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Explanation Week Stories and Cutlines Hometowns Reg. Dail Date Selected 50 M's Locals Reg. 37-2-24-PSA-workshop on skills X r 38-2-2 ladio 39 - 2 - 24 - 78PSA-carer info radin & Th 7 copies -2-24-78 ley's give_ funds no AP Cuttinead. Schalaupips Teras Stome Builder lost Wendell Mayes to Rae

JNIVERSITY NEWS AND PUBLICATIONS / P.O. BOX 4650 / TEXAS TECH UNIVERSITY / LUBBOCK, TEXAS 79409 / (806) 742-2136 Residence telephones: Jane Brandenberger, Director, 829-2108 / Bea Zeeck, Associate Director, 296-7125 / Dan Tarpley, Manager, News Bureau, 792-5596

CONTACT: Pat Broyles ATTN: Fine Arts Editors For Immediate Release

LUBBOCK--The most widely toured dance company in the United States, the Hartford Ballet, will perform at Texas Tech University on Friday and Saturday, Feb. 24-25, at 8:15 p.m., in the University Center Theatre.

The company boasts a diverse repertoire that features classical ballet as well as modern dance. They are capable of presenting more than 16 ballets that have been choreographed by artists such as George Balanchine, Lotte Goslar and Jose Limon.

The Hartford Ballet is under the direction of former Joffrey Ballet principal Michael Uthoff. Born in Chile, he became artistic director of the company in 1972. He has drawn the performers of his 18-member company from many of the top dance troupes in the world, including the New York City Ballet, the Stuttgart Ballet and the Harkness Ballet.

The company's appearance at Texas Tech is being made possible with a grant from the National Endowment for the Arts.

Tickets are available at the Texas Tech University Center ticket booth and are \$3 for Tech students and \$6 for the public. For further information call (806) 742-3611.

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CONTACT: B. Zeeck

LUBBOCK--A 5,000-year-old oven, a five-inch bear tooth, and now a fossilized wing segment of a gray-breasted crake (rail)---a bird almost unheard of in North America---are the bits and pieces of prehistory which are being used in a composite picture of Lubbock Lake Site ages.

Literally sifting the evidence dug out at the Lake Site is a team of archeologists headed by Dr. Eileen Johnson, director of an extensive study begun in 1973 at the nationally significant site.

One of the team members working with her, Vance T. Holliday, has compiled a record of the evidence in his master's thesis in museum science at Texas Tech University. It is the first time since the archeologically rich lode was discovered in 1939 that a summary of the cultural chronology has been published.

Holliday's thesis provides a chronology on which to base the first detailed record of the past 12,000 years in the Lubbock area.

"This chronology, in turn," Holliday said, "forms the basis on which to build a needed regional cultural chronology for the Llano Estacado."

#### lls/add one

It is the chronology of activity at the Lubbock Lake Site which makes the dig particularly significant, Johnson said. The site has been used by humans for all of the 12,000 years. In addition, the method of research is unusual.

All materials dug from the site are washed and sifted for evidence not only of man, but also of the environmental changes from the time of Clovis man to the historical period of the first white settlers.

It was in this sifting process that the fossilized bone of the crake was recovered. The crake is a shy, chicken-shaped marsh bird found now chiefly in northern South America, with heavy concentrations in Colombia and Venezuela. There has been scattered evidence of its existence in Central America, but the discovery at the Lubbock Lake Site, identified at the San Diego Museum of Natural History and confirmed by the Smithsonian Institution, is only the second known fossil occurrence in North America. The other was found in northern Florida. The Lubbock Lake Site find is more than 8,000 years old.

The bear tooth, experts in the field say, is the latest known occurrence and the largest of the extinct short-faced bear, Arctodus. Evidence indicated that some 11,000 to 12,000 years ago Clovis man butchered this extemely active, aggressive carnivore, which was about one and one-half to twice as large as a modern grizzly.

But as exciting for the archeologists as the crake and bear remains was the discovering of an archaic period cooking oven, radiocarbon dated to 5,000 years old. It is the only one of its kind found in the northwestern Llano Estacado area of Texas. The carefully placed burned rock was the first evidence uncovered, and,

#### lls/add two

although the burned caliche and ash made it clear it was an oven, no tools were found.

"The fact that no tools and no bones were found in it," Johnson said, "indicates to me that it probably was a vegetal processing oven."

In the more advanced periods the archeologists have uncovered Puebloan trade pottery, some of it perhaps 2,000 years old and Apache pottery a mere 500 years old.

"We have found both Garza and Washita Apache points," Johnson said, "and the exciting things about our Apache discoveries is that we are finding evidence of what historians have known, that the Comanches pushed the Apaches south through the Llano Estacado before the Apache tribes separated, some moving into central Texas and some moving into the Southwest."

Also of keen interest to historians and archeologists was the discovery at the site of Apache tools made of glass, scrapers used in butchering animals.

In modern history the first permanent white settler in the Lubbock Lake Site area was George Singer, who had a store there.

"We think we are getting close to the site of the store," Johnson said. Evidence bearing this out are metal artifacts, buckles that could have come from horsemen's tack, and cartridges. Some of these might have been left by buffalo hunters or the cavalry troops, however.

The 1978 dig will begin May 14, she said.

The importance of Holliday's thesis, in Johnson's view, is that it brings together all the chronological information on the

various cultures known from the research results from 1939 to early 1977; it points out the gaps in understanding of the site; and it provides directions for future research.

The research at the Lubbock Lake Site, done through The Museum of Texas Tech University, has had the support of the National Science Foundation, the state of Texas and both the county and city of Lubbock, National Geographic Society, and the Center for Field Research (Earthwatch).

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2-2-20-78

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CONTACT: Dan Tarpley

LUBBOCK--The Research and Training Center in Mental Retardation of Texas Tech University will sponsor a regional training conference on severely handicapped youth and adults, Tuesday through Friday noon (Feb. 21-23).

More than 300 representatives from community agencies, mental health and mental retardation centers, state schools and educational programs in Texas, New Mexico, Oklahoma, Arkansas and Louisiana are expected to attend. The conference will be held at the Lubbock Memorial Civic Center.

Speaking at the conference will be Dr. Gerard J. Bensberg, director, and Dr. Jerry D. Parham, associate director, both of the Research and Training Center, Texas Tech. Other speakers will be Dr. Marc Gold, associate professor of education, University of Illinois, Urbana-Champaign, and Dr. Louis Brown, professor of education, University of Wisconsin, Madison.

Topics to be covered include how to train severely handicapped persons. Gold says that "95 percent of the time when handicapped persons don't learn, it's because the teacher does not have the proper strategy to teach the desired skill."

He has developed a system known as Task Analysis, a set of training procedures usable with severely handicapped students.

#### mental retardation/add one

Dr. Brown stresses the link between school and community. He says he believes the ultimate test of training is whether a student can perform the desired skills in his or her community.

A registration fee of \$4 is required to cover incidental conference costs. Persons wanting more information are asked to contact the Research and Training Center at 742-2970.

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CONTACT: Mark Haller

ATTN: Sports Editors

FOR IMMEDIATE RELEASE

LUBBOCK--Playing their last two regular games of the 1977-78 season, the Texas Tech University women's basketball team will face South Plains College at the Texan Dome in Levelland on Monday (Feb. 20) at 6 p.m. and McMurry College on Tuesday (Feb. 21), 7 p.m., Tech Women's Gym.

The Red Raiders then begin play in the Texas West Zone Tournament on Feb. 24-25 in Abilene.

The Raiders, ranked fourth in Texas in the most recent poll, hold a season record of 27-6.

Nearly defeating the nation's number one team, the Lousiana State University Tigers, the Techsans placed third in the Houston Invitational Tournament. Following that tournament the Tech squad was defeated earlier last week by the University of Houston Cougars in Lubbock, 91-69. It was the fourth time this season that the Raiders and Cougars have met, with the Techsans winning the three previous games.

Coach Gay Benson said the Raiders were simply not prepared for the Houston contest.

"Since we had already defeated Houston three times this year, we just were not emotionally prepared for the game," Benson said. "We were tired from the long road schedule of the preceding week and did not play to the best of our ability."

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill Feb. 25)

For Immediate Release

(a ro! biks)

AEROBICS COULD BE THE KEY TO A HEALTHIER YOU. AEROBICS IS THE FUN EXERCISE FOR MEN, WOMEN AND CHILDREN THAT IS GOOD FOR THE HEART AND MUSCLE ENDURANCE AS WELL AS IMPROVING COORDINATION AND BALANCE. AN AEROBIC DANCE WORKSHOP WILL BE HELD AT TEXAS TECH UNIVERSITY MARCH 4, 8:30 A.M.-1 P.M., IN THE MEN'S GYM. COST OF THE WORKSHOP IS \$25 AND REGISTRATION DEADLINE IS FEBRUARY 24TH. FOR MORE INFORMATION CONTACT THE TEXAS TECH DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION AT 742-3364.

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5-2-20-78

(Released to all Lubbock and Slaton news media on Friday, Feb. 17, 1978)

Texas Tech University has dismissed all classes for today because of hazardous driving conditions. However, residence halls' food service staff, as well as custodial and maintenance staffs, are asked to report to the campus. The Student Health Center will be open. The Medical School has dismissed classes but Ambulatory Clinics will remain in service.

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CONTACT: Pat Broyles

ATTN: News Directors

For Immediate Release

DR. MICHAEL POLLOCK, DIRECTOR OF THE CARDIAC REHABILITATION CENTER AT MOUNT SINAI HOSPITAL, WILL HIGHLIGHT THE FIRST GENERAL SESSION OF THE TEXAS ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION. POLLOCK WILL SPEAK ON MEDICAL ASPECTS OF FITNESS AT 6:30 P.M., SUNDAY, FEBRUARY 26, IN THE TEXAS TECH UNIVERSITY CENTER. MAX SHERMAN, PRESIDENT OF WEST TEXAS STATE UNIVERSITY, WILL SPEAK ON THE ADMINISTRATOR'S VIEW OF PHYSICAL FITNESS AT 11:30 A.M., MONDAY THE 27TH. MORNING AND AFTERNOON SESSIONS WILL DEAL WITH SUCH TOPICS AS SMOKING EDUCATION, CANCER, ALCOHOL EDUCATION AND GYMNASTICS. ALL GENERAL SESSIONS ARE OPEN TO THE PUBLIC.

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6-2-20-78

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CONTACT: Preston Mitchell

LUBBOCK--

The one-act play, written by Arthur Schnitzler in 1898, depicts people who take reality not as it is, but as it appears to them, colored by their subjective desires, impressions and illusions. Appearance and reality, illusion and truth, dreams and actual experience are never kept apart, and this confusion often determines the fate of Schnitzler's characters.

"The Green Cockatoo," presented in German by an all-student cast of the Department of Germanic and Slavic Languages at Tech, is scheduled for March 30, 31 and April 1, 3, 4, 8:15 p.m., in the Qualia Room of the Foreign Language and Math Building at Tech.

Admission is \$1.50 and reservations may be made by calling 742-3282.

7-2-20-78

cultine------

TROPHIES--The first awards of the highly prized Ta-Que-Ne-Whap sculpture, recognizing distinguished leadership and service have been presented to, left, Manning Price of the Texas A&M University faculty in entomology and O. H. Graham, research entomologist, U.S. Department of Agriculture Livestock Insects Laboratory, Kerrville. The awards were made at the recent (Feb. 14-16) Southwestern Branch meeting of the Entomological Society of America in Lubbock. The Indian head is cast in bronze mounted on a mesquite base. Texas Tech University handled local arrangements for the meeting.

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8-2-20-78

#### cutline------

STUDENT AND TEACHER--Receiving special awards at the Southwestern Branch meeting of the Entomological Society of America were, left, Pete Teel, Oklahoma State University, who received the Outstanding Graduate Student Award and Dr. Horace Van Cleave, Texas A&M University, Distinguished Achievement Award in Teaching. The meeting took place in Lubbock, with Texas Tech University in charge of local arrangements. (Tech Photo)

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#### 8-2-20-78

(This meeting took place Feb. 14-16.)

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CONTACT: Roe Burnett

LUBBOCK--Three exhibits are showing in the Gallery of the Art Department at Texas Tech University through March 17.

The exhibit of contemporary fabrics and furnishings is a showing of art and craft pieces arranged by Donna Read and John Garstka, Texas Tech art professors.

The items on display are on loan from Design Today, Uncommon Graphics, Lubbock Stained Glass and the Texas Tech Museum Shop. Lubbock artists Romero Renya, James Leatherwood, Charlotte Funk, Frank Cheatham, Paul Hanna, Olive Jenson, Wayne Green and Bill Bagley also loaned items.

A collection of acrylic paintings and drawings by James Burke, Louisiana State University professor, are also on exhibit. Burke has been awarded a Tiffany Foundation Grant for printmaking.

Robert Hirsch, head of photography at Amarillo College, is displaying photographs using multiple imagery and collage-like effects to achieve a social commentary of strength.

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CONTACT: Dan Tarpley

LUBBOCK--Dr. Walter E. Meyerhof, professor of physics and department chairperson at Stanford University, will present three lectures at Texas Tech University on March 6-8.

The lectures will deal with inner-shell ionization in atomic collisions. The lectures are scheduled for 3:30 p.m., March 6 and 8, and 3 p.m., March 7, all in room 60, Science Building. He also will present a popularized lecture, 7:30 p.m., March 7, room 57, Science Building, on "How Do Physicists Know What Atoms Are Made of?"

Meyerhof will be available for consultation with students and faculty during his stay on campus. His visit is sponsored by the Physics Department of Texas Tech.

Meyerhof has turned his attention to neutron producing reactions in order to study threshold effects in certain nuclear reactions. He is engaged in atomic collision studies to determine the possibility of the innermost electronic shells being filled by emission of positrons rather than x-rays. He also has made related theoretical calculations.

The visitng speaker has been an Alfred P. Sloan Foundation Research Fellow and a National Science Foundation Senior Post Doctoral Fellow.

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill Feb. 24)

PLANNING A BUDGET MAY BE A SIMPLE THING FOR SOME PEOPLE. BUT WHO HASN'T HAD TROUBLE WADING THROUGH AN INCOME TAX FORM OR DECIDING WHICH LIFE INSURANCE POLICY IS RIGHT FOR THEM? A NEW SHORT COURSE AT TEXAS TECH, "FAMILY MONEY MATTERS", CAN GIVE PARTICIPANTS THE SKILLS IT TAKES TO HANDLE PERSONAL AND FAMILY FINANCIAL AFFAIRS. KNOWLEDGE IN THE MANAGEMENT OR ASSETS, TAXES, SAVINGS OPTIONS AND EVEN COPING WITH THE COST OF LIVING WILL BE COVERED. THE COURSE WILL MEET EACH THURSDAY FROM 7-9:30 P.M, FROM FEB. 23 THROUGH APRIL 6, IN ROOM 109 OF THE TEXAS TECH LAW SCHOOL. TUITION FOR THE COURSE IS \$25. FOR MORE INFORMATION CALL THE TEXAS TECH DIVISION OF CONTINUING EDUCATION AT 742-3797.

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CONTACT: Roe Burnett

LUBBOCK--Cross cultural sharing and communication will be promoted during the International Sampler, a food and entertainment festival, March 2, 7 p.m., Texas Tech University Center (UC) Ballroom.

The festival, hosted by UC Programs, will consist of food booths from various international student associations, clubs, honoraries and the Lubbock community.

Crafts will be made and sold during the festival. Dances and music depicting the cultures represented also will be performed.

Food items will cost 25 cents, 50 cents, 75 cents and \$1. Tickets will be sold in 25 cent denominations from a central booth.

Some of the food items to be sold include French quiche and other pastries, German sausages and strudel, Arabian salad, Mexican food, Latin-American pastries, Indian desserts, South American dishes, Greek gyros and Chinese fried won ton and egg rolls.

During the noon hour of the three days preceding the festival one craft or dance will be demonstrated in the UC Courtyard to offer a sample of the upcoming activities. The Slavic Dance Club and an Indian singer will be among the entertainers.

For more information concerning the festival call 742-3621.

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CONTACT: B. Zeeck

LUBBOCK--Representatives of the U.S. Department of Energy (DOE) and engineers from five states will come to Texas Tech University Wednesday (Feb. 22) to review 18 months and \$1.4 million spent on research for the Crosbyton Project, designed to bring solar power to ease energy requirements of rural Texas.

If successful, the project could be a prototype for use wherever there is an abundance of sunlight and might even alleviate fast-rising agricultural irrigation costs.

If the visiting experts finds the research to date shows promise, the research team, headed by Texas Tech Electrical Engineering Prof. John D. Reichert, will be ready to begin Segment II of the project's first phase. This includes construction of an Analog Test System (ATS) at the Crosbyton site. Cost of Segment II is estimated at about \$2.5 million.

Work to be reviewed encompasses specific plans for Segment II, including construction of a 65-foot mirrored dish and receiver which would make steam and allow researchers to study system output under various operating conditions.

"This could be used to practice interfacing with a hot rock and oil thermal storage subsystem," Dr. Reichert said, "and it would allow us to develop management policies in process control."

#### crosbyton/add one

This involves, he explained, studying the receiver under natural weather conditions of sunlight, dust, rain, snow, hail and extended periods of cloud cover.

Eventually the project calls for a \$22 million installation of 10 stationary, 200-foot diameter, mirror surfaced dishes, each with a receiver---a spiraling pipe to move about the sphere in a line coinciding with the line of focus on the sun's rays. Water in the pipes should reach 1,000 degrees F., and the steam derived from the heated water would drive a turbine to produce electricity.

Working with Reichert as project manger is Dr. Herbert J. Carper Jr. who joined the Texas Tech Department of Mechanical Engineering in January after spending seven months as a consultant on the Crosbyton Project.

Carper had previously been associated with Southwest Research Institute in San Antonio for 11 years. On the Crosbyton Project he succeeds Dr. Stanley R. Liberty, who left in December to head the Department of Electrical Engineering at Old Dominion University.

"We know from our research," Carper said, "approximately how much solar energy can be produced. What has not been determined are the exact costs. We think we have a fairly reasonable estimate, but the only way to know is to build a system and test it to determine its operating characteristics."

Carper said that the project is the only one of its kind in the United States. A similar system is being built in France, but it is designed to be an integral part of a building structure to provide total energy requirements for the building.

#### crosbyton/add two

Peak temperature for the French system is 600 degrees F., however, while the peak temperature for the Crosbyton system would reach 1,000 degrees F.

If Segment II is funded by DOE, Carper said, construction on the ATS---which means a system analogous to the actual operating system proposed for Crosbyton--probably would be started as early as next summer.

With Segment II, as with Segment I, Texas Tech University would be the prime contractor with DOE but a major subcontractor would be E-Systems, a Dallas based company producing high technology electronic systems. Foster Wheeler Energy Corp., a major boiler manufacturer of Livingston, N.J., would be another subcontractor. A third would be an architect-engineering firm not yet designated, Reichert said.

Attending the review as DOE representatives will be Joe Weisiger, branch chief for the research area concerned with the Crosbyton Project, Washington, D.C., and Dr. George W. Rhodes, senior program coordinator for solar at the DOE office in Albuquerque.

Other members of the review panel are John Bigger of Electric Power Research Institute, Palo Alto, Calif.; Dr. Art M. Clausing, University of Illinois; Dr. Ned Keltner, Sandia Laboratories, Albuquerque; and Bill Owen and James Fortenberry, Jet Propulsion Laboratory, Pasadena, Calif.

E-Systems will be represented by Dr. Lloyd K. Lauderdale, vice president for Research and Engineering, Dr. Warren T. Eriksen, director of Energy Programs, Dr. R. R. Walters, manager of Energy Programs, and several other engineers.

#### crosbyton/add three

Dr. Soung Cho.and Richard Anderson will represent Foster Wheeler.

City Secretary Norton Barrett and former city resident T. J. Taylor will represent the city of Crosbyton.

Drs. Reichert and Carper will make the presentation on the work to date with others on the 29-member Texas Tech University research team.

A decision on whether to proceed with Segment II is not expected from DOE until about March 1.

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CONTACT: Nita Gilger

LUBBOCK--Texas Tech University's short course on family money matters has been postponed to Feb. 23 becuase of inclement weather.

The short course will meet Thursdays, 7-9:30 p.m., Feb. 23-April 6, in room 109, Law School Building. There will be no meeting March 23 because of the university's spring vacation.

Course material is designed for people who wish to gain a better understanding of how to handle personal and family financial matters.

Participants will be taught skills useful in the acquisition and mangement of assets. Instruction deals with budgeting, investments, insurance, retirement planning, income tax, wills, trusts and estate planning.

The course is presented by the Texas Tech School of Law, Division of Continuing Education and Junior League of Lubbock. Also cooperating are the Texas Tech Colleges of Arts and Sciences and Home Economics.

The course is open to all interested person, and 1.5 Continuing Education units of credit will be awarded to each participant who successfully completes the course. The fee is \$25.

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ATTENTION FINE ARTS EDITORS

LUBBOCK--Henri Toulouse-Lautrec will be the subject of the seventh lecture in an Art Seminar series on the post Impressionist artists of France, beginning at 10 a.m. Tuesday (Feb. 28) at The Museum of Texas Tech University.

The series, sponsored by the Women's Council of the West Texas Museum Association, is the fourth group of 10 lectures on "One Thousand Years of French Art," presented by Rabbi Alexander Kline. Rabbi Kline has been the Art Seminars lecturer for the past 18 years.

The lectures are open to the public at \$2 per lecture of \$10 for the series, \$5 for students.

Toulouse-Lautrec was among the artists who considered construction fundamental. His works, among the most easily recognized of the artists of his period, show the strong influece of Edgar Degas and of Japanese prints.

He chose his subjects chiefly from cafes, circuses, bars and dance halls in Montmarte where he lived for 15 years, 1885-1900.

In addition to his paintings his more than 350 lithographs are testament to his wide range of technical skills, and his posters gave new life to that particular art.

Toulouse-Lautrec was noted for his superb draftsmanship, his unusual talent for using only a few strokes to convey rapid movement and the atmosphere of a scene.

Among his well known works are "Jane Avril," "Jane Avril in the Entrance of the Moulin Rouge," "Au Nouveau Cirque: The Five Shirt Fronts," "Marcelle Lender in the Ballet 'Chilperic'" and "A la Mie."

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Mracia Lundy CONTACT:

ATTN: Ag Editors

LUBBOCK--Post-burn management will greatly affect the results a rancher realizes from using controlled fire as a range management tool.

Several other factors also affecting the end result include weather conditions, plant species, amount of fuel, the season, the landscape and what the rancher wants to accomplish.

All these must be considered in planning when and how to burn rangeland, according to Dr. Henry A. Wright, professor in the Range and Wildlife Management Department at Texas Tech University.

Improper management of burned pastures, Wright said, will lead either to severe grass production damage because of overgrazing or to cattle not grazing burned pastures at all.

Most grasses become more palatable after burning and cattle will graze burned areas instead of unburned. Without regular rotation off the burned pastures cattle will overgraze them and damage the newly-sprouted grasses, Wright said.

With burned tobosagrass, however, if the cattle are not put on it within two or three weeks after the burn, the grass becomes too coarse, and the cattle will not eat it at all.

Though most pastures need to be burned in small, manageable units, at least 1/8 to 1/5 of tobosagrass pastures need to be burned at a time each year, he said. -more-

#### fire research/add one

Cattle only graze tobosagrass in the spring and fall, and not in the summer and winter. Since cattle need to be on burned tobosagrass within two or three weeks after the burn, these pastures would be best burned in the spring.

Because various grasses react differently to fire, ranchers need to know how to manage the species after a burn, Wright said. Regular pasture rotation grazing systems should also be used to ensure optimum grass production after a burn.

Before starting a burn the rancher must make sure weather conditions are at certain levels, depending on the type of fuel and type of fire. The direction of the landscape must also be considered in deciding which way to burn.

Relative humidity, soil moisture, air temperature, wind speed and wind direction all need to be within certain ranges, Wright said.

For instance, a buffalograss pasture, with 2,000 pounds per acre of fine fuel, or grass and weeds less than 1/8 inch in diameter, would have to have a fireline, or backfire, at least 100 feet wide on the north and east sides of the pasture.

The relative humidity would have to be between 30 and 40 percent, wind speed between five and 10 miles per hour (mph) and air temperature between 60 and 75 degrees Fahrenheit for the backfire.

The headfire, or main fire, could be started when the relative humidity was between 20 and 40 percent, wind at eight to 15 mph and air temperature between 70 and 75 degrees F.

Different amounts and types of fuel, different landscapes and different goals would require different weather conditions and firelines.

#### fire research/add two

When all factors are at the correct levels, Wright said, fire is probably one of the easiest and most economical means of brush control.

The only expense is the cost of having fire-fighting equipment present in case of spot fires. The more experienced and comfortable a person is with controlled fire, Wright explained, the less equipment required.

Generally the cost is about \$2 to \$3 per acre, where other methods start at \$5 to \$8 per acre and up.

With researchers from the Northern Forest Fire Laboratory in Missoula, Mont., Wright is compiling data on the history of fire and its possible uses in various sections of the country.

Reviews of fire's role and use in the Great Plains area and in the sagebrush-grass and pinyon-juniper areas of the western United States have already been completed.

Funding is provided by the U.S. Department of Agriculture. Wright has held a workshop for members of the U.S. Bureau of Land Management.

He said a spring workshop, sponsored by the U.S. Bureau of Sports Fisheries and the U.S. Forest Service, is planned for members of all federal agencies involved in grasslands management.

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CONTACT: Roe Burnett

LUBBOCK--The Thomas Jefferson Award which honors a public official who has made outstanding contributions to the rights of news media to inform the public was presented to the late Sen. Hubert H. Humphrey in ceremonies at Texas Tech University Feb. 17.

The award banquet highlighted Mass Communications Week at Texas Tech University. The award was accepted for the Humphrey family by Dr. John DeSanto, chairperson of the Mass Communications Department of St. Cloud State University, Minn. The St. Cloud State student chapter of Sigma Delta Chi journalism fraternity, nominated Humphrey for the award shortly before his death.

The presentation was made by Harold Hudson, publisher of the "Perryton (Texas) Herald" and president of the National Newspaper Association, the largest newspaper association in the world.

Humphrey was cited for his many contributions to and strong defense of news media to inform the public of governmental affairs.

Don Waddington, vice president of the Branaham Advertising Company of Dallas and chairperson of the Texas Tech Mass Communications Advisory Committee, presided at the awards dinner.

The sixth annual Thomas Jefferson Award Dinner was sponsored by the Texas Daily Newspaper Association, Texas Association of Broadcasters, Texas Press Association, Texas Tech University and the Mass Communications Advisory Committee.

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CONTACT: Pat Broyles

ATTN: Fine Arts Editors

LUBBOCK--Called "an aristocrat of his instrument" by the "London Times," Michael Lorimer has been acclaimed one of the world's foremost classical guitarists. Lorimer will bring his unique style to the Texas Tech University campus Thursday, March 9, for an 8:15 p.m. performance in the University Center Theatre.

Lorimer has been studying guitar since he was ten and in the early 1960's began taking master classes with the great Andres Segovia.

"I am certain that in a few years his name will be respected and esteemed in the United States and abroad," said Segovia recently of his favorite pupil.

Lorimer became the first American classic, guitarist invited to perform in the Soviet Union. In 1975 and again in 1977 he toured the major cities of the USSR to enormous acclaim.

In addition to his talent, he also has special affection for and knowledge about the baroque period. His instrument is an exact copy of a guitar constructed in 1687 for one of the daughters of Louis XIV. It is the first modern-day exact duplicate of a baroque guitar. -more-

#### lorimer/add one

Also interested in contemporary music, Lorimer has encouraged and assisted composers to write for guitar. He gave the American premieres of Andre Previn's "Guitar Concerto" and Maurice Ohana's "Concerto for Guitar and Orchestra."

Tickets for Lorimer's performance are \$2.50 for Texas Tech students and \$5 for the public. They are on sale at the University Center Ticketbooth. For reservations and information call (806) 742-3610.

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#### CONTACT: Pat Broyles

ATTN: News Directors

NOTE: Workshop instructor will be Dr. Herbert Shore, Adjunct Professor, North Texas State University Center for Studies on Aging, and Executive Vice President, Golden Acres Dallas Home for Jewish Aged. He is a recognized expert in the area of aging and sensitizing people to the aging process.

He will be available for interview the day of the workshop, March 3, from 2:30 to 3 p.m. or after the session at 5 p.m. Film crews will be allowed to shoot footage of the session in progress in room 111 of the Home Economics Building.

A WORKSHOP DESIGNED TO SENSITIZE PEOPLE TO THE PROCESS OF AGING WILL BE HELD AT TEXAS TECH UNIVERSITY ON FRIDAY, MARCH 3, 1-5 P.M., IN ROOM 111 OF THE HOME ECONOMICS BUILDING. THE WORKSHOP IS DESIGNED FOR PERSONS WORKING WITH THE AGED AND WILL PROVIDE INFORMATION ON METHODS THAT MAY BE USED TO HELP THE OLDER PERSONS ADAPT TO THEIR CHANGING LIFE SITUATION. IT IS SPONSORED BY THE DIVISION OF CONTINUING EDUCATION AND THE COLLEGE OF HOME ECONOMICS AT TEXAS TECH. FOR REGISTRATION INFORMATION CALL (806) 742-3033.

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CONTACT: Pat Broyles

ATTN: Farm News Editors

AN AID TO COTTONSEED PROCESSSORS IS UNDER STUDY AT TEXAS TECH UNIVERSITY AND, IF RESULTS ARE FAVORABLE, PROCESSORS WILL HAVE AN ACCURATE AND ECONOMICAL MEANS OF EVALUATING SEED QUALITY. DR. NORMAN W. HOPPER OF TEXAS TECH'S PLANT AND SOIL SCIENCES DEPARTMENT IS TESTING THE MSS-110 SEED QUALITY ANALYZER, DEVELOPED BY AGRO-SCIENCES, INC. IF THE MACHINE WORKS AS PREDICTED, THE COTTONSEED PROCESSOR WILL KNOW WITHIN 20 MINUTES IF A SHIPMENT OF SEED IS HIGH QUALITY AND SHOULD BE KEPT FOR DELINTING OR IS LOW GRADE AND SUITABLE FOR PROCESSING INTO MEAL AND OIL. HOPPER HOPES TO HAVE INITIAL RESEARCH COMPLETED BY OCOTBER.

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CONTACT: B. Zeeck

FOR RELEASE AT 7 P.M. THURSDAY, FEB. 23

LUBBOCK--Karen Watson, Fort Worth graduate student in electrical engineering at Texas Tech University, Thursday was presented the second annual Student Engineer of the Year award by the South Plains Chapter of the Texas Society of Professional Engineers.

The award was made at the chapter's annual banquet at Hillcrest Country Club.

Watson is the daughter of Mr. and Mrs. Eddie Watson, 3720 Summercrest, Fort Worth.

Runners-up in the competition were Carie Goodman, civil engineering student and the daughter of Mr. and Mrs. Jim C. Goodman, 12236 Sugden, El Paso, and Roger Dougal, electrical engineering major and son of Dr. and Mrs. Arwin Dougal, Austin. All competitors were Texas Tech University students.

Watson's was the first such award to a woman. She was the nominee of the student chapter of the Institute of Electrical & Electronics Engineers (IEEE) during her final semester as an undergraduate last fall.

A former member of the women's track team, she was named outstanding athlete in 1976-'77.

#### engineer award/add one

Watson is a member of the IEEE and of Eta Kappa Nu Association, scholastic honorary in electrical engineering, and has had a Dean's List grade average. In the Student Senate she served on the Convocation and the Student Services committees.

"The real key to eningeering," in her view, "is to be able to adapt the facts to a workable solution."

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cutline------

CONGRATULATIONS!--Dr. Russell H. Seacat, left, chairperson of the Department of Electrical Engineering at Texas Tech University, congratulates graduate student Karen Watson upon being named Student Engineer of the Year by the South Plains Chapter of the Texas Society of Professional Engineers. Dr. James R. McDonald, right, of the Texas Tech civil engineering faculty, coordinated the award program for the South Plains Chapter. (Tech Photo)

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CONTACT: Pat Broyles

ATTN: PSA Directors

For Immediate Release

THE ART AND LIFE OF HENRI TOULOUSE-LAUTREC WILL BE THE SUBJECT OF AN ART SEMINAR LECTURE ON THE POST IMPRESSIONIST ARTISTS OF FRANCE. THE LECTURE WILL BEGIN AT 10 A.M., TUESDAY FEBRUARY 28, AT THE MUSEUM OF TEXAS TECH UNIVERSITY. THIS SEMINAR, THE FOURTH IN A GROUP OF TEN LECTURES ON "ONE THOUSAND YEARS OF FRENCH ART", IS SPONSORED BY THE WOMEN'S COUNCIL OF THE WEST TEXAS MUSEUM ASSOCIATION.

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22-2-22-78

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CONTACT: B. Zeeck

LUBBOCK--The Crosbyton Project, one of the nation's large solar energy research undertakings designed to provide electricity for small community systems, is anything but an easy concept.

Dr. George W. Rhodes, senior program coordinator for solar at the Department of Energy (DOE) office in Albuquerque, terms it a "tough concept," partly because it calls for using sunlight to bring water to 1,000 degree F. superheated steam, a much higher temperature than other solar power systems require.

Rhodes, however, expressed faith in the project which uses the small town of Crosbyton, Tex., population 2,510, as a laboratory.

"I believe there is some inherent value in the simplicity of the design," he said. The Crosbyton design uses stationary mirrors and a moving collector.

Rhodes heads a DOE group which monitors progress of the Crosbyton Project, and he was in Lubbock this week (Feb. 22) for a major review of that progress.

Texas Tech University is the prime contractor for the research directed by Dr. John D. Reichert of the university's Department of Electrical Engineering. Project manager is Dr. Herbert J. Carper Jr., a member of the the mechanical engineering faculty. The major subcontractor is E-Systems of Dallas.

#### rhodes/add one

In Albuquerque Rhodes coordinates research both by government agencies and industries to evaluate more traditional solar power concepts.

In one concept, known as central receiver or "power tower", thousands of mirrors are mounted on the ground and move with the sun, reflecting its light to a stationary receiver mounted on a tower.

At Crosbyton, where construction of an Analog Test System (ATS) is to begin later this year, it is proposed to build eventually five 200-foot mirrored dishes which will remain stationary while the receiver will move along the line of focus of the sun's rays, collecting heat. Water circulating in the receiver will provide the steam necessary to run turbines producing electricity.

"The only negative things we know about in the Crosbyton system," Rhodes said, "is that it suffers from a shadowing loss, from the rim of the dish."

Segment I of the Crosbyton project was completed in 18 months at a cost of about \$1.4 million and Segment II will cost in excess of \$2 million, Rhodes said.

"But from the ATS," he said, "we can get some real numbers, some real cost projections before the complete system is built."

Rhodes explained the high costs in any new solar energy project as the result of research, design and the amount of hand work involved.

"It is never cost effective if you're building only one unit," he said, "but the payoff comes when industry can take over with mass production techniques."

#### rhodes/add two

In Albuquerque, for instance, the Solar Thermal Test Facility is the largest project of its kind in the country with an investment of \$21.25 million and built to ideal standards. But it has become a national laboratory, and researchers are learning now where savings can be made by substituting cheaper components and subsystems and testing the results.

"I think the facility represents a pretty good investment," Rhodes said.

"DOE sponsors thought centers to come up with ideas and create markets," he said. "Then we expect the market eventually to develop low cost techniques and equipment. The government wants out, wants industry to take over. To encourage this government provides some of the motives through, for instance, tax incentives."

Rhodes said that 16 per cent of the nation's energy goes into process heat.

"Solar energy is a high risk investment," Rhodes admitted. "It is hard to identify the economics of it at this time, but it should at some time release fossil fuels as a result of the experimentation being conducted in Albuquerque, Crosbyton and other locations throughout the country."

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23-2-22-78

CROSBYTON PROJECT -- Discussing plans for an analog test system planned for the Crosbyton, Tex., solar energy project are, left to right: Dr. John D. Reichert, Texas Tech University electrical engineering professor who is project director; Joe Weisiger, Department of Defense branch chief for the research area concerned with the Crosbyton Project, Washington, D.C.; Dr. George W. Rhodes, senior program coordinator for solar, DOE, Albuquerque; Texas Tech Mechanical Engineering Prof. Herbert J. Carper Jr., project manager; and Dr. Lloyd K. Lauderdale, E-Systems vice president for Research and Engineering, Dallas. The mirror, from E-Systems, is of a type selected for experimental use.

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CONTACT: Mark Haller ATTN: Sports Editors

#### FOR IMMEDIATE RELEASE

LUBBOCK--The Texas Tech Red Raider women's basketball team will begin play in the TAIAW West Zone Tournament Friday (Feb. 24) at 3 p.m. in Abilene. The Raiders will face Angelo State University in the first round game.

Tech finished season play Tuesday, defeating McMurry College, 84-26, in Lubbock. That win left the Techsans with a season record of 29-6.

In the latest poll of Texas college teams, the Red Raiders retained their number four rating, with Wayland Baptist holding down the first slot; the University of Texas, second; and Stephen F. Austin, third.

The Raiders will face either Abilene Christian University or McMurry in the second round of the tourney at 8 p.m., Friday.

"I expect us to do well in Abilene," said Tech Coach Gay Benson. "We will probably not have much trouble until we get to the finals. There is little doubt that Wayland will be in the finals, although they did not receive a bye in the tournament. I predict we will be playing Wayland in the finals on Saturday."

#### west zone tourney/add one

Benson will start Karla Schuette, senior guard from Slaton; D'Lynn Brown, sophomore center from Stratford; Marilyn Payton, senior wing from Lubbock-Cooper; Rosemary Scott, junior wing from Slaton; and Cheryl Greer, sophomore center from Bridgeport.

All games of the Zone Tournament will be played in Hunt Gymnasium on the McMurry campus in Abilene. The final game will be played at 5 p.m., Saturday.

The top three teams from each zone in Texas will play in the State Tournament in San Angelo, March 2-4.

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24-2-22-78

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill March 3)

GROWING OLD IS SOMETHING WE ALL FACE. IN AN EFFORT TO HELP COPE WITH THE AGING PROCESS, A WORKSHOP ON SENSITIZING PEOPLE TO THE PROCESS OF AGING WILL BE HELD AT TEXAS TECH UNIVERSITY. THE SEMINAR IS DESIGNED FOR ALL PERSONS WORKING WITH THE AGED AND ITS GOAL IS TO PRESENT METHODS TO HELP OLDER PERSONS ADAPT TO THEIR CHANGING LIFE SITUATION. THE WORKSHOP WILL BE HELD FRIDAY, MARCH 3, FROM 1-5 P.M. IN ROOM 111 OF THE HOME ECONOMICS BUILDING AT TECH. FOR FURTHER INFORMATION CALL (806) 742-3033.

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25-2-22-78

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CONTACT: Nita Gilger

LUBBOCK--The Texas Tech University Pistol Club will hold the first of three police combat pistol matches, Saturday (Feb. 25), at the Marine Reserve Indoor Range, 2903 4th St., 8:30 a.m.-3:30 p.m. The public is invited to participate.

The match rules require double action revolvers .32 to .45 caliber.

Individuals must supply their own guns and entry fees are \$3 for pistol club members and \$5 for non-members. There is no age limit.

Twelve medals will be awarded to the top three scorers in each four classes. Approximately 30-40 people are expected to compete.

Additional matches will be held April 1 and April 29.

More information about the competition can be obtained by contacting Mike Albers, pistol club president, at 795-2165.

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CONTACT: Nita Gilger

LUBBOCK--Career Information Day will be held March 8, 9 a.m. 3 p.m., in the Texas Tech University Center Ballroom to answer students' questions about careers, employment outlooks, salaries and the use of the university's placement service.

The Texas Tech Career Planning and Placement Service is sponsoring the event, which will have representatives from 50 businesses, industries and governmental organizations to assist inquirers.

Career Day will provide students access to employers who can supply resource material. Information will be available on recommendations for academic majors in career preparation and current job openings in various employment areas.

More information can be obtained by contacting Truman Bell, director of the Career Planning and Placement Service, at 742-2210.

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CONTACT: Nita Gilger

LUBBOCK--Buy cheap today, sell high tomorrow, and in the process help the American Diabetes Association.

A Celebrity Autograph Auction, offering several autographed possessions of celebrities, will be held by the Texas Tech University Freshman Council, Saturday (Feb. 25), 3 p.m. in the University Center Well.

All proceeds from items sold at the action will be given to the American Diabetes Association. Displays of the articles will be shown at 2 p.m., Saturday.

Items offered at the auction include a personal American flag which Rep. George Mahon had flown over the U.S. capitol for the Bi-Centennial, an autographed copy of Billy Graham's book, "Angels, Angels, Angels," a tennis cover autographed by Arthur Ashe, a glove used by Arnold Palmer in a winning tournament, the screenplay of the movie, "Magic," authographed by actress Ann Margret, and several autographed pictures of several celebrities, such as Johnny Cash and Roger Staubach.

The Freshman Council has 31 representatives and is a branch of the Texas Tech Student Association as a voice of freshman at Texas Tech.

### celebrity autograph auction/add one

Ronnie Jackson, member of the Freshman Council, said the organization chose to help the diabetes association because diabetes is the number three killing disease in America, and because it is difficult for the association to raise large amounts of money.

The auction is open to the public and to Texas Tech students and faculty.

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill Feb. 26)

THE AMERICAN DIABETES ASSOCIATION NEEDS YOUR HELP AND WHILE YOU HELP THEM WHY NOT HELP YOURSELF TO MEMENTOES AND AUTOGRAPHS OF YOUR FAVORITE CELEBRITIES. A CELEBRITY AUTOGRAPH AUCTION WILL BE HELD IN THE TEXAS TECH UNIVERSITY CENTER AT 3 P.M., SATURDAY, FEBRUARY 25. SOME OF THE ITEMS OFFERED AT AUCTION INCLUDE AN AUTOGRAPHED PICTORIAL BOOK OF RICHARD NIXON'S LIFE IN OFFICE, A TENNIS COVER SIGNED BY ARTHUR ASHE, AN AUTOGRAPHED COPY OF BILLY GRAHAM'S BOOK, "ANGELS, ANGELS, ANGELS" AND THE SCREENPLAY OF THE MOVIE "MAGIC", SIGNED BY ANN MARGRET. ALL PROCEEDS FROM THE AUCTION WILL GO TO THE AMERICAN DIABETES ASSOCIATION.

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NOTE: The auction is being sponsored by the Texas Tech Freshman Council. Other items listed for sale are: autographed photos of Johnny Carson, and Roger Staubach; a flag flown over the U.S. capitol during the Bi-Centennial; and a glove worn by Arnold Palmer in a winning tournament.

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CONTACT: Pat Broyles

ATTN: Feature and PSA Editors

(Kill March 3)

WHETHER YOU'RE A GOURMET OF INE FOOD OR JUST HUNGRY, WHY NOT LOOK INTO THE MENU OF EXOTIC DISHES AT THE "INTERNATIONAL SAMPLER", THURSDAY, MARCH 2, 7 P.M., IN THE TEXAS TECH UNIVERSITY CENTER. INCLUDED IN THE INTERNATIONAL MENU WILL BE FRENCH QUICHE AND PASTRIES, GERMAN SAUSAGES AND STRUDEL, INDIAN DESSERTS AND SOTUH AMERICAN DISHES AS WELL AS SAMPLINGS FROM GREECE AND CHINA. IF YOU LIKE ENTERTAINMENT WITH YOUR FOOD, DANCES AND MUSIC FROM A VARIETY OF CULTURES WILL BE PRESENTED, WITH CRAFTS AND SOUVENIRS FROM AROUND THE WORLD ON SALE. THE FESTIVAL IS HOSTED BY U-C PROGRAMS AND INVOLVES THE INTERNATIONAL STUDENT ASSOCIATIONS AT TEXAS TECH. FOR ADDITIONAL INFORMATION CALL 742-3621.

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CONTACT: Roe Burnett

LUBBOCK--A conference of children in youth sports, Friday and Saturday (Feb. 24-25), Texas Tech University, offers presentations and question and answer sessions related to the enhancement of a child's sports experience.

Youth sports organizers, administrators, coaches, parents and other interested persons are invited to attend the sessions.

The conference is sponsored by the Health, Physical Education and Recreation Department and the Division of Continuing Education at Texas Tech. Other sponsors are the Lubbock Independent Schools, Parks and Recreation Department and the YMCA.

The sessions are under the direction of leaders from professions involved in the different areas of youth sports.

Activities scheduled for Friday morning will be held in the Senate Room of the University Center. Friday afternoon and Saturday sessions will be in the Chemistry Building Auditorium.

Some of the topics to be discussed include "How Important Is Winning in Youth Sports," "Sports Experiences for the Handicapped Child," "Every Kid Can Win" and "Why Children Participate in Youth Sports."

Registration fee is \$5 and can be paid at the conference. For more information contact Russell Lord at 742-2390.

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#### CONTACT: Nita Gilger

LUBBOCK--An aerobic dancing workshop, designed to help public school teachers and student teachers, or any individual interested in an exercise program, will be held March 4, from 8:30-1 p.m., in the Texas Tech University Men's Gymnasium.

Registration deadline is Feb. 24.

Jacki Sorensen, originator of the aerobic dancing program is the workshop instructor. Under Soresen's plan, some public schools are using aerobic dancing.

The program includes classes with students in the elementary school system, high schools, and college and university level.

Aerobic dancing is "a rhythmic activity which is equivalent in endurance to basketball and jogging." The exercise is beneficial for the heart, muscle endurance and power, coordination, balance and flexibility.

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CONTACT: Pat Broyles

ATTN: News Editors

AST ANY

LUBBOCK--Estate planning, or "How to Live--and Die--with Texas Probate", will be the subject of a day-long seminar at Texas Tech University on Friday, March 10. The session will meet from 9 a.m.-4:30 p.m. in room 109 of the Texas Tech School of Law.

The seminar, designed for the non-professional in estate planning, will inform participants of the tax and non-tax aspects inherent in planning estate dispositions.

Reed Quilliam Jr., professor of law at Texas Tech and member of the Council of Real Estate Probate and Trust Law Section of the State Bar of Texas, is one of the seminar instructors. He said that the session should be useful to anyone desiring an orderly disposition of their estate.

"It is geared toward the tax aspects of estate planning and reducing taxes through a well conceived plan," he said.

Quilliam added that the course will concern itself with estates of realistic proportions that the average taxpayer could establish.

Other speakers at the seminar will be Charles A. Saunders, Arthur H. Bayern and Charles Giraud.

Saunders is a partner in the Houston firm of Fulbright & Jaworski. He is president-elect of the American College of Probate Counsel.

#### estate planning/add one

Bayern is a partner in Remy, Bayern & Paterson. He is past president of the San Antonio Estate Planners Council.

Giraud is a partner in the Houston firm of Butler, Binion, Rice, Cook & Knapp. He is a fellow in the American College Probate Counsel.

(cq)

The seminar is being sponsored by the Texas Tech University foundation, Medical School and Law School Foundations and the Division of Continuing Education.

Cost of the seminar is \$10 and includes all materials and lunch.

To register in advance or for further information write Division of Continuing Education, 104 Administration Bldg., Texas Tech University, Lubbock, Texas 79409.

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CONTACT: Pat Broyles ATTN: News Editors FOR IMMEDIATE RELEASE

LUBBOCK--A workshop designed to teach effective marketing of personal job skills will be held at Texas Tech University March 2,9 and 16. The three-evening course will meet at 7 p.m., in room 152 of the Administration Bldg.

The course will begin with a step-by-step approach to writing the resume and the various types preferred for different career areas. Topics such as what should be included to make up an impressive resume and how to get the greatest effect from it will be covered.

One section of the workshop will deal with the interview. How to anticipate the types of questions employers may ask and developing interviewing skills will be stressed. The importance of the post-interview follow-up will also be discussed.

The workshop is being sponsored by the Texas Tech Career Planning and Placement Service and the Services for Mature Students. Conducting the course will be Truman Bell and Jerry Phaneuf, both with the Placement Service.

There will be no charge for the workshop, however registration will be limited. To make reservations call 742-2192.

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CONTACT: Dan Tarpley FOR RELEASE AT 12 NOON, FRIDAY, FEB. 24

LUBBOCK--Dr. Camille G. Bell, chairperson of the Home Economics Education Department at Texas Tech University, was recognized as "Home Economist of the Year" by the Texas Home Economics Association, Friday (Feb. 24), at the annual meeting in Austin.

The meeting opened Thursday and continues through Saturday.

Bell was nominated by former Dean of Home Economics at Texas Tech Willa Vaughn Tinsley who presented Bell at an association luncheon.

Bell is the third Texas Tech home economist to receive the recognition. The first was Miss Mabel Erwin in 1954, Dean Tinsley was the second in 1966.

Her nomination was endorsed by representatives from "Home Economics in Education", "Home Economics in Business" and "Home Economics in Extension."

Bell joined the Home Economics Education Department faculty at Texas Tech in 1963 and five years later she was selected by the department's faculty as chairperson. She was a pioneer in microteaching. She was the first teacher at Texas Tech to obtain a videotape recorder, camera and monitor. She also was the first to conduct experimental research on effects of microteaching skills.

#### bell/add one

Her monograph describing her research on microteaching has been requested by 50 university graduate students and professors in the U.S. and 17 foreign countries. The results of work in videotaped simulated experiences commonly found in the classroom are used widely with both undergraduate and graduate students.

She served as consultant to the Institute for Development of Educational Activities, a company which developed unipacs in the early 1970s. She used the work methods of this process to develop individual modules for secondary and university students.

In cooperation with the Texas Education Agency and three other state universities, she has participated in a three-year study of identifying competencies needed by vocational homemaking teachers in Texas and developing instructional guides for all subject matter areas in home economics and teacher education.

Bell's most recent contribution to the nationwide home economics program has been her three-year term as vice president for Home Economics on the Board of the American Vocational Association. She has made 12 trips to board meetings of the association, and through her efforts she was able to bring organized pressure to bear for the support of vocational home economics education throughout the nation.

Bell is author of one book and co-author of another. She also has authored or co-authored seven articles that have appeared in juried journals.

She has assisted in writing and editing 22 publications produced at the Texas Tech Instructional Materials Center.

#### bell/add two

From 1969 to 1977 she received research grants amounting to \$827,000. She has presented professional research papers at five national conferences.

A graduate of Crowell (Texas) High School, Bell attended Baylor University her freshman year and studied two summers at The University of Texas at Austin. Her bachelor's, master's and doctor's degrees are from Texas Tech University. She has done postgraduate work at Michigan State University and postdoctoral work at Colorado State. She holds memberships in six home economics and related professional organizations, plus four honor societies.

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill March 2)

For Immediate Release

A WORKSHOP TO HELP YOU EFFECTIVELY MARKET YOUR JOB SKILLS WILL BE HELD AT TEXAS TECH MARCH 2ND, 9TH AND 16TH AT 7 P.M. IN ROOM 152 OF THE ADMINISTRATION BUILDING. THE WORKSHOP WILL TAKE A STEP-BY-STEP APPROACH TO RESUME WRITING, AND PERFECTING INTERVIEW SKILLS. THERE WILL BE NO CHARGE FOR THE WORKSHOP BUT REGISTRATION WILL BE LIMITED. CALL 742-2192 TO ENROLL. SPONSORED BY THE SERVICES FOR MATURE STUDENTS AT TEXAS TECH.

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CONTACT: Pat Broyles

PSA and News Directors (Kill March 9)

For Immediate Release

ATTN:

REPRESENTATIVES FROM FIFTY BUSINESSES, INDUSTRIES AND GOVERNMENT OFFICES WILL BE AVAILABLE TO TALK WITH STUDENTS DURING "CAREER INFORMATION DAY" AT TEXAS TECH UNIVERSITY. STUDENTS WILL HAVE ACCESS TO POSSIBLE FUTURE EMPLOYERS WHO CAN ANSWER QUESTIONS ABOUT JOB OUTLOOK AND ADVISE ON CAREER PREPARATION. INFORMATION DAY ACTIVITIES WILL BE HELD MARCH 8TH, FROM 9 A.M. TO 3 P.M. IN THE TEXAS TECH UNIVERSITY CENTER. INFORMATION DAY IS SPONSORED BY THE CAREER PLANNING AND PLACEMENT SERVICE AT TECH.

-30-

#### cutline------

BUSINESS PRESENTATION--Representatives of Foley's of Houston present \$500 to the Texas Tech University College of Business. The funds will be used by the college for improving the undergraduate program through the area of faculty development. Pictures are (from left to right) Bob Harris, store manager of Foley's, Memorial City; Business Administration Dean Carl H. Stem of Texas Tech; John McClymonds, domestic buyer for Foley's, and Robert Wilkes, coordinator of marketing in the College of Business.

-30-

cutline-----

VIOLINIST GOES WESTERN--Violinist Eugene Fodor, in Lubbock, Tex., for a performance with the Lubbock Symphony Orchestra, took time out for a tour, West Texas style, of the Texas Tech University Horse Center. His tour guide is the Quarter Horse stallion Toolie Step, on loan to Tech for breeding services from Don and Virginia Wilcox Quarter Horse Farm of Tulsa, Okla. Fodor lives in Morrison, Colo., where he breeds Quarter Horses. His personal mount is an Arabian. Fodor, who performed Mendelssohn's "Concerto in E Minor for Solo Violin and Orchestra," was well received by both Lubbock audiences and critics. (Tech Photo)

cutline-----

SCHOLARSHIPS AWARDED--Chris Disabato, left, of San Angelo, and Mark Christenson, right, of Lubbock, both Texas Tech University park administration majors, were awarded \$500 scholarships from the Southwest Park and Recreation Training Institute recently. John Alford, center, institute director, presented the awards. The annual scholarships are awarded to two sophomore, junior or senior students, majoring in park adminsitration, who show high "professional competency through extracurricular activities and potential contribution to the park administration field." Disabato, a junior, was a summer intern at the National Zoo in Washington, D.C., last summer, and Christenson, a junior, interned at Palo Duro State Park in Canyon, Tex. (Tech Photo)

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CONTACT: Nita Gilger

(Note to Plainview Editors: See last paragraph.)

LUBBOCK--Texas Tech University senior voice major Terry Cook won the Southwest Region of the Metropolitan Opera Auditions in San Antonio last week, qualifying him for semi-finals competition at the Metropolitan Opera in Lincoln Center, New York City, in April.

Cook's achievement at the regional auditions brings him not only a national honor, but also \$2,000 in stipends and a trip to New York City for two weeks of coaching with the Metropolitan Opera Staff.

Cook also has received a contract with the Santa Fe Opera apprentice program for the summer where he will understudy the role of Gremin in Tchaikovsky's "Eugene Onegin." He also will sing Second Soldier in "Salome."

There were 17 regional auditions. The Southwest Regional includes Texas and New Mexico.

The semi-final competition, consisting of the regional winners, will be held April 2 and the finals April 9, at the Lincoln Center, New York City.

Cook also is the recipient of the Hewitt Vocal Award for Musical Excellence. The \$500 award was established by Lubbock

#### cook/add one

physician A. Lee Hewitt to assist the recipient in furthering musical studies.

Other honors won by Cook include third place award in the Tuesday Music Club of San Antonio, first place in the Midland-Odessa National Young Artist Competition, second and third place awards in the annual National Association of Teachers of Singing competition.

Performances by Cook have included parts in "Showboat," "Trial by Jury," "The Barber of Seville," "The Shephards," "Camelot," "Rigoletto," and "Gianni Schicchi." His most recent appearance was as Figaro in "The Marriage of Figaro."

Cook represented Texas Tech in the All-Texas Collegiate Choir, and has sung with the Lubbock and Midland-Odessa Symphony Orchestras.

The singer is a student of John A. Gillas, Texas Tech professor of music and director of music theater. Cook plans to seek a career as an opera singer.

He is the son of Mr. and Mrs. Charlie Cook of 1308 W. 3rd St., Plainview. He was graduated from Plainview High School in 1974 and is an honor student at Texas Tech.

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CONTACT: B. Zeeck

WRITTEN FOR THE ASSOCIATED PRESS

LUBBOCK--When it comes to toys, there is one best critic-children.

"If a toy doesn't work right, that's it. They'll leave it alone," according to a Texas Tech University architecture professor who introduces sculpture techniques to his students by assigning a toy design and construction project.

Prof. Robert G. Venn co-teaches the course with Prof. Robert R. Bruno. The first assignment is a five-week project. Students must design a toy, build it, and test it with the critics. This year critics were Venn's own two children and, more importantly, 2-year-olds who attend the Texas Tech University Child Development Center supervised by the Department of Home and Family Life.

Designs ranged from an innovative "jungle jim" and hobby horse to an unconventional wheel-motivated ladybug, a rocking "boat," and even a toddler's pinball machine.

In every case students gave the children something to do, and a part of the students' grades depended upon the delay time required to tear up the toy.

"The toy has to work right," Venn said. "Adults will put up with dissatisfaction a lot longer than children. Children are very, very clear-cut critics. They'll walk away from anything that doesn't work right after one or two tries."

#### toys/add one

Architecture students enrolled in the sculpture course learn from the toy-making process. They will choose their own projects for the rest of the semester, in metal, wood, stone or other material. But they are likely to remember first mistakes.

The ladybut, for instance, was steered by the antennae. That worked well but the bug's wheels should have been larger and the seat was hard to ride.

The hobby horse was a favorite, perhaps partly because the legs moved up and down as it rolled across the floor, but the children kept pulling the head off.

The gymnastic apparatus, using irrigation pipe for a slide, fascinated all the children. Beneath the slide and ladders it evenhad a room--a good place to hide with easy access and exits. But an innovative ladder made of two lines of half-moon toe holds was an error. The student architects had misjudged the distance between the feet of climbing 2-year-olds.

A cleverly designed peg board, with a crank to move pegs up and down, was a bore at first. Finally, the children caught on and rearranged the pegs, learning to put the right diameter pegs in the right diameter holes. Then the only trouble was arguments over who had the pegs first.

The pinball machine was a glass enclosed table top mounted on an oversize spring. A child could tilt the board until all the marbles traveled through a jungle scene to ring a bell mounted in one corner.

"Toy manufacturers might spend months developing any one of these toys," Venn said, "so the grade isn't dependent upon total success. This is a learning project for beginners in sculpture."

#### toys/add two

Venn's experience helps him evaluate the work of students. His own kinetic sculptures operate like toys for adults. Most are satirical: a cross between a submarine and a fish; a man at a desk who, when turned on, drums his fingers on the desk top; carnival types with elaborate mechanical devices which give a little pleasure.

His series of eight such sculptures, he said, attempts to combine recognizable organic and mechanical elements with the fantasy aspect of mechanical devices emphasized.

Two of his sculptures fascinate his Texas Tech students. One is a satire on vending machines. The operator puts a nickel in, turns a handle, and grooved tongue protrudes, giving the operator back his nickel. The second has the aspect of a toy truck and is a satire on the automotive age.

"It attempts to bite the hand that feeds it and eats your money," Venn explained. By turning a handle, the hood of the "truck" opens as a vicious maw, grabs a coin and, with a clank, snaps shut, almost grabbing the operating hand. The coin disappears to the back of the mechanism and is locked in.

"In teaching the basic course in sculpture," Venn explained, "Prof. Bruno and I are primarily teaching students to work with their hands in any material. Designs and execution must be original.

"With toys, there are certain difficulties," he said. "It is a structure and design problem, first to find something kids enjoy, and then to build it in such a way that it has some enduring quality.

"It is satisfying for students because there are immediate results. They themselves can tell within a few minutes of the test by children whether or not they succeeded."

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CONTACT: Roe Burnett

LUBBOCK--Austin, Texas, radio executive Wendell Mayes Jr. of KNOW was inducted into the Texas Tech University Mass Communications Department Hall of Fame as a highlight of Mass Communications Week at the institution.

The induction ceremonies were conducted by Hereford, Texas, radio station onwer-operator Clint Formby, member of the Texas Tech Board of Regents and the Mass Communications Advisory Committee. Mayes is an ex-officio member of the committee and a past chairperson of it.

Luncheon speaker at the induction program was Charles Jones, vice president of the National Association of Broadcasters, Washington, D. C.

Both Mayes and Formby are widely known in Texas and national broadcast circles, organizations and associations and have been active as members of the associations' working committees. Both also have broadcast interests in several Texas cities.

Another highlight of Mass Communications Week is the presentation of the Thomas Jefferson Award which goes to a public official who has made outstanding contributions to rights of news media to inform the public. This year's award was presented posthumously to the late Sen. Hubert H. Humphrey. It was accepted for the Humphrey family by Dr. John DeSanto, chairperson of the Mass Communications Department of St. Cloud State University, Minn.

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CONTACT: Nita Gilger

LUBBOCK--Fourteen Texas Tech University students who participated in a course on projects in home planning will show their interior designs at the Feb. 21 meeting of the West Texas Home Builders Association, at 8 p.m., Koko Corner.

The students used actual homes from the 1977 Parade of Homes in southwest Lubbock to design interior decorations for the homes. The students selected one or two rooms and sketched their designs in conjunction with the colors and designs the builders installed in the homes.

Lee Conley, interior designer for Spears Furniture and parttime instructor in the Texas Tech Department of Family Management Housing Consumer Science, taught the home planning course in which the students made the designs.

The invitation to show their drawings will give the students an opportunity to meet builders and give the builders a chance to see the work the students are doing, Conley said.

The students who participated in the project include Peggy Cooper of College Station, Chyrlynne Hord of Waco, Tommi Reed, Lynn Richardson and Shauna L. Hoover of Lubbock, Brenda Johnson of Slaton, Nanette Gratz and Susan L. Reese of Dallas, Lynne Luedtke of Paducah, Kimberly A. Gross of San Antonio, Patti Riscky of Fort Worth, Laurie A. Alexander of Abilene, and Kim Miller of Dimmitt.

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CONTACT: B. Zeeck

ATTN: Agriculture Editors

LUBBOCK--For cattle and other ruminants, sunflowers may provide a cheaper high protein feed than cotton.

While cottonseed meal has a higher crude protein level, 41 percent, than sunflower seed meal, 30 percent, the two apparently have equal digestibility, according to Dr. Robert C. Albin, who heads the Department of Animal Science at Texas Tech University.

Albin, working with graduate students, studied the chemical composition, fiber content, digestibility, nitrogen balance values and roughage replacement value of whole sunflower seed meal in comparison with cottonseed meal and cottonseed hulls in a ruminant finishing ration. Eight Holsteins were used in the test, replicated four times. Consumption of all rations was limited to 15 pounds per head daily, fed in two equal feedings.

He said results indicated that growing-finishing beef cattle can use solvent-extracted sunflower seed meal as efficiently as solvent extracted cottonseed meal when fed on an equal crude protein and crude fiber basis.

In both rations, Albin said, there is no significant difference in digestibility of gross energy or nitrogen retention values.

### albin/add one

There must be compensation for the reduced crude protein in sunflower seed meal, he said, and because the sunflower product includes the hulls it is necessary to lower the proportion of cottonseed hulls in the diet when using the sunflower seed meal.

The per unit cost of sunflower protein is cheaper, however, Albin said, than the cottonseed meal protein, and there is an added advantage for growers.

Sunflowers on the West Texas plains are considered at the minimum to be a 90-day crop. If a grower is hailed out or loses a cotton crop from some other cause early enough in the season, he can plant sunflowers and still produce an income.

They are hardy and adaptable, Albin said, although to make money high levels of water are necessary. Dryland sunflower production likely would not pay, in Albin's view.

Whether or not the sunflower seed meal is useful with nonruminant livestock will be determined in tests underway at Texas Tech. Dr. C. Reed Richardson is the principal investigator. Working with him is Robert Beville, graduate student in animal science from Decatur.

One value of the sunflower seed meal, Albin said, is its high level of methionine, the sulfur valuable in growth for chicks and lambs. The high fiber content, on the other hand, may reduce digestibility in single stomach animals.

Participating in the study with Albin was Robert Ratcliff, who earned the master's degree at Texas Tech in December and who is working with Hi-Pro Feeds in Friona.

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1-2-27-78

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CONTACT: Roe Burnett

LUBBOCK--High School seniors from Texas and New Mexico will take an in-depth look at Texas Tech University during "University Day," March 3.

A centralized information mall, special presentations by each college, and campus bus tours will provide prospective college students an opportunity for first-hand observation of Texas Tech facilities and student services.

Registration will begin at 8:30 a.m. in the University Center (UC) Lounge. Special sessions with the Colleges of Agriculture Sciences, Arts and Sciences, Business Administration, Education, Engineering, and Home Economics will be held from 9:45-11:30 a.m.

Information booths in the UC Ballroom will be open from 11 a.m.-4 p.m. to answer questions concerning admissions, financial aids, student affairs, honors program, student organizations, Texas Tech Band, testing and evaluation, recreational sports, ROTC, women's intercollegiate athletics, fraternities, sororities, student association and each college.

Academic advisors also will be available to answer any questions.

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2-2-27-78

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CONTACT: Preston Mitchell

LUBBOCK--"Manipulation between reality and illusion" is the central theme of the 1978 German play, "Der Gruene Kakadu" (The Green Cockatoo), scheduled for late March and early April performances at Texas Tech University.

The German play production, in its 32nd year at Texas Tech, was started by Dr. Theodor W. Alexander, professor of German and play co-director, in 1947. Only two other major universities in the nation produce an annual German play, according to Alexander: The University of Texas at Austin and the University of Minnesota.

"This year the audiece will feel they are in a tavern called The Green Cockatoo," Alexander said. "The audience will actually experience the manipulation between reality and illusion."

"The 'Green Cockatoo' can be described as a play within a play," he said. "It is designed to be a three-stage affair involving our audience seeing what the audience at The Green Cockatoo is seeing."

Fifty students from the Department of Germanic and Slavic Languages will participate in the drama, which is presented in German.

### german play/add one

The one-act play, written by Arthur Schnitzler in 1898, is scheduled for 8:15 p.m., March 30, 31 and April 1, 3, and 4 in the Qualia Room of the Foreign Language and Math Building at Texas Tech.

The cast will also present the play at The University of Texas at Arlington during the Texas Association of German Students convention on April 8. Dr. Thomas I. Bacon, head of the Department of Germanic and Slavic Languages, is co-director of the play.

Admission is \$1.50 and reservations may be made by calling 742-3282.

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3-2-27-78

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CONTACT: Nita Gilger

LUBBOCK--Home Economics Awareness Day at Texas Tech University on Friday (March 3) will feature several widely-known home economists speaking on the theme, "The Structured Versus Unstructured Jobs for Home Economists."

The speeches and informal sessions will be from 8:30 a.m.-1:30 p.m. in the Home Economics Building.

Keynote speakers include Texas Tech graduate Phyllis Pittman, fashion designer, now of New York, and Dr. Sue Greninger, professor of home and family life at The University of Texas at Austin. Both speakers will give their presentations at 10:30 a.m. and again at 12:30 a.m.

Pittman, who will speak on the unstructured jobs in home economics, room 63, has her own business in New York. She was graduated from Texas Tech in 1972 as a clothing and textiles major and with studies in fashion merchandising.

She lived in Europe for a few years and then returned to New York to begin designing and selling clothing. Pittman's collection emphasizes soft, feminine fashions, with touches of ruffles, ribbons and inserts of lace, and they are selling well.

Buyers have purchased her collection for such stores as Sakowitz in Houston, Neiman-Marcus in Dallas, Stanley Korshak in Chicago and

### home ec day/add one

New York, and Altman's Berdorf Goodman and Saks Fifth Avenue. The designs sell for \$275-\$350.

In room 124 Greninger will speak about structured jobs in the home economics field. She worked for the Pillsbury Co. developing recipes and handling promotional work.

The University of Texas professor also has held numerous other teaching positions in home economics at the university level.

Other activities for Home Economics Awareness Day includes talks by Matt Stricherz of the Texas Tech Counseling Center on "Body Language and How It Affects Job Seeking," at 8:30 a.m., room 124; and Jane Brandenberger, director of Texas Tech University News and Publications, on "Public Relations as a Part of Your Job," also at 8:30 in room 226.

Dr. Marilyn E. Phelan, Texas Tech law professor, associate dean of Graduate School and interim general counsel, will speak at 9:30 a.m., room 242, on "Legal Rights in the Business World." Also at 9:30 a.m., room 222, Robert Prock of the Lubbock Small Business Administration will speak on "The Ins and Outs of Starting One's Own Business."

After a 10:30 a.m. reception in El Centro for all speakers, students, faculty and interested persons, Pittman will hold an informal talk-session, room 63, from 1:30-4:30 p.m.

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4-2-27-78

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill March 10)

For Immediate Release

HEAR MICHAEL LORIMER, ACCLAIMED AS ONE OF THE TOP CLASSICAL GUITARISTS IN THE WORLD, MARCH 9, 8:15 P.M. IN THE TEXAS TECH UNIVERSITY CENTER. TICKETS ARE AVAILABLE AT THE UNIVERSITY CENTER TICKETBOOTH OR CALL 742-3610. FOR AN EVENING OF CLASSICAL GUITAR AT ITS BEST DON'T MISS THIS PERFORMANCE BY MICHAEL LORIMER, "AN ARISTOCRAT OF HIS INSTRUMENT."

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5-2-27-78

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CONTACT: B. Zeeck

LUBBOCK--Hundreds die, thousands are injured and more than \$800 million in property damage occurs every year in the United States as a result of tornadoes, hurricanes and severe tropical storms.

With all the havoc it is especially critical to protect hospitals throughout the storms, and Texas Tech University researchers have developed a questionnaire to help such institutions prepare structurally for the severest winds.

In a report prepared by Dr. James R. McDonald, Tech associate professor of civil engineering, tables indicate that one of the worst windspeeds encountered by any hospital in the United States was a 200 mile-per-hour blast that made a direct hit on Bishop Bergen Mercy Hospital in Omaha in 1975.

But the high winds have been noted across the country, and the Xenia, O., high school also experienced 200 mph winds in 1974. The Monahans, Tex., Ward Memorial Hospital last year was struck by winds between 150 and 200 mph. Spohn Hospital in Corpus Christi was hit by hurricane winds gusting from 160 to 180 mph in 1970.

McDonald's study was done for the Veterans Administration, and the questionnaire he prepared for the VA would allow any trained

#### hospitals/add one

engineer using it to make a rational judgement on how a facility will perform in a windstorm.

VA hospitals have had their share of high winds. In 1959 a 115 mph blast hit the VA Regional Office and Hospital in Fargo, N.D., and better than 90 mph winds have struck VA hospitals in Brockton, Mass., Providence, R.I., and Bay Pines and St. Petersburg, Fla.

While McDonald's questionnaire was for VA use, the engineer said it could apply to other buildings, including hospitals.

"The information from our historical survey, evaluations of the construction subsystems, and use of the questionnaire provide the information VA personnel need for developing new design criteria, if needed, and for assessing the condition of existing facilities with regard to their windstorm resistance.

"We hope soon to provide a similar questionnaire for public use," McDonald said.

In developing the questionnaire McDonald said he relied heavily on the work of the Texas Tech University Institute for disaster Research which, in the past seven years, had strucutral engineers surveying building damage resulting from more than 30 windstorms. McDonald is a member of the institute as well as a member of the Texas Tech faculty.

Particularly dangerous to hospitals, he said, are glass breakage; gravel being swept from roofs and serving as wind-borne missiles; roof-mounted mechanical equipment being ripped off and not only leaving holes in the roofs but also sometimes becoming missiles themselves; and even collapse of some walls.

### hospitals/add two

In most cases, McDonald said, the historical survey showed no major casualties, often because of forewarning which allowed evacuation of patients and personnel to safety.

The safest solution, however, according to McDonald, is good initial construction.

Working with McDonald in the study was Texas Tech graduate student Patrick A. Lea of Tyler, Tex.

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6-2-28-78

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CONTACT: Dan Tarpley

LUBBOCK--Some 100 leading scientists from 15 countries and 50 or more institutions will meet at Texas Tech University March 9-11 to report on and hear reports on what may be the latest developments in the search for super heavy elements.

The "International Symposium on Super Heavy Elements," according to Texas Tech physicist M. A. K. Lodhi, International Advisory Committee chairperson, will look at the latest laboratory and natural evidence regarding the existence or non-existence of super heavy elements (SHE).

There also will be reports on the latest theoretical predictions regarding stability, reaction mechanisms, possible methods of production and structure of SHE. The meeting will enable discussion of unsolved and controversial problems in this area.

It will provide opportunity to focus on needed critical experiments and calculations and foster interchange of ideas among specialists in this area and researchers in related areas.

The search for possible phenomena in SHE research could make universal contributions, Lodhi said. It is possible that is SHE were found, they could provide a variety of applications for benefit of human society.

### lodhi & elements/add one

The research may reveal other findings, and entirely new phenomena in other research areas could be discovered, the Texas Tech physicist said.

The scientists are challenged by the unknown, and their innate curiosity can lead to discoveries which would have almost revolutionary results not only in the fields of physics and other sciences but also in other disciplines and knowledge, he said.

At least two Nobel Laureates and three Bonner Laureates are participating. The Nobel Laureates are Drs. E. M. McMillan and G. T. Seaborg of the University of California, Berkeley; the Bonner Laureates, Drs. H. Feshbach of Massachusetts Institute of Technology (MIT), W. A. Fowler of California Institute of Technology, Pasadena, and M. Goldhaber of Brookhaven National Laboratory, Long Island. The Nobel prize is the highest given in general physics, and the Bonner the highest in nuclear physics.

Richard C. Atkinson of Washington, D.C., director of the National Science Foundation, also will attend and participate.

Seven sessions will be held, all in the University Center Senate room. The first is scheduled for the morning of March 9 and the last on March 11. An informal work session also will be arranged, if possible, in which the work in progress and incomplete reports can be presented with free discussion, Lodhi said. This work is not intended to be included in the proceedings.

W. O. Milligan, director of research, Welch Foundation, will chair the opening session. The inaugural lecture will be delivered by O. Lewin Keller of Oak Ridge National Laboratories. It will present an overview on the history and perspective of the search for super heavy elements. -more-

### lodhi & elements/add two

The second Thursday morning session, March 9, will be on searches for SHE at accelerators. That afternoon's program will be on the quest for SHE in nature.

Friday (March 10) sessions are on theoretical predictions for SHE and atomic phenomena relevant to SHE. Saturday meetings are on model and techniques pertaining to SHE, as well as a final plenary session.

A summary of the symposium will be presented at the plenary session by Dr. George Cowan of Los Alamos (N. M.) Scientific Laboratory.

Two outstanding women scientists will deliver papers at the symposium: Dr. Darleane C. Hoffman of Los Alamos Scientific Laboratory and Dr. Daphne F. Jackson of the University of Surrey, England.

Hoffman, speaking at the second session, will summarize work being done in Russia. She has recently returned from a trip to the USSR. Jackson will present the proposal of a new theory designed to help identify super heavy elements. She will speak at the sixth session.

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7-2-28-78

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CONTACT: B. Zeeck

EDITOR'S ADVISORY: You are invited to participate in a news (Bell-ah-oon'-day Terry) conference for Sr. Belaunde-Terry at 2 p.m., Thursday (March 2), in the Green Room of the Texas Tech University Center.

LUBBOCK--Political and economic issues facing Latin America will be discussed by a former president of Peru in a public lecture at 8 p.m. on Thursday (March 2) in the Texas Tech University Business Administration Building room 202.

Fernando Belaunde-Terry, a leading architect and widely known university professor as well as one of Latin America's leading politicians, will speak on "Latin America Today" at his evening lecture, the second in the Faye LaVerne Bumpass Lecture Series. His lecture is free to the public.

He will conduct an informal seminar for students and faculty, particularly those in Latin American Area Studies and political science, at 3:30 p.m. on Thursday in Holden Hall, room 4.

On Friday Belaunde-Terry will give two lectures in the Division of Architecture at 10:30 a.m. in room 7 in the Architecture Building on the "Art and Architecture of the Incas" and at 11:30 a.m. in room 157 of the Business Administration Building, on "Squatter Settlements in Developing Nations."

The division will be the host for an informal coffee for the distinguished architect at 9:30 a.m. in room 1001 of the Architecture Building. -more-

### belaunde-terry/add one

The public is especially invited to the Bumpass lecture at 8 p.m. on Thursday, but the other sessions, open to the public, are designed particularly for faculty and students with special interests.

Belaunde-Terry is visiting professor of urban history and planning at George Washington University in Washington, D.C. He has lived in the United States since 1968 and has taught at Harvard, Columbia and Johns Hopkins universities as a visiting professor.

He is well known to American audiences as a dynamic speaker as well as an authority on Latin American affairs.

Belaunde-Terry was president of Peru from 1963 to 1968 and has been mentioned as a future candidate for the same office. He also served in the Peruvian legislature from the Lima district.

His term as president was marked by the development of numerous social programs, and many of these emphasized his interest in integrating Peru's large Indian population into the national life.

Several major construction projects were undertaken during his term of office. One of the most notable was the Carretera Marginal de la Selva, a highway to link the coastal regions of Peru with the largely undeveloped Amazonian areas.

Belaunde-Terry studied in France and the United States, earning his architecture degree from The University of Texas at Austin. In Peru he became both a teacher and practicing architect, founding the professional journal, "El Arquitecto Peruano," and the Instituto de Urbanismo del Peru, which evolved into the Facultad de Arquitectura in the Escuela Nacional de Ingenieros. Belaunde-Terry was its first dean.

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LUBBOCK--Public school teachers from West Texas and New Mexico are invited to attend an aerobic dancing workshop at Texas Tech University on Saturday (March 4) from 8:30 a.m.-l p.m. in the Men's Gymnasium.

Workshop dances are choreographed to teach elementary, secondary and university students.

Clinician Jacki Sorensen, originator of the aerobic dancing program, is workshop instructor. Sorensen has put together more than 300 aerobic dance routines at the University of California as a student. She taught classes and conducted laboratory and field tests on the program before introducing it to other fitness instructors in 1972.

Aerobic dancing is an exercise that is beneficial for the heart, muscle endurance and power, coordination, balance and flexibility.

Aerobic Dancing Incorporated also offers classes for adult women in Amarillo, Canyon and Lubbock. The women's classes are for 12 weeks and serve as fitness courses.

Lubbock classes for women are held in the First Baptist Church Activities Building. The instructor is Masy Whiteside.

More information about the aerobic dancing program in West Texas can be obtained by contacting Patsie Ross, Texas Tech physical education instructor, at 742-3364.

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CONTACT: Pat Broyles

ATTN: PSA Directors (Kill March 4)

HOME ECONOMICS AWARENESS DAY AT TEXAS TECH UNIVERSITY FRIDAY, MARCH 3RD, WILL FEATURE SEVERAL NATIONALLY RECOGNIZED HOME ECONOMISTS SPEAKING ON THE JOB ASPECTS IN THE HOME ECONOMICS FIELD. SPEECHES AND INFORMAL SESSIONS WILL BE FROM 8:30 A.M.-1:30 P.M. IN THE HOME ECONOMICS BUILDING AT TECH. TOPICS TO BE COVERED INCLUDE "BODY LANGUAGES AND HOW IT AFFECTS JOB SEEKING", "LEGAL RIGHTS IN THE BUSINESS WORLD" AND "STRUCTURED AND UNSTRUCTURED JOBS FOR HOME ECONOMISTS".

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10-2-28-78

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CONTACT: Dan Tarpley

LUBBOCK--A "Distinguished Visiting Scientist" to Texas Tech University has scheduled a lecture designed particularly for non-physicists and the general public to tell them how physicists know what atoms are made of.

Dr. Walter E. Meyerhof, professor of physics at Stanford University, will deliver the lecture at 7:30 p.m., Tuesday (March 7), in room 57 of the Science Building at Texas Tech and the public is invited at no charge.

Meyerhof also will deliver three other lectures while on campus which are also open to the public but which are designed primarily for scientists. They are on "Inner-Shell Ionization in Atomic Collisons" and will be presented in room 60, Science Building, 3:30 p.m., Monday and Wednesday (March 7 and 8) and 3 p.m., Tuesday (March 7).

The public lecture attempts to answer the question: "How do physicists see systems they can not ordinarily see, such as atoms, nuclei or the constituents of nuclei?" With use of lecture demonstrations and illustrations, it will be made plausible that collisions between particles provide a powerful tool to investigate these small systems, said Dr. M. A. K. Lodhi, Texas Tech physicist.

#### meyerhof/add one

Based on historical development of the knowledge which has been gained, results about the structure of atoms, nuclei and other particles will be presented.

The development of particle accelerators in the last 20 years has stimulated the study of atomic, as well as nuclear, collisions. In contrast to nuclear collisions, in an atomic collision the time development of the collision can be studied theoretically and observed experimentally, he said. When atoms coalesce, the inner electrons will see the summed nuclear charge. In this way one can study the properties of systems with summed charge.

Meyerhof will remain at Texas Tech to participate in the International Symposium on Super Heavy Elements, March 9-11.

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11-2-28-78

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For:

CONTACT: B. Zeeck

ATTENTION OIL EDITORS

LUBBOCK--

Between 450 and 500 representatives of production and refining industries in the Southwest are expected to attend the short course, sponsored by the West Texas petroleum industry and organized by the Texas Tech Department of Petroleum Engineering.

The program will cover information on drilling and well completion, well stimulation and work-over, reservoir operations, artificial lift, production handling and general interest papers, including two dealing with solar and geothermal sources of energy.

For additional information write Prof. Duane A. Crawford, Department of Petroleum Engineering, Box 4099, Texas Tech University, Lubbock.

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CONTACT: Marcia Lundy

LUBBOCK--Correspondence real estate classes, offered through Texas Tech University, drew more than 400 enrollees this semester.

Almost 200 enrolled in non-credit courses and more than 100 enrolled in regular classes in real estate offered at the university.

The real estate industry in Texas might be termed self-perpetuating because half of the yearly license fees collected from realtors go into programs like Tech's to provide continuing education for realtors.

The fees are put into a fund which supports the Texas Real Estate Research Ceneter, set up by the Texas state legislature.

The center provides for continuing education for realtors and for initial education for beginning real estate students. It is located at Texas A & M University, but several state universities participate in the program.

One of those is Tech, which receives about \$25,000-\$30,000 a year from the fund.

Dr. Rex P. Kennedy, professor of agricultural economics at Tech, was original coordinator of the program on the Tech campus. He set up the advisory group for an interdisciplinary program between the Colleges of Agricultural Sciences, Business Administration and Home Economics in 1974, and he heads the program in the Department of Agricultural Economics.

### real estate program/add one

The objective of the statewide program, according to Kennedy, is to upgrade the professional status of realtors in the state.

The program is directed in business administration by Dr. Karl L. Guntermann, professor of finance, and in home economics by Dr. K. Jane Coulter, associate dean of the college.

The four areas taught include finance, management, sales and appraisal. The program is set up as an option in each of the three colleges' degree plans. For instance, in agricultural sciences it is an option in the degree in agricultural economics, Kennedy explained.

All three colleges coordinate their programs, with students taking courses from each of the three. The difference in the programs is that a student in the agricultural option, for example, concentrates in agricultural real estate, according to Kennedy.

A student with an option in real estate will receive from 12 to 15 college credit hours of pure real estate. By 1981, the educational requirement will be about 60 college hours for a license. University requirements would differ between colleges.

At graduation a student will have fulfilled the educational requirements for a state realtor's license, Kennedy said, and will only have to pass the state exams. Regular and correspondence classes are credit courses and are the ones taken for the educational requirement.

All three colleges also periodically sponsor seminars and workshops for licensed realtors. These provide the realtors with opportunities to catch up on new developments and review old material.

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CONTACT: B. Zeeck

LUBBOCK--Mathematicians attending Texas Academy of Science (TAS) meetings at Texas Tech University Friday, March 10, will haear one of the nation's most distinguished pure, abstract mathematicians, Dr. Hyman Bass of Columbia University.

Bass will speak during a symposium at 9:40 a.m. in room 208 of the University Center. His subject will be "Linear Representations of Infinite Groups," an area used in such things as quantum mechanics, physics of elementary particles and the relativity theory.

Texas Tech Mathematics Prof. William H. Gustufson, who arranged for Bass's lecture, explained that pure mathematics ultimately lies behind all applications of mathematics.

"It is perhaps the most rigorous form of abstract thought," he said.

In conjunction with the TAS meeting, Bass's appearance is a part of the weekly Mathematics Colloquium at Texas Tech. Gustufson is Colloquium chairperson.

Bass, a native of Houston, studied at Princeton University and the University of Chicago before going to Columbia University. He was a National Science Foundation Fellow at College de France during the 1963-'64 academic year. He is noted for his research

### bass/add one

in algebraic number theory, algebraic geometry and representation theory. He is the founder of algebraic K-theory used in abstract mathematics.

The American Mathematical Society awarded Bass the 1975 Cole Prize for algebra, recognizing his distinguished work in algebra and number theory.

The public may attend his lecture.

-30-

### underground living/add one

"While mortgage payments remain fairly constant, utility payments on conventional homes inevitably will be much greater than those mortgage payments."

One obvious alternative solution is to put homes underground where temperatures vary much less than they do on the surface, he said.

Skylights can provide daylight. Much of the heat required could come as a byproduct, heat generated by lights and applicances. Heat for domestic hot water can be provided economically by solar energy.

Underground dwellings must be designed for regional differences, Kiesling said, but the Southwest, particularly West Texas, has some unusual advantages.

"We have uniform soil conditions," he said, "and few water problems, nothing like the drainage and flooding problems which could affect other regions."

While some people might feel a psychological barrier to living underground, Kiesling said he thinks this can be overcome with good design, to give the feeling of openness.

In Smith's view, however, there always will be some who won't feel comfortable underground despite the savings, "just as there are people who will never be comfortable living on the 14th floor of an apartment building."

The concept for earth covered residential units is equally good for small businesses, Smith said, and small apartment complexes are within reason.

### underground living/add two

Basic research should precede construction, Kiesling and Smith agreed. Among the factors to be studied are analyses of soil properties and temperatures at different depths, the optimum depth of soil cover, the most economical structural system, whether or not earthquake activity would have any bearing on the safety of the structures and such factors as the amount of fresh air required for comfort and health.

This particular area, Smith said, does not record any but minor damage from earthquakes.

"We don't expect to find any earthquake problems here which would deter underground living," he said, "but studies are important to the success of the concept."

Kiesling said he expects complementary research will be done in Texas Tech's College of Home Economics and Division of Architecture.

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CONTACT: Roe Burnett

LUBBOCK--Speakers representing the areas of architecture, art and design will participate in a design seminar at Texas Tech University, Saturday (March 4), 8:30-11:30 a.m., in the University Center Coronado Room.

The seminar on "Designing Our Environment" is sponsored by the student chapter of Housing and Interiors.

Gerald McLindon, dean of environmental design at Louisiana State University, will be the keynote speaker.

Other speakers include Wayne Douglas Carpenter of Dallas, representing the student chapter of Housing and Interior Design; Lawrance Zuercher, student chapter of American Society of Landscape Architects; Prof. W. L. Garvin, chairperson of the Department of Architecture, student chapter of American Institute of Architecture; and Andre Staffelbach, commercial interior designer of Dallas, student chapter of Association of Student Interior Designers.

A courtesy luncheon will be served in El Centro in the College of Home Economics Building at the conclusion of the seminar. The public is invited to the seminar and free luncheon.

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CONTACT: B. Zeeck

LUBBOCK--Twelve-hour workdays, women working in saloons and pay in company script rather than money were big labor issues in the not too distant past. To make changes it was the courts which applied an increasingly broadened concept of state police power.

In an article published in the January issue of "Journal of the West," a quarterly historical publication, Texas Tech University History Prof. R. Douglas Hurt writes on "Populist-Endorsed Judges and the Protection of Western Labor."

"From 1893 to 1902, eight Populist-endorsed state supreme court judges in Kansas, Nebraska, Colorado, Washington and Montana ruled on issues crucial to the welfare of the laboring man," Hurt wrote.

"By so doing they had the potential to champion the Populist cause of the protection of labor."

The Populist-endorsed jurists whose work Dr. Hurt reviews include Stephen H. Allen and Frank Doster of Kansas; John J. Sullivan and Silas A. Holcomb, Nebraska; Luther M. Goddard, Colorado; Theodore Brantly and William L. Holloway, Montana; and James B. Reavis, Washington.

One of the most significant issues to come before the justices was a push for maximum-hour legislation, specifically the eight-hour day. -more-

#### populists/add one

In 1890 the typical work week was six 10-hour days, Hurt said. Construction workers averaged 55 hours per week, bakers more than 65, canners 77, and blast furnace steel workers labored 12 hours a day seven days a week. In Colorado miners worked nine-hour days for \$2.50 per day.

Judicial arguments ranged from the idea that laborer had the right to sell his or her own labor as desired to the concept that it was the duty of the state to protect the health of the working man, promote morality and improve the physical and intellectual condition of workers, thus enabling them to become better citizens.

For some justices imposition of an eight-hour work day implied "unwarrantable interference" with the freedom of contract between employer and employee.

As for a law preventing women working in saloons, taverns, theaters or any other place where intoxicating liquors were sold, the court in Nebraska justified its constitutionality on the grounds that women had always been considered wards of the state and---since certain types of work which men performed were injurious to the health of women and thereby damaged home and family life---it was the duty of the state to protect women from hazardous occupations.

In regard to script, some miners received this in lieu of lawful money for 72 percent of their wages. It could be used only at the company store where prices were highly inflated.

In almost every case the Populist justices argued in favor of the eight-hour day, the freedom of contract for women and the banning of script.

### populists/add two

The Populist movement was fundamentally agrarian, Hurt said, and the supporters made a fundamental error in believing that the interest of rural and urban labor were the same.

"The farmer wanted high prices for his crops and low prices for mercantile goods, machinery and other necessities. The urban worker wanted cheap bread and increased industrial prices in order for his company to profit and in turn grant him a wage increase," Hurt explained.

The Populist movement was concerned primarily with railroad abuses, land and money.

"Although labor reform was minimal in the courts of Populist states," Hurt said, "it seemed significant when compared to the court's regulation of railroads and finance.

"The responsiveness of the state supreme courts and the Populist-endorsed justices in regard to the protection of labor was the closest to judicial activism, or rather judicial Populism, that these states ever came.

"Not until nearly 75 years later did 20th century Populists openly advocate the achievement of social reform through the judiciary."

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#### CONTACT: Pat Broyles

ATTN: News Editors

LUBBOCK--Texas Tech Students for Free Enterprise in the College of Business Administration are promoting free enterprise by putting it to work.

The students in Individual Problems 4381 for their class project are working on a campaign to promote and explain the free enterprise system. Working with the students, Mayor Roy Bass and the Texas Tech Student Association have officially proclaimed the week of March 5-11 "Free Enterprise Week" in Lubbock and at Texas Tech.

Dr. Vincent P. Luchsinger, professor of management at Texas Tech, is course instructor. According to Luchsinger the public is all for free enterprise but just does not comprehend its full ramifications.

"Free Enterprise revolves around concepts like freedom of choice, competition and making a profit. It is a system providing the right and freedom to operate competitively for profit with a relative absence of interference."

To build interest in free enterprise and promote the week's activities the students have worked within the free enterprise system and sold several thousand dollars in advertising to finance a Sunday supplement to the "Lubbock Avalanche-Journal." The supplement, to be in the March 5 edition, will feature articles

### free enterprise/add one

by the students explaining the meaning and history of free enterprise in America.

Texas Commissioner of Agriculture Reagan V. Brown will highlight the week at a seminar on free enterprise. Brown will talk Friday, March 10, 3 p.m. in room 202, Business Administration Building.

"The goal of the week is to promote awareness and understanding so that people will know the issues involved and protect free enterprise," Luchsinger said.

Throughout the week various aspects of the free enterprise system will be on display in the Business Administration Building.

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CONTACT: B. Zeeck

LUBBOCK--The Texas Academy of Science (TAS) annual section meeting on Forensic Sciences, from 2 to 4:30 p.m. Friday, March 10, in the Texas Tech University Science Building room 57, should prove of special interest to lawyers and others concerned with insurance claims.

The presiding officer for the meeting, Dr. Raymond W. Mires of the Texas Tech physics faculty, said most of the papers presented will be case studies. They will be of value, he said, both to scientists and non-scientists.

Speakers will be: Dr. I. C. Stone, chief of the Physical Evidence Analysis Section, Southwestern Institute of Forensic Sciences, Dallas, discussing "Scientific Evidence in Criminal Cases;" Charles Manka and Jack Wilson of the Sam Houston State University faculty, "Scientific Evidence in Civil Cases;" Hadley Edgar of the Texas Tech University law faculty, "Presentation of Scientific Evidence in Court;" and Mires, "Forensic Applications of Engineering Physics."

Sessions are part of the 81st annual meeting of TAS taking place at Texas Tech University on March 9-11.

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CONTACT: Mark Haller

ATTN: Sports Editors

FOR IMMEDIATE RELEASE

LUBBOCK--The Texas Tech Red Raider Women's basketball team, coming off a second place finish in the TAIAW West Zone Tournament last weekend, will begin play Thursday (March 2) in the TAIAW State Tournament in San Angelo.

In zone tourney play the Raiders defeated Abilene Christian University, 94-64, and Angelo State University, 94-67. In the final round the Raiders were beaten for the third time this season by the Wayland Baptist Flying Queens, ranked fourth in the nation.

"I am not sure what causes it," said Tech Coach Gay Benson. "But Wayland seems to overpower us psychologically every time Because of the pressure of the tournament Wayland's presence was just that much more evident."

At 12 noon Thursday the Techsans will face Sam Houston State University in the first round of play. The winner of that game will take on the winner of the University of Houston-Angelo State University game.

#### state tourney/add one

"The way the tournament bracket is designed, if we beat Sam Houston State and the winner of the Houston-Angelo State game, we will be playing Wayland again," Benson said. "If we play well enough to advance that far, I only hope that we don't let Wayland beat us before the game even starts."

Wayland is seeded first in the tournament, with The University of Texas at Austin second, Stephen F. Austin State University third, Tech fourth, Houston fifth and North Texas State University sixth.

Tournament play will continue through Saturday in San Angelo. The Raiders finished regular season play with a record of 26-9.

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CONTACT: Roe Burnett

LUBBOCK--One of the world's leading classic guitarists, Michael Lorimer, will perform in concert on March 9, 8:15 p.m., in the Texas Tech University Center (UC) Theatre.

Lorimer, presented by the Texas Tech Music Department and the UC Cultural Events Office, is the first American Classic guitarist invited to perform in the Soviet Union. He toured the USSR in 1975.

The young American artist was born in Chicago and reared in Los Angeles. His guitar studies began at the age of 10 and by 1963 he was taking master classes with Andres Segovia.

In addition to performing early works on original instruments, the baroque guitar and lute, Lorimer also is interested in contemporary music.

He gave the American premieres of Andre Previn's "Guitar Concerto" and Maurice Ohana's "Concerto for Guitar and Orchestra." He also has premiered William Bolcom's "Seasons" for solo guitar and "Folios" by Toro Takemitsu.

During Lorimer's appearance at Texas Tech he will conduct a class visit and two master classes in guitar.

Tickets are \$2.50 for students and \$5 for others. Advance tickets may be purchased at the UC Ticketbooth and \$5 tickets only may be purchased at Hemphill-Wells in South Plains Mall. For more information call 742-3610.

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CONTACT: Nita Gilger

LUBBOCK--A circus the likes of which West Texas has never seen before will be performed, Tuesday through Thursday (March 7-9), in Lubbock, a prelude to the 39th National Festival of the Puppeteers of America at Texas Tech University this summer.

The Fred Cowan Puppets, one of the largest portable puppet productions in the United States, will present their new production "Circus Showcase," at Don Crow Chevrolet, Loop 289 and Slide Road, Tuesday, Wednesday, and Thursday at 10 a.m., 2 p.m. and 4 p.m.

The marionette circus will include clowns, acrobatic acts, elephants, lion tamers, rope walkers, and a knife thrower hurling knives at his beautiful assistant and barely missing her.

Puppeteers Fred Cowan and Rudy Gaytan will perform. The Fred Cowan Puppets were located at the Storybook Gardens in the Dells, Wis. They recently moved headquarters to Dallas.

The show is "alive." The eyes of the puppets sparkle and blink, and the puppets do juggling, balancing balls on their feet, strutting, blowing up balloons, moving their mouths as if speaking, and even working their own marionettes.

"Circus Showcase" is designed to entertain all ages and is noted as "good family entertainment." The show is open to the public at no cost. The total investment for the Fred Cowan Show is \$25,000. The price of each puppet is estimated at \$800. Approximately \$900 is spent on feathers and another \$1,500 on materials specially ordered for the show.

The Fred Cowan Show is put together and presented by a crew of nine seamstresses, two sculptresses and one hairdresser in addition to Cowan and Gaytan.

Cowan does technical designs for the show such as equipping the puppets to blow up balloons and attaching the baton to the puppet so that it can be twirled.

The circus puppet show is in Lubbock to help promote the upcoming 39th National Festival of the Puppeteers of America. The festival will be at Texas Tech University on June 25-July 1.

Workshops, demonstrations, study groups, exhibits and professional performances will be offered at the festival to persons interested in puppetry.

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#### CONTACT: Pat Broyles

ATTN: News Editors

LUBBOCK--Future students at the Texas Tech University School of Law will be on the Texas Tech campus Saturday, March 11, for Accepted Students Day.

The day gives invited law student candidates an opportunity to see the school and meet with students and faculty.

The events begin at 9:30 a.m., Saturday, with opening remarks by Dean Frank Elliott of the Law School. A mock class on torts will be conducted at 10:30 a.m. and a tour of the facilities at 11:30 a.m.

Annette Marple, assistant dean, said that so far over 100 students have been invited to attend.

"The purpose of Accepted Students Day is to acquaint the student with our law school and our facility and what law school study is like."

Spouses of accepted students are also welcome to attend the events.

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CONTACT: Nita Gilger

LUBBOCK--Barbara Barber, director of the Texas Tech University Suzuki String Program and assistant concertmaster of the Lubbock Symphony Orchestra, is the 1978 winner of the Young Artist Auditions sponsored by the Women's Committee of the Oklahoma City Symphony Orchestra.

Barber's winning performance was the Violin Concerto in D Major by Tschaikovsky with the Oklahoma City Symphony directed by Joel Lazaar, associate director.

Barber will return to Oklahoma City, April 1, to perform the concerto again as the Young Artist winner, with the orchestra's conductor, Ainslee Cox, directing. The concert will be sponsored by Xerox Corporation and Barber will receive a cash award.

The musician received the bachelor of music and the master of music degrees from Texas Tech. She has studied at the National Music Camp at Interlochen, Mich.; Rocky Ridge Music Center, Estes Park, Colo.; Accademia Musicale Chigiana, Siena, Italy, and the Taos School of Music at Taos, N. M.

Barber has participated in the Amarillo Symphony Student Soloist Auditions, the Midland-Odessa National Young Artist Competitions, the Pueblo Symphony Young Artist Competition, Tuesday Music Club Young Artist Competition in San Antonio, and the San Angelo Symphony Young Artist Competition.

#### barber/add one

Appearances by Barber include performances with the Amarillo, Lubbock, Midland-Odessa and Texas Tech University symphony orchestras. She also has been a frequent solo performer in numerous public schools and universities throughout Texas and New Mexico.

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CONTACT: Nita Gilger

FOR SUGGESTED RELEASE ON SUNDAY, MARCH 5

LUBBOCK--Persons interested in proper estate planning and reducing taxes through a well conceived plan are invited to attend a seminar on Friday (March 10) from 9 a.m.-4:30 p.m. at the Texas Tech University School of Law.

The seminar on "How to Live--and Die--with Texas Probate" is designed for non-professionals in estate planning. The sessions will inform participants of tax and non-tax aspects inherent in planning estate dispositions.

Speakers include Dr. Cecil Mackey, president of Texas Tech University; Charles A. Saunders, Houston, partner in the law firm of Fulbright and Jaworski and president-elect of the American College of Probate Counsel; Arthur H. Bayern, San Antonio, partner in Remy, Bayern and Paterson and past-president of the San Antonio Estate Planners Council.

Also speaking will be Charles W. Giraud, Houston, partner in Butler, Binoin, Rice, Cook and Knapp and fellow in the American College of Probate Counsel; and W. Reed Quilliam Jr., professor, Texas Tech University School of Law, and member of the Council of Real Estate Probate and Trust Law Section of the State Bar of Texas.

-more-

#### texas probate/add one

The seminar is being sponsored by the Texas Tech University Foundation, Medical School and Law School Foundations and the Division of Continuing Education.

Cost of the seminar is \$10 and inloudes all materials and lunch.

Registration information and other inquiries should be directed to the Division of Continuing Education, room 104, Administration Building, Texas Tech, or by calling 742-3797.

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CONTACT: Pat Broyles ATTN: PSA Directors (Kill March 11) FOR IMMEDIATE RELEASE

"HOW TO LIVE--AND DIE--WITH TEXAS PROBATE" WILL BE THE SUBJECT OF AN ESTATE PLANNING SEMINAR AT TEXAS TECH UNIVERSITY. THE ONE DAY SESSION IS DESIGNED FOR NON-PROFESSIONALS IN ESTATE PLANNING AND IS GEARED TOWARD REDUCING TAXES THROUGH A WELL CONCEIVED ESTATE PLAN. THE SEMINAR WILL BE HELD FRIDAY, MARCH 10, FROM 9 A.M.-4:30 P.M IN ROOM 109 OF THE TEXAS TECH SCHOOL OF LAW. FOR FURTHER INFORMATION CALL (806) 742-3797.

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CONTACT: Nita Gilger

NOTE TO MEDIA: There will be a news conference with fashion designer Phyllis Pittman at 9:30 a.m., Friday (March 3), in room 63, basement, of the Texas Tech University Home Economics Building. Models will be showing Pittman's spring line of fashions at the 9:30 a.m. session. Elevators are available for media use. Biographical information will be available.

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CONTACT: Pat Broyles ATTN: PSA and News Directors (Kill March 1) For Immediate Release

THE WEEK OF MARCH 5TH THROUGH 11TH HAS BEEN PROCLAIMED "FREE ENTERPRISE WEEK" IN LUBBOCK BY MAYOR ROY BASS. TEXAS TECH STUDENTS FOR FREE ENTERPRISE HAVE PLANNED THE WEEK TO INFORM THE PUBLIC ABOUT WHAT THE FREE ENTERPRISE SYSTEM IS AND HOW TO PROTECT IT. A SPECIAL ADDITION TO THE MARCH 5TH AVALANCHE JOURNAL WILL EXPLAIN THE GOALS OF THE WEEK AND A SEMINAR FRIDAY, MARCH 10, WILL FEATURE TEXAS COMMISSIONER OF AGRICULTURE REAGAN V. BROWN DISCUSSING FREE ENTERPRISE. BROWN WILL SPEAK AT 3 P.M. IN ROOM 202 OF THE BUSINESS ADMINISTRATION BUILDING.

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CONTACT: Roe Burnett

LUBBOCK--Former Texas Tech University president Dossie M. Wiggins will be honored at a reception celebrating the tenth anniversary of the dediction of the Wiggins Complex.

The reception Friday (March 3), from 2-4 p.m. in the Chitwood-Weymouth lobby is hosted by the student government of Chitwood, Weymouth and Coleman Residence Halls and the Office of Residence Halls.

Faculty and staff members employed during the tenure of Dr. Wiggins as president have been invited as have the present administrators and regents. Residents in the Wiggins Complex have also been invited to the reception to meet the man for whom the complex is named.

The Saddle Tramps, a spirit organization, will roll out the red carpet for Wiggins.

The Chitwood resident assistants will lead tours for those who have not visited the high-rise halls.

Wiggins served as Texas Tech's fifth president from 1948 until 1952. Prior to his service at Texas Tech, Wiggins was president of the University of Texas, El Paso.

-more-

#### wiggins reception/add one

Wiggins is director of the Texas Commerce Bank of Lubbock, a member of the Board of Trustees at Hardin-Simmons University and member of the Texas Tech Foundation Board.

The three dorms were named in honor of Chanslor E. Weymouth of Amarillo, Texas Tech board member influential in acquiring Texas Tech's Agricultural Research Farm at Pantex; the late Richard M. Chitwood of Sweetwater, a staunch supporter of the bill creating Texas Tech in 1923 and Texas Tech's first business manager, and the late Dr. P. C. Coleman, pioneer Colorado City physician and leader in the campaign to bring a college to the High Plains.

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CONTACT: Marcia Lundy

ATTN: Ag Editors

LUBBOCK--Progress toward commercial use of mesquite is furthered by the development at Texas Tech University of an equation to estimate available mesquite tonnage per acre.

Dr. Donald F. Burzlaff, chairperson of the Tech Range and Wildlife Management Department, has completed research which gives this equation to measure average tonnage per acre. He and several other faculty members are also studying ways mesquite could be used commercially.

One project concerns the possibility of using shredded and treated mesquite as a livestock feed, Burzlaff said. Mesquite might also be used as low quality paper pulp, a coal supplement, charcoal, artificial logs or for steam generation.

The equation is used to determine if enough mesquite is available to make harvesting profitable for the rancher or landowner.

The equation is Y equals .410 times X (Y= .410X). The Y stands for the green weight of the tree, which is the end result of the equation. The .410 is the average total weight of a mesquite tree, as determined through Burzlaff's research. The X is the diameter of the tree at two feet above the ground.

-more-

#### equation/add one

A random sample of 256 trees would have to be measured for diameter, he said. The average diameter of the sample trees is then inserted as the X in the equation and multiplied by .410, which gives the total green weight, or Y. The sampling generally takes about one hour, Burzlaff said.

These 256 trees will provide the average weight of all the trees on a particular section, according to Burzlaff. To determine tree density in a pasture a rancher would have to make a tree count on about 10, one-tenth-acre plots, he said.

These two measurements will provide ranchers with a close estimate of available tree tonnage, according to Burzlaff.

The Tech professor has taken several samples from different areas of the state. For shallowland he found an average of 259 trees per acre, yielding about 1.8 tons per acre. Deep upland has about 567 trees per acre, yielding 8.63 tons. Bottomland averages 633 trees per acre, for 16 tons.

Before embarking on a mesquite harvest, Burzlaff said, a rancher or landowner needs to make such estimates of trees available for harvesting to determine profitability.

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CONTACT: B. Zeeck/Duron Hobbs

LUBBOCK -- "The Legacy," a fast-paced journey through the solar system, will open at the Moody Planetarium of The Museum of Texas Tech University on March 18 in celebration of space achievements since the National Aeronautics and Space Administration (NASA) was formed 20 years ago.

A generation ago, surface features of Mercury and Venus were unknown. Controversy swirled around conjecture regarding the existence of canals on Mars. It was hoped that man might land on the moon in the far distant future.

Viewers of "The Legacy" will embark on a spectacular journey through the solar system aboard an interplanetary spaceship of the future. They will skim past planets for close-up views, available through mankind's new legacy, one made possible by American manned and unmanned space programs.

The program at Moody Planetarium was developed by the Hansen Planetarium in Salt Lake City with the assistance of NASA and the Utah American Revolution Bicentennial Commission. Distribution of the program is supported by NASA.

Showings of "The Legacy" will continue each Saturday and Sunday at 3 p.m. through May 28. Tickets are \$1 for adults and 50 cents for students. Preschool children are not encouraged to attend because of their limited comprehension.

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CONTACT: Nita Gilger

LUBBOCK--Antique puppets, some as old as 200 years, will be part of the exhibit at the 39th Annual National Festival of the Puppeteers of America scheduled for Texas Tech University this summer.

These collector item puppets from various parts of the world belong to Tom Maud, Dallas businessman and president of the Dallas guild of the National Puppeteers of America.

Maud has traveled extensively to find the puppets for his growing collection.

Most of Maud's collection comes directly from Italy and Sicily. However, the origin of his collection was with Neiman-Marcus of Dallas.

According to Maud, some years ago Stanley Marcus had imported a number of old Sicilian rod marionettes for an "Italian Fortnight" promotion. Maud bought a knight, three feet tall, weighing 25 pounds, with fine hand-wrought armor. The knight is an example of mid-19th century art.

The purchase of the knight was just the beginning for the marionette collector. After a month's search in Rome, Maud began looking at Porta Portese, a famous flea market in Italy. Maud purchased a three-foot clown in red and green with black glass

-more-

#### antique puppets/add one

eyes. He soon learned that the clown, more than 100-years-old, had performed in Naples.

Another contribution to Maud's collection was a 19th century prince, a hand puppet from Genoa. The overall length is 30 inches and it has a wooden head. The head is 9 inches long and 4 inches wide.

On the same trip during which Maud bought the prince, he found a dancer, 28 inches tall, with orange hair, real glass eyes, green and gold sequin costume and a wooden head. This Italian dancer had performed in Rome in the 1920's.

Maud also has a 200-year-old Neapolitan marionette in a gold brocade costume. It is 16 feet tall. He also purchased a one-inch marionette, Pinocchio.

"The marionette of Pinocchio is exquisitely detailed and jointed, made of pure gold by a famous craftsman on the Ponte Vecchio in Florence, Italy," Maud said.

The collector has obtained eight puppet heads on iron rods from Sicily. The puppets were used in the Orlando Furioso plays. They vary in size from five to eight inches. The puppets were hidden in Taormina, Sicily, during World War II.

The collection includes other valuable antiques, and Maud will send a few of these "treasured marionettes and puppets" to Texas Tech, June 25-July 1, for the National Festival of the Puppeteers of America.

The festival provides the opportunity for non-professional puppeteers and interested persons to see and work with professionals. Workshops, performances, demonstrations and exhibits will be offered to participants.

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CONTACT: Preston Mitchell

LUBBOCK--"Gaite Parisienne", a one-act ballet choreographed by Massine, will highlight the Spring Dance Concert, April 12-13, in the Texas Tech University Center Theatre.

The ballet, sponsored by the Dance Division of the Department of Health, Physical Education and Recreation, will be staged by Nancy Schaffenburg-Cross, former featured soloist with the Ballet Russo de Monte Carlo and presently co-director of the Dance Department of El Centro College in Dallas.

The concert will also feature a demonstration of ballet techniques as narrated by Peggy Willis, assistant professor of dance and director of "Gaite Parisienne."

The dance, termed by some as one of the most popular ballets of all time, is made up of various episodes at the famous Cafe Tortoni in Paris during the Second Empire. The evening is complete with the Can-Can and a nostalgic waltz.

Ticket cost are \$3 for adults and \$1.50 for Tech students with I.D. For more information contact Peggy Willis at 742-3361.

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CONTACT: Nita Gilger

LUBBOCK--Texas Tech University Theatre Arts Department received two AMOCO gold medallions at the recent regional American College Theatre Festival.

One medallion was awarded to the University Theatre for its fundamental support of the American College Theatre Festival at the state level. The University Theatre has hosted the Texas Area III Festival for the past four years.

Dr. Richard A. Weaver, director of theatre at Texas Tech, received the other AMOCO gold medallion as the American College Theatre Festival Award of Excellence.

Weaver, with James Barton of Southwest Texas State University, San Marcos, organized the Texas State Committee for the American College Theatre Festival.

Weaver served as state chairperson from 1974-'78 and as playwriting chairperson from 1974-'77. He was elected vicechairperson of the Southwest Region of the American College Theatre Festival at the Fort Worth meeting.

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CONTACT: Pat Broyles

ATTN: News Editors

LUBBOCK--A doctoral student in accounting at Texas Tech University is the recipient of the fourth annual Haskins & Sells Foundation Fellowship Award.

The \$3,500 award was presented to Wig B. Demoville by Claude T. Scott, partner in charge of the Fort Worth office of Haskins & Sells, certified public accountants.

The award is presented annually in an effort to encourage and assist students to enter the teaching field in the area of accounting. Demoville plans to complete his thesis by July, at which time he will accept a teaching position at the University of Wisconsin at Milwaukee. Demoville was selected to receive the award by the Texas Tech accounting faculty.

"Haskins & Sells welcomes the opportunity and privilege to make these awards to accounting students who are planning careers in the teaching field," said Scott.

Doyle Williams, professor of accounting at Texas Tech, said that the faculty of the College of Business Administration is delighted that Haskins & Sells sponsors such a program. "It gives our students a real boost to their careers," he added.

#### haskins & sells award/add one

Demoville is currently a full time instructor in the Texas Tech Accounting Department. He received the master's degree in English from Stephen F. Austin and the master's in Business from Angelo State. His parents are Mr. and Mrs. Bevie Demoville of San Angelo.

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#### CONTACT: Pat Broyles

ATTN: Farm News Directors

RESULTS OF RESEARCH UNDERWAY AT TEXAS TECH UNIVERSITY ANIMAL SCIENCE DEPARTMENT INDICATES THAT SUNFLOWERS MAY PROVIDE A CHEAPER HIGH PROTEIN FEED FOR CATTLE AND SHEEP THAN COTTON. DR. ROBERT C. ALBIN, WHO HEADS THE RESEARCH PROGRAM, SAID THAT RESULTS INDICATE THAT GROWING-FINISHING BEEF CATTLE CAN USE SOLVENT-EXTRACTED SUNFLOWER SEED MEAL AS EFFICIENTLY AS SOLVENT EXTRACTED COTTONSEED MEAL WHEN FED ON AN EQUAL CRUDE PROTEIN AND CRUDE FIBER BASIS. TESTS HAVE SHOWN THAT THERE IS NO SIGNIFICANT DIFFERENCE IN DIGESTIBILITY OF GROSS ENERGY OR NITROGEN RETENTION VALUES BETWEEN WHOLE SUNFLOWER SEED MEAL AND COTTONSEED MEAL AND HULLS.

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FOUNDATION AWARD--Representatives of Haskins & Sells, certified public accountants, present the Foundation Fellowship Award for \$3,500 to Wig B. Demoville (center), doctoral candidate at Texas Tech University College of Business. The award is made annually to encourage students to enter the teaching field in the area of accouting. Representing Haskins & Sells are Claude T. Scott (left), partner in charge of the Fort Worth office and J. Ike Guest (right), partner in charge of the Dallas office. (Tech Photo)

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CONTACT: Roe Burnett

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LUBBOCK--Mrs. Sally Mack may be shut-in but she won't be shutout, thanks to the efforts of the Texas Tech University Junior Council.

The Junior Council, an all-junior honorary service organization will sand the house of Mrs. Mack, 3406 E. 14th, Saturday.

On April 1 the Junior Council will return to paint Mrs. Mack's house.

Several Lubbock paint stores have donated the paint, brushes and other needed equipment to sand and paint the house.

The Junior Council is comprised of 31 members. Faculty sponsors are Dr. Jacquelin Collins, history professor, and Wildring Edwards, home and family life professor. Mary Katherine Pakis is president and Carol Walsh and Becky Lyle are vice presidents.

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NOTE TO MEDIA: News media are invited to cover the activities of the Junior Council at the Mack residence at 3406 E. 14th St., 10 a.m.-12 noon, Saturday, March 3, for information, photos and film.

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CONTACT: Marcia Lundy

ATTN: Ag Editors

LUBBOCK--Texas Coastal Bend ranchers might be well advised to match pasture grasses with planned usage to get best results from grazing.

Considerations would be how much the rancher is willing to spend on fertilization and the time of year the pasture is grazed.

Experiments, conducted by Texas Tech University researchers on coastal rangeland just north of Corpus Christi, revealed differing weight gains from three grasses, depending on fertizilization and, to some extent, on the season.

The study was directed by Dr. Bill E. Dahl, with the assistance of graduate student Paul F. McCawley, both of the Range and Wildlife Management Department.

They looked at the production rates of coastcross-1 bermudagrass, Kleingrass-75 and Bell rhodesgrass on brush-cleared rangeland.

The study began in 1974. Through 1977 little difference was found in cattle gain performance between the coastcross and kleingrass on non-fertilized pastures, with coastcross yielding about 260 pounds of beef per acre for one year, with the kleingrass giving 390 pounds per acre per year.

In 1976, the pastures were left unfertilized and the yield again dropped, to about 230 pounds of gain per acre for coastcross and 235 for kleingrass. -more-

#### coastal research/add one

McCawley estimated the fertilizer costs at about \$30 per acre. With an increase of almost 200 pounds of gain per acre in the coastcross, this averages out to about 15 cents for each extra pound of animal gain, he said.

The Bell rhodesgrass was consistently lower in producing beef pounds in unfertilized acreages. It was not added to the study until 1976 and so has not been fertilized. They said that, if fertilized, the rhodesgrass would be comparable to the other two.

Dahl said the animals had to eat considerably more of the rhodesgrass to gain one pound of weight than they did the other two, and it was less palatable. The rhodesgrass was also found to be low in phosphorus content. Phosphorus content could be adjusted with fertilization, though, he added.

McCawley said the season affected the weight gain and the grass desirability to cattle to some extent.

"You can put cattle on kleingrass and rhodesgrass earlier in the sping than on coastcross," he said. "Cattle can remain on kleingrass until September and on coastcross through October."

Both kleingrass and coastcross provided relatively high-quality forage throughout the season, although coastcross did have a slight advantage when fertilized.

Dahl and McCawley also found that spring only applications of fertilizer produced as good forage yields, as did spring and fall, and better than fall only applications. They recommended a complete, balanced fertilizer, including 40 pounds each of nitrogen, phosphorus and potassium, for best results in the coastal prairie.

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#### CONTACT: B. Zeeck

#### SUGGESTED RELEASE DATE: SUNDAY, MARCH 5

LUBBOCK--Texas scientists, from the high school level through the ranks of university professors, are expected on the Texas Tech University campus March 9-11 for the 81st annual meeting of the Texas Academy of Science (TAS).

In addition to business sessions, papers will be presented in 11 scientific sections for the senior academy. The Junior Academy for high school students has a dozen subject areas. While the Collegiate Academy does not list specific areas, its members have scheduled paper presentations throughout Friday and Saturday morning.

Highlighting the Senior Academy meeting will be six symposia on "Island Biogeography" in the biological sciences; "Super Heavy Elements: Prediction and Search for Them in Nature and in Accelerators," physical sciences; "A Discussion of the Recommendations of the American Chemical Society Biennial Education Conference on Safety in the Chemical Laboratory," chemical sciences; "Linear Representation of Infinite Groups," mathematics; "The Organisms and Ecology of Lobos Reef, Veracruz, Mexico," aquatic sciences; and "Microcomputers," computer sciences.

Speaker for the full academy's banquet, at 7:30 p.m. Friday at the KoKo Palace, will be U.S. Rep. Robert Krueger, a member of the Science and Technology and the Interstate and Foreign Commerce

-more-

committees in the House of Representatives. He will speak on "The Scientist: National and International Responsibilities."

Junior Academy participants, who pay \$1 to attend all meetings, exclusive of meals, will have an awards presentation from 11:30 a.m. to 12 noon Saturday in the Home Economics Building room 111.

Awards will be presented for the best papers in the behavioral and social sciences, engineering, medicine and health, earth and space science, biochemistry and chemistry, mathematics and computers, botany, microbiology, physics and zoology.

A highlight of the Junior Academy meeting will be a Thursday tour from 4 to 6 p.m. of the Texas Tech University School of Medicine and the Texas Tech University engineering facilities. All paper sessions for the Junior TAS will take place in the Home Economics Building.

The Collegiate Academy will open at 7 p.m., Thursday, in the Lubbock Room of the Tech University Center, and all paper presentations as well as the awards presentation for this group will take place in that room. A dutch treat pizza party from 8 to 10 p.m., Thursday, will launch social events for the Collegiate Academy. Collegiate participation also is \$1, exclusive of meals.

Younger academy members are expected from schools throughout the state, while collegiate participants and scientists presenting papers in the Senior Academy are expected from virtually every college and university community in Texas.

Senior scientists will present their papers during sectional meetings on the mathematical sciences; physical and space sciences; earth sciences; biological sciences, social sciences; environmental sciences; chemistry; science education; computer sciences, aquatic sciences and forensic sciences. -moreThe sessions on the physical and space sciences are expected to attract large numbers of scientists because of an International Symposium on Super Heavy Elements being held in conjunction with the TAS meeting.

The Department of Physics at Texas Tech has arranged for the symposium. Some of the nation's leading physicists will participate, including two Nobel Laureates, Drs. E. M. McMillan and G. T. Seaborg of the University of California, Berkeley.

The Department of Mathematics at Texas Tech also has arranged a colloquium with Dr. Hyman Bass, one of the nation's most distinguished abstract mathematicians, as the speaker. Bass, a member of the Columbia University faculty, will speak during the mathematical sciences symposium at 9:40 a.m, Friday.

Business meetings will be held for physics teachers, geology teachers and science educators, as well as for the general membership of TAS.

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HORSEMEN'S ASSOCIATION--Texas Tech University's newly-formed Horsemen's Association officers are, left to right: seated, Leslie Garnett, reporter, Vernon; and Sandy Mandel, secretary, Parker, Colo.; and standing, Gary Reynolds, president, Canyon; Dirk Jones, vice president, Tatum; and Debbie Clay, treasurer, Flomot. Faculty advisor Jim Heird said the club plans to sponsor horse shows, lectures by professional horse trainers, field trips and judging contests. (Tech Photo)

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