

Texas Tech News

OFFICE OF INFORMATION SERVICES ■ TEXAS TECH UNIVERSITY ■ P.O. BOX 4650 ■ LUBBOCK, TEXAS 79409 ■ (806) 742-4136

Contact: B. Zeeck

LUBBOCK--Phase I of a solar power project, to receive \$2.2 million in funds from the national Energy Research and Development Agency (ERDA), could change the face of West Texas and relieve energy headaches both for farmers and small towns in the sunny Southwest.

Announcement of the funding was made Saturday (May 1) in Washington by Rep. George Mahon.

As proposed, the project would in Phase II erect a solar energy prototype plant to serve Crosbyton, Tex., a town with a population of about 2,200.

Dean John R. Bradford of Texas Tech University's college of engineering said that, while the concept involved is more than a century old, the project has unique features which promise highly practical results.

The first phase will be devoted to research leading to cost estimates for mass production of units similar to the installation planned for Crosbyton.

"We are hoping," he said, "that eventually farmers could invest as little as \$50 to \$100 per acre to bring their irrigation fuel costs back down to a level comparable to that invested in fuel three or four years ago."

In addition, he said, the prototype at Crosbyton will be an operable system which could serve as a model for other towns of a similar size, helping them to produce electrical energy at pre-crisis levels.

-more-

add one--solar energy

The difference in the system proposed for Crosbyton and most solar energy collection systems is the "Fixed Mirror-Distributed Focus" (FMDF).

Most systems call for a different concept, using a reflector of a parabolic shape which moves with the sun and focuses its rays on one hot spot.

"This is an extremely complex and costly installation," Dr. Bradford said, "while the fixed mirror -- with the focus of the sun's rays distributed across the collector as the sun moves -- is more within economic reason for the purposes of agriculture and small communities.

Cost for the Crosbyton installation will be great, he said, but if that installation proves useful, it is hoped that the mirrors and associated equipment could be mass produced at an estimated \$1 million to \$2 million.

For irrigation energy requirements, one such mirror might serve about 25 square miles of farmland, or one mirror could serve one community in supplementing its fossil fuel generated energy.

"One of the interesting things about using Crosbyton as a pilot location," Bradford commented, "is that solar energy collected and converted to electrical energy would be fed into the power system Crosbyton already has."

-more-

add two--solar energy

A critical factor in the research problem will be study of the interface between solar and fossil fuel systems in order that electrical frequencies, energy loads and all other elements can be matched to make the two systems work in harmony.

The initial research for which ERDS funds have been designated will be theoretical, Bradford said, and will determine probable limits of the system.

Phase II will involve actual construction of a complete solar energy power production system.

Bradford said that discussions on the project began about two years ago when Mayor Pro Tem T. J. Taylor of Crosbyton approached faculty working in the Institute for Energy Research within the Texas Tech college of engineering. Involved in those discussions were Dr. Stanley R. Liberty, assistant director of the institute who will be project manager, and Dr. John D. Reichert, project director. Both Liberty and Reichert are on the electrical engineering faculty.

The project will involve faculty from other departments, however, Bradford said, including college of engineering departments of civil, chemical, mechanical and systems. Bradford said he also anticipated that faculty in the department of physics would take part.

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

Contact: Worth Wren

ATTN: AGRICULTURE AND NEWS EDITORS

LUBBOCK, Tex.--The economics of natural fibers is the business of Dr. Don Ethridge and Dale Shaw, both of the United States Department of Agriculture's Economic Research Service (USDA-ERS).

That's not an unusual task for two USDA-ERS employees. What is unusual is the two men--stationed at Texas Tech University--staff one of only two ERS field offices located at non-land grant universities.

The USDA has chosen Texas Tech for its field offices to study natural fibers in the Southwest. The university is located in a major U.S. cotton region, and Texas is a major producer of wool and mohair.

Also unusual about Ethridge and Shaw's work is its geographical scope. They conduct studies and collect economic data in California, Arizona, New Mexico and Texas.

Working in the only ERS fibers office west of Baton Rouge, La., the two economists are conducting their four-state share of a nationwide study of the entire cotton industry. Segments of the study include production, ginning, warehousing, marketing, transportation, water availability, textile manufacturing and consumption.

-more-

add one--USDA reps at Tech

Although interim results are likely, the broad analysis probably will not be completed for two to three years, Ethridge said.

The two researchers are, or will be, involved in several natural fibers studies, including a cooperative effort to test a mechanized line cotton classing system in the USDA's Lubbock cotton classing office.

The Agricultural Research Service (ARS) and the Agricultural Marketing Service (AMS) are also working on the test. The ARS was responsible for developing the equipment. The AMS Cotton Division will actually conduct the test.

The test begins this fall and will be largely a comparison of machinery characterizing cotton with similar work performed mostly by hand in the conventional classing method.

However, the machinery will class cotton according to two fiber characteristics--strength and length uniformity--in addition to the three conventional cotton traits--grade, staple and micronaire, Ethridge said.

He said the test is part of USDA and cotton industry efforts to improve the marketing system.

"These classing instrument lines have been tested on a smaller scale over the past five years by USDA-ARS, the Texas Tech Textile Research Center and some industrial firms. They have not been tested in a full-scale classing office environment with large volumes of cotton," Ethridge said.

-more-

add two--USDA reps at Tech

"Our involvement will be in evaluating the usefulness of the additional marketing information derived from the test," he said. The Lubbock classing office will run the automated line.

"If the system proves to be workable and desirable, which no one knows at this point," the economist continued, "widespread adoption of the instruments would require a period of years."

Ethridge said the High Plains produces numerous varieties and qualities of cotton and for that reason Lubbock is a key location for the test.

"We should see any and all benefits and faults of the system quickly," he said.

The instrument classing test will be "only a test" at this stage, and full adoption of the machinery into classing offices is probably years away, if adoption every comes, Ethridge emphasized.

He and Shaw are part of the Commodity Economics Division of ERS. Operations at Texas Tech began in November.

Cooperative agreements between ERS and Texas Tech and between ERS and the Texas Agricultural Experiment Station brought the field office to Texas Tech, he said.

Through the agreements two Texas Tech faculty members are involved with the research work--Dr. James Osborn, chairman of the agricultural economics department and assistant dean of ag research, coordinating the work between the university and the ERS team; and Dr. Billy G. Freeman, ag economics professor.

Dr. Don Farris, ag economics professor at Texas A&M University, supervises the Experiment Station agreement with ERS.

add three--USDA reps at Tech

Sister field offices are at Stoneville, Miss.; Louisiana State University, Clemson University and the University of Georgia at Athens. Each office is working on the cotton industry study.

The project is at the descriptive writing stage, Ethridge said. Among factors being described are resource base, production practices, marketing channels, financial structures and many others, he added.

Primary function of the ERS, Ethridge continued, is to provide pertinent economic data and analysis to public and private decision makers, including Congress and the federal executive branch.

The USDA's ongoing cost of production estimates, ordered by Congress, will involve the Lubbock group. The task requires estimating costs of producing major agricultural commodities.

Findings have to be updated annually, Ethridge said, although actual surveys are done at five-year intervals. The Firm Enterprise Data System (FEDS) will provide estimates during interim years. FEDS is a computerized system for generating and analyzing firm enterprise budgets, such as those of farms.

Data will enable the USDA to describe "typical" farm operations for each region of the country.

These descriptions combined with the budget estimates will be used to update the cost of production estimates for each major commodity in each producing region, Ethridge said.

"Texas Tech is a logical place for a fibers field office," he added.

"The cotton industry in the Southwest and West has significant impact on the region, country and world. The High Plains is a major force in that industry. Texas is also the leading producing state and a major processing state for wool and mohair, the other natural fibers."

TEXAS TECH NEWS, P. O. BOX 4650, Lubbock, Texas 79409

Contact: Prabhu Ponkshe

Contemporary Chicano issues will be discussed at the second annual Cinco de Mayo Symposium, arranged by the Texas Tech University Special Services program, Wednesday (May 5), in the Ballroom of the University Center.

The symposium will be opened at 10 a.m. by Julio Llanas, director, Upward Bound Program, Texas Tech, with a lecture on "Chicano Community Involvement in Texas Tech University."

Six other speakers from Texas Tech will participate in the day-long event. The symposium will also feature two outside speakers.

Dr. Charles Henry, president, Lubbock County Mental Health Association, will speak on "Mental Health Needs of Chicanos and Hispanos," and Hector Serrano, professor of English, University of Texas at El Paso, will speak on "El Teatro los Pobres."

Discussion sessions will follow the 30-minute presentations.

The symposium is open to the public at no cost. There will be a 90-minute lunch break, beginning at 12 noon, and the symposium will end at 4 p.m.

The Mexican holiday commemorates the overthrow of the French forces of Napoleon in Mexico. May 5, 1862.

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5-5-3-76

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
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Contact: Margaret Mintkenbaugh

LUBBOCK--Los Pobres, a bilingual theatre company from El Paso, will perform Mexican playwright J. Humberto Robels' "Los Desarraigados ("Uprooted") at 7:30 p.m., Wednesday (May 5) in the Texas Tech University Center Ballroom.

The three-act drama revolves around a Mexican-American family in El Paso and their difficulties in choosing between Mexican heritage and Hispanic culture, and American society and ideals.

Both Spanish and English will be spoken during the single enactment of "Los Desarraigados," however, the company stresses that the play would be comprehensible to either a Spanish or an English speaking audience.

Los Pobres, directed by Hector Serrano, has been actively performing for five years. The company is being sponsored at Texas Tech by the University Center Programs and Los Chicanos/Mecha.

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11-5-4-76 sa

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
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Contact: B. Zeeck

ATTN: Agricultural Editors

LUBBOCK -- When Texas Tech freshman George Toone, a student of agricultural communications, goes to see a tractor exhibit, he gets a good, clear picture -- with his hands.

George has been blind from birth, but he is a working hand for his father on their Pecos, Tex., farm.

When the John Deere Company set up a display of new tractor equipment for students at Texas Tech University, Toone was one of the first to come and have a look.

His hands moved admiringly over the innovations on display, and his face shone like a young man with new-car fever.

"I sure can tell the differences between this equipment and what we have at home," he said.

Toone said that he has been helping his father tear down tractors for repairs "ever since I was a little kid," and he knows how they are put together.

One of the innovations he liked best was a cushioned tractor seat with safety belt and let-down arm rests.

"I ride with my dad on the tractor a lot," he said. "With the arm-rests down level with the seat, there could be more room for both of us."

Toone is the son of Mr. and Mrs. Dale Toone of Pecos.

The exhibit is used by John Deere for demonstration and educational purposes.

TEXAS TECH NEWS
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CONTACT: Kay Hord

Texas Tech University will host a seminar on fabrics and clothing for the physically and mentally handicapped and for geriatric patients Thursday, May 20, 9 a.m.-3 p.m., University Center Ballroom.

Speakers will include Alex Cuellar, administrative aide at the Texas Department of Community Affairs, who will speak on legislation and a pilot project in San Antonio for the aging; Rose Fadul of the Institute of Rehabilitation Medicine at New York University Medical Center, who will discuss adapting ready-made clothing for the handicapped.

Other speakers will be Dr. George F. Meenaghan, dean for research at Texas Tech; Joe Burks, assistant superintendent of the Lubbock State School; Dr. Dorothy B. Hoyle, professor of physical education at Texas Tech; and Mrs. Kay D. Caddel, research associate at the Texas Tech Textile Research Center.

The seminar is open to the public. Registration fee is \$15, including a luncheon. Reservations must be made by Friday, May 14, by contacting Mrs. Caddel at the Textile Research Center.

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22-5-6-76

TEXAS TECH NEWS
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P.O. Box 4650
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Contact: B. Zeeck

LUBBOCK--There's a new sound at Texas Tech University. The bells are ringing -- 36 of them in a carillon installed in the west tower of the Administration Building.

The carillon was the bequest of Ruth Baird Larabee, who lived all of her early life in the Kansas City area but who made lasting friendships during the few months in 1964 that she lived in Lubbock, Tex.

Mrs. Larabee specified in her will, probated in 1973, that farm lands she owned in the Lubbock area be sold and that a portion of the proceeds be used to install the carillon.

The vanBergen Bellfoundries, Inc., of Greenwood, S.C., had the bells cast in the Netherlands of bell bronze -- 82 per cent new copper and 18 per cent new tin. H. T. vanBergen supervised installation and tuning. Eight generations of vanBergens have cast, racked and tuned bells for the past 200 years.

Miss Jerry Kirkwood of Texas Tech's office of new construction said that the largest of the bells had just one-quarter inch clearance when it went up into the tower.

The first to play the bells has been music Prof. Judson D. Maynard who learned the art 25 years ago at the University of Montana in Missoula.

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add one--carillon

The carillon at Texas Tech is one of less than a dozen of this type in the state. It is played using both the hands and feet. While all the notes can be struck by the carillonneur using his hands on kiln-dried hardwood keys, the pedals strike the 17 lowest notes and, by using his feet, he can strike more notes simultaneously.

The carillon was cast, tuned, framed and installed at a cost of a little more than \$26,000. A practice keyboard is being constructed, and students will learn techniques of performing carillon music on it before mounting the Administration Building tower to toll the actual bells.

Dr. Maynard said that concerts probably will be appropriate at commencement time, during the Carol of Lights festival at Christmas, at homecoming, perhaps before football games as fans are walking across campus to Jones Stadium, and on other special occasions.

"These are traditional Flemish carillon bells," Maynard said. "Along with the nominal pitch of the bell, the overtones comprise a minor chord which is very different from most musical instruments.

"Until the ear becomes accustomed to this characteristic sound, some listeners may think the bells are out of tune. They really are very well tuned."

Mrs. Larabee gave the bells in memory of her parents, Charles and Georgia Robertson Baird.

-more-

add two--carillon

Mrs. Larabee had expressed to friends her wish to leave her estate for educational purposes, but in her correspondence made available to the university by Lubbock acquaintances, there was only one reference to a carillon.

She told Mrs. Dorothy Rylander, for many years associated with The Museum of Texas Tech University, that she was glad Mrs. Rylander had had an opportunity to hear the carillon at the University of Missouri. This casual reference was her only previous indication that she wanted a carillon for Texas Tech University.

Mrs. Larabee's father, Charles Baird, was at one time an officer of the First National Bank in Kansas City, and it was he who had acquired the farm lands in the Lubbock area.

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20-5-6-76 sa

TEXAS TECH NEWS
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Contact: Margaret Mintkenbaugh

LUBBOCK--For the 20 years preceding World War II, almost nothing could produce as much excitement and bustle in a small, Texas farm belt community as the Harley Sadler tent shows.

These popular melodramas and comedies will be revived by the Texas Tech University department of speech and theatre arts as part of the Lubbock Bicentennial Celebration and the opening of the Texas Tech Ranching Heritage Center.

The New Harley Sadler Show plans to fold its tent and begin traveling in mid-July. After playing Round Top, near Houston, the company will return to West Texas for playing dates in August.

"We'll be available for six-day stands in any community that would like to have us," said Ginger Perkins, business manager for the company. The show combines comedy, melodrama, vaudeville and music, and is being billed as "entertainment for all the family."

"We can play shopping center parking lots, parks, school grounds, anywhere there is room to pitch a 50' by 110' tent," Mrs. Perkins said. With a seating capacity in the tent of more than 500, the show will add a touch of Texas nostalgia to any community's Bicentennial observance.

-more-

add one--Harley Sadler Tent Show

A community could monetarily gain from the performances, she added. "After our basic touring expenses are met, we will divide our profits with any local civic organization, so a sponsor can make money toward other worthwhile projects."

Any community interested in livening its Bicentennial festival with the New Harley Sadler Show should contact Mrs. Perkins at the Texas Tech University Theatre.

The original Harley Sadler tent shows were sometimes the central social and cultural event in the oilboom, frontier days of pre-World War II Texas. Following the harvest and building a national reputation, the theatrical group toured the farm belt from Galveston to Amarillo.

Sadler's trademark was the clownish Toby, a colorful, country character pitted against city vice. In spite of his sheltered country background, Toby and his rural goodness always triumphed over city evils.

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21-5-6-76 sa

TEXAS TECH NEWS
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Contact: Dan Tarpley

"Little General" Diane Miller of Texas Tech University will command a lot of nationwide attention and respect during the 1976-'77 academic year.

The senior family relations major from Midland captured the Arnold Air Society and Angel Flights "Little General" title at the national conclave in Philadelphia. She was in command all the way up through the ranks, earning the "Little Major" title at the squadron level in the Air Force ROTC at Texas Tech and "Little Colonel" at the area level.

The area win qualified her for the national competition in which there were 14 entries. Selection at all levels was based on poise, personality, appearance, Angel Flight participation and scholastic standing. Competitors were also required to speak extemporaneously.

Angel Flight is a professional, educational, honorary, social service organization of college women whose purpose is to support the Arnold Air Society, the Air Force ROTC, the USAF, their university, and the community. The cadet arm of the Arnold Air Society is a professional, honorary service organization designed to develop outstanding Air Force officers and to support aerospace power.

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With the "Little General" title go the responsibilities of official hostess of Angel Flight and Arnold Air Society at the 1977 national conclave and at as many area conclaves, special events and Air Force Association events as possible. She becomes the national representative of the flight and the society and the chief of protocol.

Miss Miller's obligations as Little General will take her to Washington in late June to the Total Force Conference of the Air Force Association and again in September for the meeting of the National Executive Board of Angel Flight and Arnold Air Society.

Texas Tech student commanders of the Arnold Air Society and Angel Flight called Miss Miller's selection "the most important aspect" of Texas Tech's participation in the national conclave.

Twenty-six Angels and 21 Arnold air cadets participated in the national meeting. Miss Miller is the executive officer of the Texas Tech AFROTC Angel Flight.

At the national conclave she received a \$300 national Angel Flight scholarship which was not associated with her selection as Little General.

A 1973 graduate of Midland Lee High School, she is the daughter of Mr. and Mrs. Edward M. Miller of 3712 Humble, Midland. She is the granddaughter of Mr. and Mrs. W. M. Miller of 3304 Hollywood Avenue, Austin, and Mr. and Mrs. D. W. Mitchell of 1907 Belford Drive, Austin.

The 20-year-old co-ed attended Southwest Texas State University, San Marcos, in the fall of 1973.

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

Contact: Charley Bankhead

LUBBOCK--The influence of violence and armed conflict in the history of Brazil is the subject of a new book coedited by Dr. Robert A. Hayes, associate professor of history at Texas Tech University.

"Perspectives on Armed Politics in Brazil" is its title. Hayes coedited the book with Henry Keith, faculty member at the University of Brasilia (Brazil). The publisher, Arizona State University, is scheduled to release the book in the next few weeks.

The Texas Tech professor said Brazil has had the reputation of a country where no one is very serious. He said many have referred to Brazil as a "sleeping giant" and the "land of the carnival." The book is an attempt to show inaccuracies of the traditional pacific view of Brazil.

In 1964, the military took control of Brazilian government, which caused major changes in that nation's life patterns. Since then Brazil has become one of the most rapidly developing nations in the world, Hayes said.

"Until 1964, the military played a moderating role in Brazil." They had taken control of the government before but always returned power to civilians. In 1964, the military leaders decided civilians weren't doing the job.

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brazil book / add 1

"Government by armed forces adopts tough attitude. It won't tolerate back talk or attempts at interference with its programs. This attitude startled a lot of people, and many said it was going against traditional patterns of Brazilian history."

Hayes said the Brazilian military leaders who now govern the country developed many of their ideas and philosophies after serving with U.S. servicemen during World War II. In addition, some of them attended U.S. military schools.

He further pointed out that Gen. Vernon A. Walters served as liaison between the U.S. and Brazilian armies during World War II and later became deputy director of the Central Intelligence Agency. Walters was also in Brazil during the 1964 military takeover.

Hayes worked in Rio de Janeiro for the State Department from 1961-'66. He was in Rio during the military takeover. Not long after the takeover he and other historians and political scientists began a study and re-evaluation of Brazilian history in order to determine if military rule was a break with traditional patterns.

The researchers studied Brazilian government from the municipal, state and national levels. They concluded the earlier pacific view of Brazil had been erroneous.

"We decided this theory might have blinded people to some things," said Hayes. "We found violence always has been a factor in Brazil. It was not necessarily the kind of violence that involved shooting. Often it was just a matter of who had the most supporters, the largest army."

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"Even at the municipal level, competing sides would decide who would rule simply by measuring their armies. Whoever had the most men was the winner. Usually, there was no actual shooting. But the threat of violence was there."

Hayes, who specializes in Latin American history, said several historians and political scientists from Brazil, Portugal and the United States contributed to the book. In addition to coediting, he wrote two chapters.

We've broken new ground in this book," said Hayes. "I think we've shown where scholarship was deficient in this area. We want to show the oversight of years past."

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
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FOR IMMEDIATE RELEASE

Contact: Jane Brandenberger

Texas Tech University's college of home economics has been granted \$400,761 for training and technical assistance for Texas' Head Start Program, president Grover E. Murray announced today.

The Lubbock-based university has formed a consortium for Head Start training and technical assistance with Pan American University in Edinburg, Texas Southern University in Houston and Texas Woman's University in Denton, Dr. Murray said.

The other Texas universities serve as sub-contractors, with Texas Tech listed as primary contracting agency with the U.S. Department of Health, Education and Welfare.

"As state institutions of higher education, the four consortium members have access to a comprehensive band of services, support and facilities necessary to development and delivery of training needed for the 3,500 Head Start staff members who care for the 19,500 children enrolled in the program across Texas," Dr. Donald S. Longworth, home economics dean, explained.

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tech head start grant / add 1

Dr. Mary Tom Riley, associate professor of home economics, is the project director.

Head Start is a pre-kindergarten program for culturally deprived children. Its aim is to give the youngsters a more equal opportunity to excel when they begin their formal education.

"We are proud that Texas Tech University has been chosen as primary sponsor for this aspect of the Head Start program, which we think a most valuable one for the State of Texas," Dr. Murray commented in announcing the grant.

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1-5-10-76

TEXAS TECH NEWS
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FOR RELEASE AFTER 6 P.M. TUESDAY, MAY 11, 1976

CONTACT: Worth Wren

ATTN: NEWS AND EDUCATION EDITORS

LUBBOCK, Tex.--Room 212, scene of all faculty meetings and receptions for distinguished guests in the Texas Tech University chemistry department, will be renamed in honor of retiring biochemistry teacher Dr. Joe Dennis.

After 38 years of work in the department, Dennis was honored at a retirement dinner Tuesday night in the University Center Faculty Club. Dennis was head of the chemistry department 19 years, 1950-1969. Since then, he has continued to teach.

The chemistry faculty announced the room dedication for Dennis during the dinner. A reception honoring Dennis and the unveiling of the Dennis Room will be held at the beginning of the fall semester, after renovation of the room is completed.

Formerly the Tower Room, the Dennis Room will house a portrait of the longtime chemistry professor and plaque in his honor, said current chemistry chairman, Dr. John L. Kice.

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dennis retirement / add 1

"It is the feeling of the department that Dr. Dennis' contributions to the department over the years are so important we couldn't just take note of his retirement from teaching with only a dinner a reception," Kice said. "We needed to do something more important, more permanent.

"That's the reason for the new Dennis Room, to keep his name familiar with those connected with the department in future years.

"Dedicating this room in his honor is a fitting way of doing this. Dr. Dennis has been invaluable in the development of the department.

"This permanent recognition will express our continuing thanks to him," Kice said.

A statement on the plaque will read: "An inspiring teacher and a true leader whose contributions to the department established its strength and will long be remembered."

More than half the funds for the renovation came through contributions from Dennis' former students and associates, Kice said.

"The room's renovation and dedication would not have been possible without their contributions," he said.

Dennis stepped down from the department chairmanship in July 1969. At that time the portrait, painted by Thelma Clark Griggs, was unveiled. The portrait will hang in the Dennis Room.

Dennis is considered the major force behind construction of new chemistry facilities.

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dennis retirement / add 2

He joined Texas Tech in 1938. He received his bachelor's degree at Austin College in Sherman and his master's and doctor's degrees at the University of Texas. He holds an honorary doctor of science degree from Austin College.

He was named a fellow of the American Association for the Advancement of Science in 1952 and served as president of the Southwestern and Rocky Mountain Division. He was elected a fellow of the American Institute of Chemists in 1970. He is listed in "Who's Who in America."

Dennis was pre-medical adviser and chairman of the pre-medical advisory committee at Texas Tech for some 20 years.

Dr. and Mrs. Dennis have three daughters, Mrs. Charles Price (Linda) of Tacoma, Wash.; Mrs. Ed Wilbourn (Nancy) of Kerrville; and Mrs. James Robbins (Susie) of Poquoson, Va.

TEXAS TECH NEWS
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Contact: B. Zeeck

LUBBOCK--The public is invited to a preview carillon concert from 4 to 4:30 p.m. Friday, May 14, on the Texas Tech University campus. The concert will precede commencement exercises beginning at 7:30 p.m. in Jones Stadium.

Dr. Judson D. Maynard of the music faculty will play familiar folk songs, hymns and patriotic melodies on the carillon recently installed in the Administration Building. The 36-bell instrument is a bequest from Mrs. Ruth Baird Larabee, given to Texas Tech in memory of her parents, Charles and Georgia Robertson Baird.

Visitors will find parking easily accessible by entering at 15th St. The carillon music can be heard best on the central portion of the campus.

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6-5-12-76

TEXAS TECH NEWS
University News & Publications
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Contact: B. Zeeck

LUBBOCK--A 250 photo exhibition, "The Image of America in Caricature and Cartoon," is on display at The Museum of Texas Tech University.

The exhibition begins with Benjamin Franklin's 1754 political cartoon of a severed snake with the caption, "Join or Die," issued as an exhortation to the 13 colonies. Subjects which dominate the concluding section are pollution, crime in the streets, the oil shortage, Vietnam and Watergate.

The exhibit provides a short visual history of issues confronting America, with some of them depicted by foreign cartoonists. Freedom of the seas, domestic slavery and the "Texas question" are mirrored in post-Independence cartoons. The Mexican war and the Civil War are treated at length.

From the late nineteenth century are emphases on such issues as political chicanery, currency and economy, industry, labor, women's rights and foreign immigration.

President Wilson's proclamation that "The world must be made safe for democracy" is reflected in cartoons from four wars -- World Wars I and II, the Korean conflict and Vietnam.

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cartoons / add 1

The Depression, Prohibition, baseball and military life are treated at length.

From Benjamin Franklin and Paul Revere to Thomas Nast, James Thurber, Bill Mauldin and Pat Oliphant, the viewer is taken on a humorous commentary through history.

A book, "The Image of America in Caricature and Cartoon," includes all the cartoons in the exhibition and a text by Ron Tyler, Amon Carter Museum curator of history, and serves as a catalog in conjunction with the exhibit. It sells for \$6 in soft cover.

"Political cartooning and satire have remained a strong part of American life through two centuries," Tyler comments. "America has never feared and has always been responsive to self-criticism."

The exhibit will remain on display through June 20 at The Museum 4th and Indiana, in Lubbock.

The exhibition was assembled by the Amon Carter Museum in cooperation with the Swann Foundation of New York City and Lincoln National Corporation in Fort Wayne, Ind., with assistance of the National Endowment for the Arts. Mildred Constantine, formerly with the Museum of Modern Art in New York and the Hispanic Foundation of the Library of Congress, assisted in selection of materials.

TEXAS TECH NEWS
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Contact: Worth Wren

ATTN: NEWS AND EDUCATION EDITORS

An Air Force captain experienced in computer and missile operations has joined Texas Tech University's Air Force ROTC faculty as assistant professor of aerospace studies.

Capt. Bruce McRae comes to Texas Tech from an overseas assignment where he was chief of data automation and manager of the largest base level computer system in the United Kingdom.

McRae also worked in computer operations at the Cheyenne Mountain NORAD installation. He was responsible for operation and maintenance of six computer systems there.

McRae received a B.A. in psychology in 1967 and master's of business administration in February of this year, both from the University of Utah.

He and his wife, Diana, have three daughters, Elizabeth Kathleen, Leslie Anne and Heather Lynn.

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10-5-13-76

TEXAS TECH NEWS
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Contact: Charley Bankhead

LUBBOCK--Seventeen Texas Tech Army and Air Force ROTC cadets will receive commissions during joint ceremonies Saturday (May 15), 2 p.m., in the University Theatre.

Major General John G. Waggener will present the principal address and commissions and administer the oath of office. Waggener is commanding general of U.S. Army Training Center Engineer and Fort Leonard Wood, Mo.

Four Army cadets will receive commissions as second lieutenants at the ceremonies. They are Steven J. Butts, distinguished military graduate from Lubbock, who will receive a commission in armor; Thomas J. Tutt, distinguished military graduate from Lubbock, military intelligence; Stephen C. Hayduk of Lubbock, field artillery; and Charles P. Rocco of Lubbock, air defense artillery.

Thirteen Air Force cadets will be commissioned. They are Mark R. Angleton, distinguished military graduate from Abilene, pilot training; Robert D. Kluting Jr., distinguished military graduate from Aspermont, missile operations; Michael G. Wells, distinguished military graduate from Schertz, missile operations.

-more-

business award story / add 1

"The institute grew out of the 'Tech Project' from the spring of 1970, when Dr. Vincent P. Luchsinger in Texas Tech's business management department suggested the program," O'Jibway explained.

"Texas Tech has always taken the largest caseload in the district, in which seven of 10 universities and colleges are participating."

Texas Tech business majors have handled cases ranging from virtual bankruptcies to successes seeking to relocate.

"We're proud to receive this honor, and we're going to continue to provide business consultant experiences in every degree of difficulty for our students," Dean Stern said.

One of the consulting experiences was analyzing the needs of a restaurant at a New Mexico motel. The owner of the firm wrote a letter of thanks to Texas Tech's professor-consultant in the program, Dr. Robert Justis.

"His (the Texas Tech student's) use of sound and reasonable analytical techniques was the key to making myself and my manager realize some critical errors in our pricing policy, credit management and advertising program," Weldon O. Spencer Jr. of Crossroads/Frontier Motel's wrote.

"All of his suggestions were backed by detailed financial analysis and a considerable amount of prior research in restaurant management, thus making it difficult to disagree with his proposals. I am pleased to report that his assistance has already started to show favorable results in our cash flow position," Spencer commented.

-more-

business award story / add 2

Students in the program work in teams of two and three to a business, and each team spends one semester working closely with a business as management counselors.

In another case, students helped Lubbock Implement Co. relocate. "They gave the firm three options, and the owner chose one of them," Stem said. The work involved both agricultural economics and business administration students.

More than 350 colleges and universities in the U.S. are participating in the institute, and thousands of small firms have benefited from its services, O'Jibway reported.

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14-5-14-76

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

Contact: Prabhu Ponkshe

LUBBOCK--Home management students at Texas Tech University recently found only eight violations of advertising claims by Lubbock businessmen.

While working on a consumer problems project in cooperation with the local Better Business Bureau, the students surveyed 36 selected local businesses. They reported non-availability of an advertised product in two cases, disagreement between store price and advertised price in one case and inadequate care labels on textiles in the remaining five cases.

The project was conducted during the Spring semester. Twenty-one students participated under the direction of Dr. Carolyn Ater, associate professor of home management. Executive vice president of the Better Business Bureau (BBB) of the South Plains, Malcolm T. Cleland, also worked with Dr. Ater and her class.

Cleland introduced the student to laws covering false advertising and explained the BBB's operations during a two-hour class session.

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home management study / add 1

This is the first time the Lubbock BBB has conducted such a survey with help from Texas Tech students. Cleland said that bureaus in other cities have conducted similar surveys.

Each student was provided with an identification card stating that she was a volunteer shopper for the BBB. Students reported that store personnel were "very cooperative."

In one instance, the store management corrected the error in the presence of the students.

Dr. Ater and Cleland said they plan to conduct other such surveys in the future.

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2-5-17-76

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

Contact: Dan Tarpley

Savings and loan association officials and executives meeting at Texas Tech University were told Monday that the industry "is at the threshold of a substantial industry reform."

"But," said James A. Coles, president of the Federal Home Loan Bank of Little Rock, "it will remain America's major source for financing residential homes."

Proposed legislation, Coles said, has been billed as the most comprehensive reform in financial institutions since the changes of the 1930's.

"According to the sponsors of the legislation," the Little Rock banker told the Texas Tech group, "the purpose is to expand competition among financial institutions and reform the existing system to meet more closely the needs of today's society."

Coles addressed approximately 100 officials and executives of savings and loan associations from Texas, New Mexico, Arizona, Colorado, Kansas, Oklahoma, Arkansas and Louisiana.

He was the first speaker at the opening session of the third annual Intermediate School for Savings and Loan Associations conducted by the Texas Tech college of business administration.

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The week-long school will continue through Friday, with an awards luncheon at noon in the Wiggins Complex. The speaker will be Durwood Curlee of Austin, executive director, Texas Savings and Loan League.

Coles also said electronic funds transfer and third-party transfer powers embody vast opportunities for broadening the market for services available to savings and loan depositors.

Electronic funds transfer systems would provide for transferring funds by use of computers, possibly with use of coded credit or identification cards. The systems reduce or eliminate handling checks.

"Developments in funds transfer are still in the initial stages in the savings and loan industry," he said. "Further efforts for direct access and direct participation by savings and loans are being pursued within the industry. Best prospects for entry by the savings and loan industry into the field of electronic funds transfer is the legislative process. Such enabling legislation for participation is presently being considered at the national level."

The industry is and will remain sound and strong, Coles said. Earnings during the first quarter of 1976 were up dramatically "in the right direction" as compared with 1975 and there is no need for "radical change."

Business administration Dean Carl H. Stem welcomed the visiting financial organization officials at the opening session. Mike Klappenbach, graduate student in finance, is coordinating director for the intermediate school.

The third Intermediate School for Banks will be conducted in the college of business administration next week.

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

FOR IMMEDIATE RELEASE

Contact: Jane Brandenberger

Clint Formby of Hereford, chairman of the Board of Regents of Texas Tech University and the Texas Tech University School of Medicine, will address the Southern California Texas Tech Ex-Students Association on Saturday evening (May 22).

The meeting will be held on the St. Princess Louise Ship in Los Angeles at 7 p.m. President of the Southern California Association is Miss Vera Culwell, TTU graduate of 1944 and now head of the Story Analysis Department of Universal Studios.

Wayne James, executive director of the Ex-Students Association, will accompany Formby. The two men will also visit with other Texas Tech Exes and supporters in California for two days prior to the Los Angeles gathering, the chairman said.

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1-5-17-76

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

Contact: B. Zeek

LUBBOCK--Texas legislators, ranchers, agricultural leaders and researchers met at Texas Tech University Tuesday (May 18) to learn results of studies leading to increased and improved farm and ranch production.

Presentation made by members of the faculty in Texas Tech's college of agricultural sciences dealt with swine and vegetable production as well as brush control and range management. This research has been supported by the Texas Legislature.

Texas vegetables are grown on 196,450 acres and represent an income of \$171.5 million per year. Of special importance to West Texas farmers are such crops as potatoes, onions, lettuce, and peppers. It is with these and others of only slightly less significance that the research is dealing.

In addition to laboratory and field studies at the Lubbock Institution, Texas Tech research associates are working with growers in Munday and Hereford, large vegetable growing centers.

Weed and insect control, efficient production and resource allocation represent significant studies. Also of prime importance in some West Texas areas are Texas Tech studies on wind damage and control.

Prof. John D. Downes told an audience of 50 that planting practices and chemical applications on soils to modify wind damage are among promising experiments.

Dr. A. Max Lennon, chairman of the department of animal science, reported on the potential for swine production in Texas, where 1.5 million pigs are now produced each year.

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brush-vegetable-swine distribution/ add 1

Research in swine production relates to survival, growth, feed efficiency, increasing the number of pigs produced annually, disease and parasite control, marketing and other economic problems.

A full range of Texas Tech's extensive program in noxious brush and weed control was explored in the day-long program. Discussion ranged from control by prescription-burning to the development of brush utilization, which might provide eventually a possible contribution toward better protein diets for humans.

Brush control studies within Texas Tech's department of range and wildlife management involve research in burning, biological, chemical, and mechanical control. These also have been extended to other departments of the university, where research teams are converting brush to single-cell protein and, currently, developing improved livestock feeds from mesquite.

Dr. Henry Wright, who is directing research dealing with burning, reviewed several goals: killing the brush, getting rid of brush and cactus, increasing production of grass and other forage, increasing utilization of forage by livestock and maintaining wildlife population.

Research by burning has been conducted at the Renderbrook-Spade Ranch near Colorado City, the Beckham Ranch near Abilene, and the Dan Harrison ranch near Caterina.

TEXAS TECH NEWS

University News & Publications

P.O. Box 4650

Lubbock, Texas 79409

Contact: Kay Hord

LUBBOCK--A seminar on clothing for the mentally and physically handicapped and geriatric patients will be held at Texas Tech University, 9 a.m. - 3 p.m., Thursday, May 20.

The seminar, sponsored by the Textile Research Center, will be held in the University Center Coronado Room.

Topics for the seminar include legislation for the handicapped and aging, clothing and related health problems of the geriatric populace, special clothing designs for the aging, unique research designs for the mentally and physically handicapped, and adapting ready-made clothing to the individually handicapped of all ages.

Speakers for the program will be: Rose Fadul of the Institute of Rehabilitation Medicine, New York University Medical Center, New York; Dr. George Meenaghan, dean of research, Texas Tech University; Joe Burks, assistant superintendent, Lubbock State School; Dr. Dorothy Hoyle, professor of health education, Texas Tech; Kay Caddel, research associate, Textile Research Center; and Alex Cuellar, administrative aide at the Texas Department of Community Affairs, Austin.

TEXAS TECH NEWS
University News & Publications
P.O. Box 4650
Lubbock, Texas 79409

Contact: Charley Bankhead

LUBBOCK--Researchers indicate widespread use of solar energy as an alternative to current sources of energy might be years away. But a group of Texas Tech students already has learned several practical applications of sunlight suitable for home use.

The students studied different applications of solar energy, then developed their own projects as part of a solar energy seminar in the department of mechanical engineering. The projects ranged from a simple solar-powered stove, steam engine and crop driers to water heaters and distillers.

According to Dr. Norman Sheridan, who directed the seminar, the purpose of the course was to give students experience with solar energy. Sheridan said one of the course requirements was an individual project involving an application of solar energy.

Sheridan said he received 24 projects from students in the seminar. He said the projects were inexpensive and constructed of common, readily available materials.

Randy Mayes, a senior from Lubbock, developed the solar-powered stove. He said he built the stove from several concentric circles he cut from a piece of masonite. He covered the rings with aluminum foil and cut notches in each ring to pull the rings into a cone. He held the cone together with two-by-fours.

The cone formed a solar energy collector. When Mayes focused sunlight on the center of the cone, the collector produced heat. The heat reflected two feet from the center of the collector and could boil a liter of water in about 15 minutes.

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solar energy projects / add 1

Mayes said he learned about the practicality of collectors from his project. He concluded a flat collector would be more practical than a cone-shaped collector.

Sheridan said Mayes probably learned something about the potential of solar energy collectors as heat generators. He said Mayes left the collector in a car part of a day. When Mayes returned to the car, the sunlight concentrated on the collector had reflected and burned a hole in the roof of the car.

Henry Kight, another Lubbock senior, constructed a solar-powered steam engine. He used a series of mirrors to focus sunlight on a metal tube heat converter filled with water. The heat and water produced steam, which was transferred through rubber tubing to power the engine.

"A student has to build a solar collection device to realize the problems of heat transfer," said Kight. "I think I understand better the problems that prevent solar energy from being a reality today."

Fred Hennighausen, a fifth-year architecture student from Roswell, N. M., used solar energy to produce distilled water. He filled an aluminum baking pan with water. He insulated the sides of the pan with wood and styrofoam and placed a roof-shaped plastic cover over the pan.

Sunlight caused the water to evaporate and collect on the sides of the cover. The distilled water dripped from the cover into collecting ducts. Sheridan said such distillers are practical for producing home drinking water. He said Hennighausen's small (about two feet square) distiller could produce about a liter of

solar energy projects / add 2 .

distilled water each day.

Sheridan described another project he called a desert survival still. He said the still could be constructed by digging a hole and placing a can or other container in the center of the hole. The hole should be filled with leaves or other greenery and covered with a thin plastic, such as cellophane or polyethylene. The cover should be secured outside the hole and weighted in the center with a rock.

Sheridan said sunlight produces moisture from the greenery. The moisture collects on the plastic and drains into the can. According to Sheridan, a desert survival still can produce a liter of water per day for each square meter of hole.

Sheridan, a visiting professor from Australia, has worked with solar energy about 20 years. He said much of his work has involved the study of solar air conditioning. He said solar air conditioning is not yet economical for single-family homes. But he said he is optimistic about using solar air conditioning in multi-unit construction, such as motels.

The Australian also is involved with the design of a solar heating system for a Lubbock house. He said a local contractor will begin construction later this month and finish the house in September. He said the house will be sold after a month or two of demonstration to the public.

"We want to see if the public will buy a solar-heated house and know how to handle it," said Sheridan. "The demonstration is a good way of getting ideas out of the university and out where people can use them.

-more-

solar energy projects / add 3 "

"The idea of solar energy demonstration projects is to learn how to produce them more economically. Industry is not now geared for their production. I hope such projects can become more common and cheaper."

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10-5-20-76

Women's Athletics at Texas Tech University signed its first two track athletes, both West Texans and physical education majors, to letters of intent this week.

The signees were Judy K. Butler of Llano, daughter of Mr. and Mrs. Jerry L. Butler of 1108 Wallace, Llano; and Jan A. Osborn of Sunray, daughter of Mr. and Mrs. J. E. Osborn of 1012 Triangle Drive, Sunray.

Both women have impressive records in sprints, relays and jumps, with academic achievements to match, according to Jeannine McHaney, director of the women's athletics department.

Both signees also played high school basketball and will consider competing in the sport if other athletic and academic commitments will permit.

Miss Butler, from double A Llano, runs the 220, 440 and relays. She holds her high school triple jump record, has thrown the shotput 39 feet 5 1/2 inches and has run the 220 in 26.4 seconds. The Llano basketball team was district champion during her freshman and sophomore years and runner-up during the last two years. The track team took district championships the last two years and second in state in the mile relay.

She averaged about 25 points a game during the 1975-'76 basketball season. The 18-year-old athlete is five feet, eight inches tall and weighs 145 pounds. She had a four-year grade average of 94.94.

Miss Osborn, from class A Sunray, has done the 440-yard dash in 57.5 seconds, the 220 in 24.8, a triple jump of 33 feet 5 1/2 inches and a long jump of 16 feet 5 inches. She ran relays and went to state in the 440 this year. Her mile relay team was third in state in 1973.

She ranked third in her class academically this year. The 17-year-old athlete is five feet, six and one-half inches tall and weighs 126 pounds.

Both athletes, the second and third to be signed to letters of intent by the women's athletics department at Texas Tech, were sought by several other colleges and universities. McHaney said other signings are expected soon.

TEXAS TECH NEWS
University News & Publications
Box 4650
Lubbock, Texas 79409

The regional director of the Federal Deposit Insurance Corporation told the Intermediate School of Banking at Texas Tech University Monday that for too long "bank regulation has been influenced by implicit theorizing about the causes of the 'great depression'."

Quinton Thompson, regional director of the FDIC, told the more than 100 bankers from Texas and several other Southwestern states that not until recently has the look toward regulation "turned to mid-Twentieth Century requirements for an imaginative and creative financial system in a growing economy."

As providers of the country's money supply, commercial banks play a sensitive, crucial role in the maintenance of economic stability, the Dallas financial expert said. "Without forward looking regulation, we may find ourselves in the mid-70's with insufficient banking resources in some areas and with units of less than optimum size in others.

"Whether commercial bank supervision will, in fact, be forward rather than backward looking, depends upon technical changes in the payments system, successfully achieving goals of economic stability, and legislative attitudes toward competition in banking."

Thompson was one of four speakers for the opening day's program for the third annual Intermediate School of Banking sponsored by the college of business administration at Texas Tech.

Others included Ernest Baughman, president of the Federal Reserve Bank of Dallas; Jack Griggs, vice president of the First National Bank of San Antonio; and Dr. Robert L. Rouse, professor of economics at Texas Tech University. Dean Carl H. Stem of the college of business administration welcomed the visiting bankers.

The five-day program will conclude with an awards luncheon at noon Friday. J. B. Wheeler, immediate past president of the Texas Bankers Association, will be the speaker.

Graduate student Michael Klappenbach is coordinating director for the intermediate school.

TEXAS TECH UNIVERSITY COMPLEX

SURPLUS FURNITURE SALE

The Residence Halls Operations has for sale where is as is the following items:

Double Metal Desk	\$10.00 each
Chest of Drawers	\$16.00 each
Bunk Beds (single, without mattress)	\$ 6.00 each
Plastic Serving Trays	\$.50 each

All items may be seen and purchased between 11:00 A.M. and 6:00 P.M.
May 31 through June 3 in Wells-Carpenter Dining Hall.

Texas Tech News

UNIVERSITY NEWS AND PUBLICATIONS / P.O. BOX 4650 / TEXAS TECH UNIVERSITY / LUBBOCK, TEXAS 79409 / (806) 742-4136

CONTACT: Dan Tarpley

Prof. Neale J. Pearson of Texas Tech University's political science department has been selected by the Texas Tech chapter of Pi Sigma Alpha as its 1976 recipient of the Best Teacher Award.

Pi Sigma Alpha is a political science honorary.

Pearson teaches courses in comparative politics, Latin American politics, local government and introductory political science courses. He has written articles on Latin America for professional journals, the "Encyclopedia Americana Annual Yearbook" and the "Yearbook on International Communist Affairs."

The honorary president, Randall G. Mathis, said Dr. Pearson's "students really appreciate the efforts he puts forward in the classroom as well as his counsel outside the classroom."

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8-5-27-76