

Space Administration Eyes Tech Research

Possibilities of space research at Texas Tech were discussed here Monday by Tech officials and representatives of the National Aeronautics and Space Administration.

The four NASA representatives met in the morning with Tech President R. C. Goodwin and 22 other Tech executives, then spent the afternoon touring campus facilities and conferring with Tech faculty members and researchers.

The NASA delegation was made up of four executives of the Southwest Research Institute at San Antonio: Dr. Dana Young and Dr. J. M. Sharp, technical vice-presidents; Dr. J. E. Hobson, planning and development director; and Dr. H. P. Burchfield, SRI chemist.

NASA has a \$3.5 billion budget that may be increased soon to as much as \$5 billion, representatives of the space agency reported.

Eighty per cent of this will be spent in contract research and development.

"NASA is dependent on educational institutions for its manpower and basic research," said Dr. Young, beginning spokesman for the delegation at the morning conference in the President's Office.

The NASA program's by-products alone will have tremendous economic implications, he declared.

More direct economic benefits will come to areas with educational institutions that have the facilities and facilities to make direct contributions to the NASA program, the representatives pointed out.

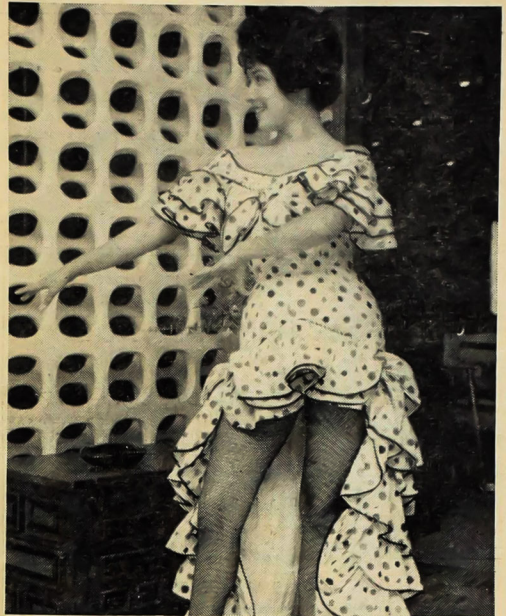
In addition to basic research

contracts, NASA will make between four and five thousand fellowship grants per year, with the aim of eventually producing a thousand Ph.D.'s annually with backgrounds that will contribute to the space program as well as other scientific and industrial development.

The NASA delegates described various aspects of the U.S. space program and invited Tech researchers to apply for grants in any area where they think they can make a contribution.

Ends of U.S. space research are as infinite as space itself, the NASA representatives said. Already in the planning stage are explorations to Mars and Venus and possible trips to planets so far away that a family which can reproduce itself enroute may be required so the second generation can complete the journey.

NASA has asked the delegation of SRI researchers to visit educational institutions throughout the Southwest, with a special attention to be given to research that will tie in with developments at NASA projects in Houston.



MEXICAN (UGH!) MAMBO

... at Tech Union tomorrow will feature an act by Sylvia Ramirez entitled "Mambo Number 5," exhibition dancing, dinner and music by Bob Lamont and orchestra. (See story page 3.)

Panhellenic To Offer Summer Fashion Show

A fashion preview — clothes furnished by Margaret's and modeled by Tech coeds — will bring the fashion word to the campus in the City Panhellenic Style Show at 2 p.m. Aug. 8 in the Tech Union Ballroom.

Tickets for the show are \$1 and are now on sale at Margaret's.

Modeling the fall fashions will be 14 Tech girls, each representing her sorority.

Coeds who are expected to model and their sororities are Shelley White, Alpha Chi Omega; Lynda Ryno, Alpha Phi; Betty Tripp, Delta Gamma; Linda Montgomery, Sigma Kappa; Karen Parks, Delta Zeta; Karen Hoelschet, Zeta Tau Alpha; Mary Harrison, Phi Mu; Nelda McQuien, Kappa Alpha Ze-

ta; Donna King, Delta Delta Delta; Betsy Kaiser, Pi Beta Phi; Karla Dickson, Gamma Phi Beta; Sharon Jones, Chi Omega; Hinda Kaln, Alpha Epsilon Phi; Betty Moshier, Kappa Kappa Gamma.

Dr. James Holly Hanford, world renowned Milton scholar, will be a visiting professor in the Texas Tech English department this fall.

Dr. Hanford, now at Princeton University, will teach two graduate courses during the fall semester, Dr. John C. Guilds, head of Tech's

FOREREADOR

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Renowned Scholar To Teach Here

English department, said.

He will teach two seminar courses—"Studies in English Literature of the Seventeenth Century," with emphasis on John Milton and "Seminar in Literary Research."

In addition to teaching, Dr. Hanford will serve as a bibliographical

consultant to R. C. Janeway, Tech library director, and will present several public lectures during the fall.

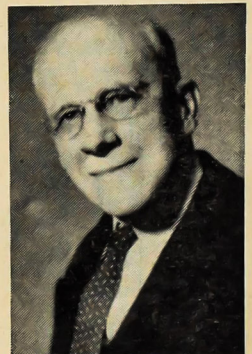
A past president of the Modern Language Assn., Dr. Hanford is called by many the foremost authority on Milton today.

He has been professor of English at Simmons College in Boston, Western Reserve University and the Universities of North Carolina and Michigan.

As a visiting professor he has taught at Harvard, Princeton, Columbia, the Universities of Texas, Chicago, California and Damascus, Syria's national university.

His major contribution to the study of Milton has been his *Handbook on Milton*, first published in 1926. The book has been widely used as a textbook in America and England. His other books on the

See **RENOVED**, Page 2



DR. J. H. HANFORD

Group Plans 6-Volume History



SIX WRITERS, SIX VOLUMES

... of Texas history are planned with each writer, faculty members of Tech's history department, contributing one volume. The comprehensive work will be written "for enjoyment as well as enlightenment." It is the first multi-volume cooperative history of the state.

Six Texas Tech faculty members will team up to write a six-volume narrative history of Texas.

The project is one of the most extensive ever undertaken in Texas history. It is the first cooperative multi-volume history of the state.

It probably is the first major work of its type with all the authors at one institution. This will allow many conferences and suggestions that would be impossible otherwise.

The authors are Dr. Ernest Wallace, Dr. David Vigness, Dr. S. S. McKay, Dr. Seymour V. Connor, Sylvan Dunn, and Odie Faulk. Publisher is Steck Co. of Austin.

This will be history to enjoy as well as enlighten, the authors announced in a joint statement.

"Too many historians write only for other historians," the authors said, "and too much 'history' has been written by skilled writers who know little about history."

The volumes will range from the first Spanish probes into Texas in the 1500's to modern times. The writers will attempt to emphasize the lively, significant events and personalities in Texas' development — all with the historian's accuracy. Footnotes will be avoided.

The first volume, by Faulk, will cover Spanish Texas from 1519 to 1810. Vigness will describe Mexican and colonial Texas and the Texas Revolution in volume two.

The Lone Star Republic, Mexico See **HISTORY**, Page 2

Stadium Option Sales Booming—Polk Robison

Texas Tech's Athletic Business Office, busy with season football ticket sales, is facing another pleasant chore—stadium option purchases.

Athletic Director Polk Robison noted with more pleasure than surprise a recent flurry of option sales.

"A growing realization that year after year we'll have attractive home schedules is encouraging the option sales," Robison said. "To take just one example, every season we'll have either Texas A&M or the University of Texas team playing in Jones Stadium.

"Either A&M or Texas is sure to be near-capacity or a sell-out. A season ticket is the only guarantee a fan has of seeing these or other games here."

Seats in the choice option area

are available on a season basis, but the purchaser can't renew in the same location the following year if another fan buys the option for them.

Texas Tech's best available seats are in the \$300 option area. As they remain they may be bought on a season basis for \$30. Other season ticket prices are \$25 (\$200), \$22.50 (\$100 area), and \$20. Mail orders, including 25-cent mailing fee, should be sent to the Texas Tech Athletic Department.

Option purchases may be arranged by telephoning Porter 2-0296 or by visiting the Athletic Office, south of Jones Stadium on 6th Street.

Home games are with West Texas State, Texas, Southern Methodist, Colorado, and Arkansas.

Renowned Scholar...

(Continued from Page 1)
 English author include: *John Milton, Englishman; The Poems of John Milton; and A Restoration Reader.*
 Dr. Hanford received the B.A. degree from the University of Rochester and the M.A. and Ph.D. degrees from Harvard. The University of North Carolina conferred an honorary Doctor of Laws degree on him for his scholarly compilations and interpretations which he began while there.
 Dr. Hanford lists Thomas Wolfe, American novelist, and Paul Green, playwright, among his famous students.

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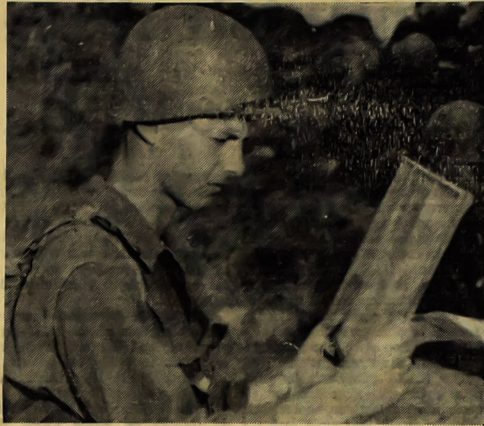
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History...

(Continued from Page 1)
 can War and early statehood are Connor's subjects in volume three. In volume four, Wallace will write about the Civil War, reconstruction and the Indian frontier.
 Dunn's narrative in volume five covers the last quarter of the 19th century, the bringing of law to the frontier and development of the ranching industry.
 The dramatic story of 20th century Texas' rapid growth and change will be told in the sixth volume by McKay.
 The total list of books and articles by the team of Tech historians would exceed 100. It would include McKay's *Seven Decades of the Texas Constitution* and Wallace's widely-read *Comanches, Lords of the South Plains*.
 It would range from Vigness' publications in Latin American history to Dunn's work on agricultural problems of the late 19th century.

Connor, author and editor of a number of works on the Texas Republic, is director of Tech's Southwest Collection as well as a history professor. Faulk, regarded as one of the region's most promising young historians, will receive his Ph.D. degree from Tech in August.
 Each volume in the series will stand alone as a separate treatment of its period. The series is expected to be ready for publishing sometime in 1963. Connor will be editor for the project.

CAMPUS SECOND LARGEST

With 1,844 acres, Tech is reputed to be the second largest campus in America. Approximately 285 acres are in the campus property and are maintained by the Grounds Department.

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Union Presents Dinner-Dance, *Nina Dova*

'Mexican Mambo' Rocks Union Tomorrow!

The internationally-known Nina Dova, concert singer and guitarist, will present to Techsians an evening of delightful songs at 7:15 p.m. Aug. 2 in the Tech Union Ballroom.

Nina Dova has collected the songs for her musical repertoire of six languages from her extensive travels around the world.

An enjoyable evening is in store as she brings her performance to life with colorful costumes and her vast theatrical training and experience in music, dramatics and singing.

Her unique collection of songs have found her a place in the theatre and on radio and television.

Her success in part has been attributed to her feeling for the songs she sings and plays.

A native of England, Miss Dova now makes her home in New York and has recently toured the United States and Canada performing in concert series and in leading universities.

Movie

On the screen in the Tech Union this week will be the "Last Angry Man." An elderly doctor, played by Paul Muni, finds himself the victim of a television producer, portrayed by David Wayne, who is attempting to cash in on the humanitarianism.

The movie was an academy award nominee.

Miniature Golf Tourney

For miniature golfers — and would-be golfers, too—Tech Union has slated a miniature golf tournament, free to all who sign up.

Qualifying rounds will be played Aug. 10 and finals, Aug. 11. Deadline for signing up at the newsstand of the Tech Union is Aug. 8.

Trophies and medals will be awarded to the top three winners in both the men and the women's division. A gift certificate will be presented to the top two winners.

The competition will be at the Twin Lakes Miniature Golf Course.

Square Dance Change

The square dance, originally scheduled for tonight in the Tech Union has been cancelled. There will be a square dance at 7 p.m. Tuesday. Instructions to the beginners, refreshments, lively music and professional calling — and it's all free.



NINA DOVA

... famed international songstress-guitarist will appear next Thursday at 7:15 p.m. at Tech Union. Enhancing her performance of many songs from many countries with costume changes, Miss Dova has achieved international renown as a folk-singer.

Don't miss it! Don't miss Mexican Mambo!

Mexican Mambo is something unusual in the way of entertainment at the Tech Union. It's a dinner dance complete with all the trimmings.

Bob Lamont's orchestra will present the dance music, party favors will be given to the young ladies, entertainment will take the form of two floor shows, and Mexican food is the menu.

Cost of the entire evening is only \$1.25 per person. Table reservations for one or two couples must be made by 5 p.m. today. Dress for the occasion is formal.

The dance, which is free, gets under way at 8:30 p.m. and the

whole evening comes to an end at 11:30 p.m. Those not desiring dinner may come later for the dance.

Two floor shows are scheduled for 7:45 and 9:30 p.m.

On the menu are enchiladas with chili, Spanish rice, guacamole salad, tostadas, pecan roll and coffee or tea. Cokes may be ordered all evening.

Mexican Mambo and the idea behind this night club-night is a first-timer on the Tech campus.

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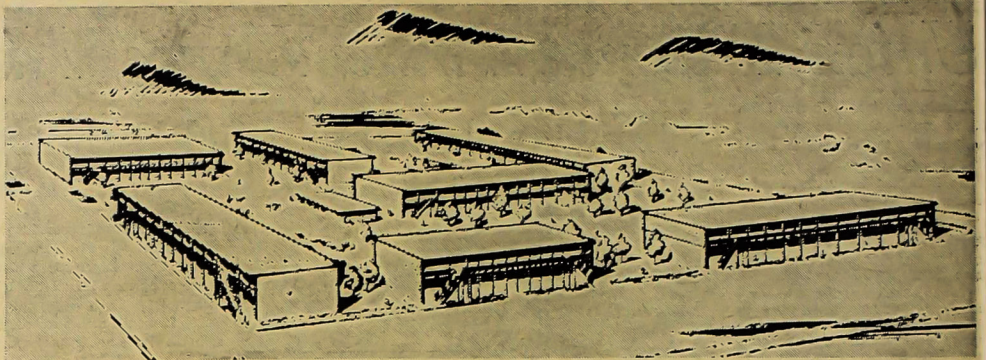
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Mathematician Speaks Today

An Australian mathematician will be a guest lecturer at Texas Tech's National Science Foundation mathematics institute this week.

He is Dr. T. G. Room, mathematics department head at the University of Sydney, Australia, who will speak today, Friday and Saturday to the institute participants and the Tech mathematics staff.

Today's lecture, which is open to the public, will be at 3 p.m. in Room 126 of the air-conditioned Classroom and Office Bldg. "Geometry, Prolegomena to Physics" is the topic of the lecture, which explains axiomatic development of plane geometry by interpretation of physical relations.



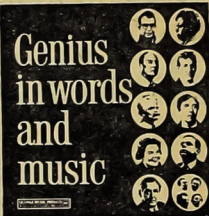
NOW UNDER CONSTRUCTION
... are 200 apartments for Tech's married students. The \$1.3 million project calls for seven buildings to be located between Detroit and Elgin Streets and Second and Third Place, and for the first units to be ready for occupancy by fall. Air-conditioned apartments will rent for about \$80 per month, bills paid. Eventually a swimming pool will be added.

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Tech Trains 'New' Engineers For American Industrial Scene

A new kind of engineer is coming into prominence in the American industrial scene these days through training at Texas Tech and other institutions. He is the industrial engineer.

The classical engineer works with components. The industrial engineer is concerned with entire work systems including the men and women who operate them. Men, machines, increased productivity and lower costs are seen in an all-embracing perspective in this new field of engineering.

The field developed before World War II but really sprouted its wings and became an important engineering segment within the past 10 years as more and more companies became interested in maintaining quality and lowering production cost.

Tech's industrial engineering department, ranked in the top five

across the nation, has grown from 55 students in 1950 to 181 students in 1961, including 10 graduate students working toward their master's.

Dr. Richard A. Dudek, head of the Tech department, said the computer has taken its place alongside the slide rule as an important tool of the industrial engineer who is concerned with the design, improvement, installation of integrated systems of men, materials, and equipment to do a better job and still maintain quality control.

The industrial engineer of today is most often employed in an advisory capacity, usually on the management staff of an organization.

In this capacity, he designs work systems which will allow the organization to obtain maximum utilization and control of its re-

sources, determines cost, sets quality standards, sets schedule and standard times for the performance of specific jobs, and determines the layout of the physical facilities.

The industrial engineer is used most widely in manufacturing fields, according to Dr. Dudek, but contributes his knowledge to such areas as engineering sales, farm management, home economics, hospital work, surgery, hotel and restaurant operation, retail store operation and other fields.

At Tech, the industrial engineering staff and students are carrying on research in such fields as work analysis, work management, production, analysis, control systems and systems management.

One of the important problems of work analysis is a more scientific definition and measurement system for human work. Directed toward this end is research being conducted by M. M. Ayoub to determine the accelerations, velocities, distances, and positions of body member in three dimensions during the performance of any work task.

Another research project being conducted by Tech's IE department is concerned with the development of a method for determining the minimum time sequence of any job schedule to be performed on many machines. Still other projects are concerned with the analysis of the forces involved in machining for the purpose of designing better tools for automation and in machining for new "space age" materials.

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All Books —517,000— Now Moved

Texas Tech's library is "a home" in its new building.

The last of Tech's 517,000 books and other volumes were moved in to the striking new five-story library building Friday.

All of them were available to students, faculty and staff and other users Monday. For the past several weeks, users have had to go either to the old library or the new, depending on the status of the move.

Summer hours for the new library are now 7:10 a.m. to 10 p.m. Monday through Thursday, 7:10 a.m. to 5 p.m. Friday and Saturday. The building is closed on Sunday.

Librarian Ray Janeway and his staff celebrated the end of the move Friday with the cutting of a large white cake. Incribed in it were the words "at long, long, long last."

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