

## A New Center for Scientific Studies In the Southwest

*Claude C. Albritton, Jr.*

### *Introduction*

On October 14, 1957, the charter of The Graduate Research Center, Inc. was approved and filed in the Office of the Secretary of State at Austin, Texas. In the words of the charter, "this corporation is formed to support and encourage the advancement of knowledge in the pure and applied sciences, and to aid in the conduct of research and investigations in those fields at Southern Methodist University."

The approach of the Center's second anniversary is the occasion for this article, which describes the history, organization, accomplishments and plans of the new corporation. While newspapers and industrial magazines of the Southwest have been both generous and accurate in publicizing the Center, their accounts have necessarily been topical, and hence incomplete. Furthermore, some of these popular accounts have predicted such vast accomplishments for the Center that readers have sometimes mistaken prophecy for history.

In point of fact, the Center is now passing through a transitional phase of growth, during which it is beginning operations in research and at the same time completing its organization. Twenty trustees have accepted invitations to the governing board; a President and a Secretary-Treasurer have been elected; one research project has been completed, two others begun; money is at hand for the construction of the Center's first building, and architects have been commissioned to design it; the Trustees have authorized the establishment of a Division of Earth Sciences; and an operating budget has been adopted for the fiscal year 1959-60. This much is a matter of record.

### *History of Organization*

The original proposal that led to the establishment of the Graduate Research Center was made by Mr. Lewis W. MacNaughton of Dallas. As an officer of the geological consulting

firm in which his name is associated with that of E. DeGolyer, MacNaughton has long been interested in the training of scientists. During the years when SMU had inadequate library facilities and scholarships for students of science, Messrs. DeGolyer and MacNaughton made their collections of books freely available to students and professors, regularly offered part-time work for student apprentices in geology, and occasionally arranged short-term consulting assignments for faculty members. This informal working relationship between a business firm and a university proved to be mutually advantageous. Accordingly, Mr. MacNaughton proposed to officials of the University that they consider establishing similar relationships with other technical corporations, on a more formal basis.

This proposal was made in November of 1953, when a flourishing defense industry was bringing new technical corporations and industrial research laboratories to Dallas. With these came hundreds of scientists and engineers, many of whom had taught and conducted research at universities. If arrangements could be made to obtain the services of industrial researchers for graduate instruction, as a contribution of the companies in aid of education, and if some of the more specialized equipment in the laboratories of industry could be made available for academic research, MacNaughton felt that the University might accept a greater measure of responsibility in training scientists and engineers.

The University was not in a position to act upon this suggestion at the time it was offered. The principal academic efforts then were with the strengthening of the undergraduate college and the professional schools. Graduate instruction had not grown beyond the master's level in any discipline, and the faculties of science and engineering were too small to manage an expanded graduate program.

When Dr. Willis M. Tate accepted the presidency of Southern Methodist University in 1955, he announced that the strengthening of the Graduate School would be one of his major projects. President Tate asked his predecessor in office, Chancellor Umphrey Lee, to serve as chairman of a committee to recommend the steps that should be taken.

In late September of 1956, Dr. Lee and Provost Hemphill Hosford invited Mr. MacNaughton to visit the campus and restate his ideas. The substance of the memorandum summarizing this conference was embodied in the Lee Committee's report,

which was presented to President Tate on February 25, 1957. This report urged the establishment of a graduate research center, patterned after the structure of the Southwestern Legal Foundation. That is to say, the Center should be an independent corporation, with its own trustees, officers and director. The trustees should include leaders in industries that depend upon scientific manpower and research. The Center and the University should then join forces in strengthening advanced training and basic research in science and engineering.

President Tate promptly acted upon these recommendations. During the following eight months, he secured the firm support of the Trustees of the University in behalf of Chancellor Lee's proposals, was instrumental in bringing together in periodic meetings the influential businessmen who later became the founding trustees, and convened the meeting of October 28, 1957, at which the Center was formally organized.

By a happy coincidence, during these months when plans for the Center were being laid, the President of the Dallas Chamber of Commerce was Mr. J. Erik Jonsson. As President of Texas Instruments, Inc., Mr. Jonsson was aware of the difficulties in recruiting the better young scientists for work in a region that offers few opportunities for continuing education at the graduate level. As a patron and trustee of private schools in and away from Dallas, he understood the complex problems faced by institutions that cannot draw support from public funds. Mr. Jonsson had been consulted by Dr. Lee prior to the drafting of his report on graduate instruction, and had been co-sponsor of the evening meetings that preceded the formal organization of the Center. At the October meeting of 1957, he was elected the first president of The Graduate Research Center.

The names of the original trustees are as follows:

PRESIDENT: J. Erik Jonsson, *Chairman of the Board, Texas Instruments, Inc.*

SECRETARY-TREASURER: Eugene McElvaney, *Senior Vice-President, First National Bank of Dallas*

Harry Bass, Sr., *President, Harry Bass Drilling Company*

August C. Esenwein, *Vice-President, Convair Aircraft*

T. C. Forrest, Jr., *Consulting Engineer, Forrest and Cotton*

Harvey Gaylord, *President, Bell Aircraft*

Cecil Green, *President, Geophysical Service, Inc.*

J. L. Latimer, *President, Magnolia Petroleum Company*

Lewis W. MacNaughton, *President, DeGolyer and MacNaughton*

H. Neil Mallon, *Chairman of the Board, Dresser Industries, Inc.*

Stanley Marcus, *President, Neiman-Marcus*

C. J. McCarthy, *Chairman of the Board, Chance Vought Aircraft, Inc.*

L. F. McCollum, *President, Continental Oil Company*

Robert McCulloch, *President, Temco Aircraft Corporation*

Eugene McDermott, *Director, Texas Instruments, Inc.*

John E. Mitchell, Jr., *President, John E. Mitchell Company*

John G. Pew, *Vice-President in Charge of Production, Sun Oil Co.*

Gardner Symonds, *President, Tennessee Gas Transmission Company*

C. A. Tatum, Jr., *President and General Manager, Dallas Power and Light Company*

W. C. Windsor, Jr., *President, Windsor Properties, Inc.*

The only member of the group who is officially connected with the University is Mr. Eugene McElvaney, Chairman of the Executive Committee of the Southern Methodist University Board of Trustees. It was generally agreed that the autonomy of the Center would best be assured by trustees without university connections; but an exception was made in the case of Mr. McElvaney, in view of his leadership in the community generally, and in the financial phases of the petroleum industry, in particular.

The charter of the Center permits appointments of additional trustees, to the number of fifty.

#### *Contractual Arrangements with the University*

At their organizational meeting the Trustees of the Center also approved a contract with Southern Methodist University and requested that President Tate present it to the University's official board for confirmation. Approval of the contract was secured on December 5, 1957.

The contract defines the terms under which the Center and the University shall work together toward advancement of knowledge in the pure and applied sciences, and in the training of graduate students.

Article I states that the University shall provide, without charge, space in existing facilities for graduate studies and re-

search, together with offices for the Center's administrative personnel. To the extent that both parties agree that additional land and facilities are needed, the Center shall purchase these for the University, with the understanding that the University will maintain the new buildings and equipment, and provide utilities necessary for their operation.

Article II states that the administrative personnel of the Center shall be employed by the Center, but shall also be considered employees of the University and given the rights and privileges of University appointees. Research and teaching personnel are to be employed directly by the University.

Article III states that the fiscal year of the Center shall coincide with that of the University. Grants-in-aid of research provided by the Center shall be expended by the University, in accordance with memoranda drawn up for each project and jointly approved by the two parties.

Article IV states that the University shall award all academic degrees incidental to advanced training and research, and shall determine the conditions of admission, the curricula, and the requirements for graduation.

Article V describes the conditions under which the contract may be amended or terminated.

#### *Research Projects Completed or in Progress*

Although the Trustees of the Research Center have not yet named a director, three research projects have already been undertaken under their sponsorship.

In January of 1959 the Callier Trust of Dallas granted \$125,000 to the Acoustics Laboratory of SMU for a five-year investigation of the loss in hearing on exposure to noise at different levels. The Callier trustees awarded this grant upon formal recommendation by officers of the Research Center. Dr. H Wayne Rudmose, Professor of Physics and Director of the Acoustics Laboratory, began working on this project in the summer of 1959.

On March 22, 1959, a gift of \$750,000 for the construction of a science information center was announced. This grant came in three equal parts from a foundation representing Texas Instruments, Inc. and Geophysical Services, Inc., of which Mr. Erik Jonsson, Mr. Cecil H. Green and Mr. W. C. Edwards, Jr. are trustees; a foundation representing Mr. and Mrs. J. Erik Jonsson and their children, Philip R. Jonsson, Kenneth A. Jons-

son and Miss Margaret Jonsson; and a foundation representing Mr. and Mrs. Eugene McDermott and their daughter, Miss Mary McDermott.

The science information center is designed to serve scientists and engineers of the North Texas region, as well as the students and professors on the central campus of the University. Beyond the conventional services through interlibrary loans and microfilm, experiments will be conducted on the storage and retrieval of information, and in rapid transmission of data to laboratories of industrial research. Indeed, the central purpose of this facility is to devise new and improved methods of gathering and dispersing information in support of on-going research projects. Plans for the building are being drawn by Mr. O'Neil Ford and Mr. A. B. Swank, architects.

In May of 1959 the Center granted \$2,500 in support of three months of seismological research by Dr. Eugene Herrin, Director of the Dallas Seismological Observatory. Two articles on the velocity and propagation of the *Lg* seismic phase, resulting from this work, are now in press with the Bulletin of the Seismological Society of America.

*Plans for the Fiscal Year, 1959-1960*

While the plans for the science information center are being drawn up, a committee working under the chairmanship of Mr. Cecil Green is seeking a director, and Mr. Jonsson is investigating the possibility of acquiring additional land to accommodate new buildings for research.

In addition, the Trustees have adopted an operating budget to serve the Office of the Director, and to permit the appointment of a deputy director for the natural sciences, a geochemist, and a director of the Univac Computing Laboratory at Southern Methodist University. This budget also provides for the purchase of new books and periodicals in the earth sciences, for the editing and publication of scientific articles, for a survey of the scientific resources of North Texas, and for supplementary educational services in mathematics and engineering.