DOCUMENTS AND MINUTES OF THE GENERAL FACULTY

REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR WILLIAM MONROE RUST, JR.

The Special Committee of the General Faculty to prepare a Memorial Resolution for William Monroe Rust, Jr., Adjunct Professor, Department of Geological Sciences, has filed with the Secretary of the General Faculty the following report.

H. Paul Kelley, Secretary
The General Faculty

IN MEMORIAM

WILLIAM MONROE RUST, JR.

Dr. William Monroe Rust, Jr., Adjunct Professor of Geological Sciences, The University of Texas at Austin, died in Austin, Texas, Thursday, September 24, 1987. He is survived by his wife, Margaret Sue Rust, at his home in Austin and one son, William Monroe Rust, III, of Gualala, California.

"Will," as all his friends and colleagues knew him, was born January 17, 1907, Liberty, Texas, the son of William Monroe Rust and Bettie Miller Burges Rust. His father was of a long line of Rusts of Virginia dating back to 1654.

His early schooling was in Seguin and Houston, Texas, and culminated in undergraduate and graduate work at Rice Institute, Houston, Texas, where he received an A.B. in 1928, M.A. in 1929, and a Ph.D. in Mathematics in 1931. He was awarded a Fellowship at Rice for the interim 1928-1931, and he went on to become an Instructor in Mathematics at Rice, 1931-1932. He was an International Exchange Fellow at the Charlottenburg Polytechnic Institute, Berlin, Germany, 1932-1933, and an Instructor and Tutor in Mathematics, Harvard University, 1933-1934. He returned to Harvard in 1960 while attending the Business School's Advanced Management Program.

Will joined Humble Oil & Refining Company in 1934 as a Research Geophysicist and was made Head of Geophysics Research in 1937, which included a special assignment in 1949 as an observer in the Research and Technical Services Departments of the Baytown Refinery. In 1955 he
became Assistant Chief Geophysicist and in 1961 became Exploration Administrative Manager. This culminated in his becoming Manager of the Exploration Data Processing Center for Humble Oil & Refining Company. His retirement date from the Humble Company was August 31, 1969.

He was married to Margaret Sue, daughter of Mr. and Mrs. John O. Sue of Houston, in 1936, and their boy, William Monroe, III, was born in 1939. Will and Margaret had 51 years of married life at the time of Will's death.

During the time of his Humble Oil & Refining Company work Will managed to be involved in many other activities. He was consultant to Division II of the National Defense Research Committee that dealt with subterranean explosions. He was Humble's representative under contracts to the Radiation Laboratory at Massachusetts Institute of Technology, with the Committee on Radiowave Propagations for the Office of Scientific Research and Development, and with the University of Texas. On these projects he was responsible for work ranging from the study of radar components to plane-to-plane fire control. He was sent to the American Steel & Wire, a United States Steel Company organization, to develop a stronger steel rope. He suggested that alternate strands of the rope be wound in alternate directions for greater strength. It worked and is still working today.

During his Humble Company years he developed 12 patents, 10 in the United States and two in Canada. The patents involved electric logging, radio navigation surveying, interpretation of seismic signals, and measurements of electrical impedance of the earth. Some of the patents were done with the collaboration of F. J. Feagin, M. R. MacPhail, W. D. Mounce and A. Chapanis.

Will served as Secretary-Treasurer 1942-1943, Vice President 1943-1944 and President 1944-1945 of the Society of Exploration Geophysicists. Later he became chairman of the Constitution and By-Laws Committee 1945-1947, a committee that created the local section system for the Society of Exploration Geophysicists. The list of organizations that he belonged to reads as follows:

American Association for the Advancement of Science, fifty year member since June 26, 1981.
American Association of Petroleum Geologists, member.
American Mathematical Society, charter member.
American Physical Society, member.
American Institute of Mining, Metallurgical and Petroleum Engineers, member.
American Geophysical Union, member.
American Society for Engineering Education, member.
Houston Geophysical Society, member.
Geological Society of Houston, member.
Society of Exploration Geophysicists, Secretary-Treasurer 1942-1943, Vice-President 1943-1944, President 1944-1945. Honorary member 1982,
a fifty year member.
Registered Engineer of the State of Texas since 1938, a fifty year
member.
River Oaks Baptist Church, deacon.
Riverside General Hospital, Houston, Director.

During the time he was President of the Society of Exploration
Geophysicists he was involved with the Federal Communications Commission
and he helped establish a Petroleum Radio Service that eventually was
merged with the American Petroleum Institute Central Committee on the use
of Radio and Radar. He was a charter member of the Houston section of
the Institute of Electrical and Electronic Engineers and served on the
board of the National Society representing region 6 from 1953-1954. He
was elected a Fellow in the Institute of Radio Engineers and later became
a member and chairman of the Honors Committee of the Institute.

Will served as chairman of the Central Committee on Radio facilities
for the American Petroleum Institute and was a member of the Institute's
General Committee of the Division of Transportation, an operating group
on the Law of Regulation, and on the Geophysical Committee on the use of
radio.

After retirement from Humble Oil & Refining Company in 1969 Will
and Margaret moved to Austin, Texas, and Will became a Lecturer in the
Department of Geological Sciences. As both a lecturer and as a
consultant he helped the University establish a growing geophysical
program. He was made Adjunct Professor of Geological Sciences in 1972
and held this title until his death. Significant to Will's tenure at The
University of Texas at Austin is that he never was paid a salary, at his
request.

Will was a leader in the development of the undergraduate geophysics
option in the Department of Geological Sciences and in the initiation of
a visible graduate program in geophysics. The undergraduate geophysics
curriculum emphasized fundamentals in physics, chemistry, mathematics and
geology with exposure to the blending of these disciplines in exploration
gephysics and whole earth geophysics. He promoted a close liaison with
industry and introduced the popular course in geophysical interpretation,
in which the leading exploration geophysicists from industry were invited
to provide a diverse and current view of the science and technology of
applied geophysics.

When asked about any advice he had for young people he placed
extreme emphasis on education. His favorite saying was, "The difference
between a human being and other things is that humans have the capabili-
ties to express themselves in words and to learn from the experience of
others. One of the glories of education is the training of the ability
to think. A corollary to that is each of us should learn to listen."

Those of us who knew Will will miss him.