SPECIAL NOON MEETING

MODERN AND ANCIENT HURRICANE DEPOSITS - THEIR GEOLOGICAL SIGNIFICANCE

by William Ralph Walton

The shoreline sands ocurring along the coastlines of the northern Gulf of Mexico offer excellent examples of the processes that have created them and determine their distribution. Sands of such varying origin as eolian sands of the south Texas sand sheet, the barrier islands of the Central Texas Bay - Barrier Island Province, the chenier sands of southwestern Louisiana, the channel sands of the active and inactive passes of the Mississippi River delta complex, the reworked sands of the old distributary channels of the Mississippi delta, and the Mississippi-Alabama barrier island chain, are well documented in this almost unique basin of deposition. The point is strongly made that these sands are "made" by nearshore processes from other sand-containing sediments and are not deposited as such from their sources. They, in essence, are all multicycle sands.

The "normal" shoreline and nearshore processes maintain these sand deposits in their present environments. Major storms, however, completely distrupt these "normal" processes and cause unusual sand distributions. Many of the storm-caused distributions are repaired by the "normal" processes shortly after they are formed. Some, however, remain as a permanent distribution and probably are included in the geological record as such.

Many examples of sand bodies in the subsurface Tertiary of the Gulf Coast geosyncline are directly analogous to modern "normal" and "abnormal" sand bodies available for study in the northern Gulf of Mexico. The Oligocene "Frio Barrier" in South Texas is associated with probable storm deposits and production from these deposits is discussed.

BIOGRAPHICAL DATA

Born:	April 11, 1923, Fort Worth, Texas
Education:	1949 - A.B., Geology, Amherst College, Massachusetts
	1949 - Entered graduate school at Harvard University on a fellowship from the Woods Hole Oceanographic Institution to study sedimentation and stratigraphy
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	1952 - M.S., Oceanography, Scripps Institution of Oceanography, University of California (La Jolla)

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Experience:

1953-57 - Paleocologist, Gulf Research and Development Co., Houston, Texas and Pittsburgh, Pennsylvania
1957-58 - Paleocologist and sedimentologist, Pan American Petroleum Corp., Tulsa, Oklahoma.
1958-63 - Division Consulting Geologist, Pan American Petroleum Corp., Houston, Texas.
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