

Neil M. Sullivan

# GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

TRANSACTIONS OF THE

*17th Annual Meeting*



R. B. Begeman 1967  
Mission San José

SAN ANTONIO, TEXAS

OCTOBER 25, 26, 27, 1967

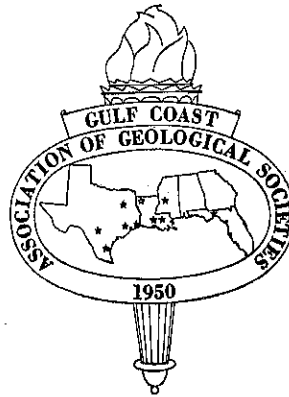


*Neil M. Sullivan*

# TRANSACTIONS

## Gulf Coast Association of Geological Societies

VOLUME XVII 1967



A Section of the American Association of Petroleum Geologists

JOHN R. SANDIDGE  
Editor

Prepared for the

### SEVENTEENTH ANNUAL MEETING OF THE GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES AND REGIONAL A.A.P.G. MEETING

held in cooperation with the  
SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS

OCTOBER 25-27, 1967  
SAN ANTONIO, TEXAS



Published at  
San Antonio, Texas

Copyright 1967 by the Gulf Coast Association of Geological Societies  
No reproduction without permission of the President of the G.C.A.G.S.

## A Portrait of San Antonio

The greatest cultural confrontation in the long history of mankind occurred in the Middle America area south of San Antonio, sending out strong ripples which are still felt here. In 1519 Cortes' small force, representing the might of European civilization, met in violent reaction with large segments of the millions of native Amerinds. These utterly strange aborigines had developed their distinctive achievements over a period of 40,000 years, completely without knowledge of or effective contact with any cultural elements from the eastern half of the world.

San Antonio de Padua is a living, thriving product of that classic confrontation of these two ways of life, mellowed now through the centuries, but still obviously a blend of ancient, native Mexican ways and more recent, but still old-fashioned European traits. Bountiful springs emerging from the exposed edge of the Cretaceous Edwards Plateau to the north brought nomadic tribes here to repair the ravages of desert travel and to swap goods from far places. In 1691 the first Spaniard saw the fertile lands about the springs, the abundance of buffalo, deer and other game, the wild nuts and fruits and the numerous friendly Indians. A few years later Franciscan friars, with a military escort, arrived on the day of Saint Anthony, April 13, 1709 and happily gave the lush area a name.

On May 1, 1718 the first mission was founded and the pattern was set for the next 250 years. Irrigation works were laid out, churches and graneries built, and the Indians learned a new religion, hard work and the curse of foreign diseases. When the local natives were wiped out by smallpox new tribes moved in—hundreds were imported almost 1000 miles over desert lands from Tlaxcala deep in Mexico. The Lipan Apaches, driven by hunger and the even more ferocious Comanches to the north of them, came peacefully to the little town to learn the new ways of life. The survivors, christianed with Spanish surnames and sprinkled with a few drops of Iberian blood, managed to exist and multiply and today they form about half of the city's population.

In 1836 the disgruntled American contingent, pioneer Texan immigrants into this bastion of Mexico from the United States, fought for independence. After a totally fatal stand at the Alamo, wiser heads won some field battles and carved out a shakey republic which lasted until 1845 when the U. S. decided to run in and grab everything that was not nailed down. When the dust settled Mexico had not only lost all hopes of recovering Texas but had lost California as well. However, San Antonio has remained more Mexican in its form than American. It has grown, not in the usual American manner, but on a whimsical pattern more like its sister city, Monterey, 300 miles to the south in Mexico.

After the Civil War San Antonio became a major haven for the U. S. military due to its equitable climate and low cost facilities. From the Rough Riders of Teddy Roosevelt through the vast legions of Franklin D. Roosevelt the training camps and airfields of San Antonio have turned out hundreds of thousands of fighting men. And a large percentage of them were the same Indians so long in the area, caught up in the "Western" ways, taught English and the use of modern arms so they could fight and die for the technocracy which overran their own culture so long ago.

Missions, ancient churches, venerable schools, old forts and gracious pioneer buildings jumble together here with an overlay of newer elements. The Southwest Research Institute and numerous university programs are probing the challenges of the ages yet to come. But you can drive out any small country road and see the heritage behind today's city—small stone or adobe ranch and farm homes, surrounded by dry stone walls, examples of a hardy spirit which still lingers under the neon-lit, plastic veneer. The spirit of countless centuries of native evolution, the urge to survive, to endure and progress—it persists and gradually is creating something new out of a blend of native and European ways of life which will be better than either was before the mixture.

The nation's fourteenth largest city is half "Mexican-American", half Old World and wholly dedicated to the solution of man's oldest problem, how to get along with himself. The Brooks Aerospace Medical facility is planning far ahead for survival in hostile environments; the Southwest Texas Medical Research Hospital is almost ready to undertake a great program of experimentation and teaching; Brooke General Hospital takes superlative care of burn victims from all over the world and the Wilford Hall Hospital pioneers many new recovery techniques.

We do not have liquor by the drink, slot machines or even horse racing, but we have a lot of fun. Nearby lakes provide good fishing, boating sports and family picnic sites. Some geolo-

gists, with more spare time than sense, probe deep into the many wet and muddy caves in the hill country, collect fossils or enjoy some of the many forms of hunting available. Dr. Billy Burns, director of the Witte Museum, can provide more real entertainment than a New Orleans floor show if you miss the bright lights. We have no girlie shows worth mentioning so visiting our museum may be a high spot of your trip here. If that is too dry for you, go to the old Buckhorn Saloon (a good replica) at the Lone Star Brewery plant for plenty of suds and all sorts of game animal oddities.

Whatever you do, don't come crying to the convention officers about the crazy streets which change name and direction in mid-block — they were laid out by a drunken Indian on a blind burro.

Salud, amor y pesetas y tiempo para gastarlos.

BIENVENIDOS AMIGOS !!

William R. Gray

548 Babcock Road



## TABLE OF CONTENTS

	Page
A PORTRAIT OF SAN ANTONIO - - - - -	II
OFFICERS AND EXECUTIVE COMMITTEE, G.C.A.G.S. - - - - -	VI
OFFICERS OF MEMBER SOCIETIES, G.C.A.G.S. - - - - -	VI
REPORT OF THE PRESIDENT, G.C.A.G.S., Wilford Lee Stapp - - - - -	VIII
REPORT OF THE GENERAL CHAIRMAN, SEVENTEENTH ANNUAL MEETING, M. O. Turner - - - - -	IX
EDITOR'S REPORT, John R. Sandidge - - - - -	X
SEVENTEENTH ANNUAL CONVENTION COMMITTEES - - - - -	XI
OFFICERS AND BUSINESS REPRESENTATIVES, GULF COAST SECTION, S.E.P.M. - - - - -	XII
REPORT OF THE PRESIDENT, GULF COAST SECTION, S.E.P.M., Hubert C. Skinner - - - - -	XIII
BEST PAPER AWARDS, 16th ANNUAL MEETING - - - - -	XIV
DEDICATION TO DR. JOHN ROY SANDIDGE - - - - -	XV
WHY AND WHITHER G.C.A.G.S., Leslie Bowling - - - - -	XVII
PUBLICATIONS OF THE GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES - - - - -	XX

## TECHNICAL PAPERS

HIDDEN TRENDS AND FEATURES, - - - - - Michel T. Halbouty	2
A STUDY OF THE JURASSIC SEDIMENTS IN PORTIONS OF MISSISSIPPI AND ALABAMA, - - - - - Marvin L. Oxley, Edward Minihan and Julius M. Ridgeway	24
COMPARISON OF SOME GULF COAST MESOZOIC CARBONATE SHELVES, - - - - - James K. Rogers	49
STRATIGRAPHY OF THE EDWARDS AND ASSOCIATED FORMATIONS, WEST-CENTRAL TEXAS, Clyde H. Moore, Jr. - - - - -	61
SUBSURFACE UPPER CRETACEOUS STRATIGRAPHY OF SOUTHWESTERN ARKANSAS, - - - - - J. H. Dolloff, R. A. Rozendal, E. N. Siratovich, F. M. Swain and John Wonick	76
DEPOSITIONAL SYSTEMS IN THE WILCOX GROUP OF TEXAS AND THEIR RELATIONSHIP TO OCCURRENCE OF OIL AND GAS, W. L. Fisher and J. H. McGowen - - - - -	105
SHALE DIAPIRS OF THE LOWER TEXAS GULF COAST AS TYPIFIED BY THE NORTH LA- WARD DIAPIR, Frank J. Brooner, Jr. - - - - -	126
RELATIONSHIP OF MINERAL COMPOSITION OF SHALES TO DENSITY, - - - - - R. W. Rochon	135
DEMAND AND SUPPLY OF FREE WORLD SULPHUR AND FUTURE ADDITIONAL RESERVES, 143 John C. Myers	143
FAULTS OF SOUTH AND CENTRAL TEXAS, - - - - - Delos R. Tucker	144
STRUCTURAL AND STRATIGRAPHIC TRAPS RELATED TO EXTRUSIVE ROCKS IN SOUTH CENTRAL TEXAS, John S. Rives - - - - -	148
SOURCE OF DETRITUS IN THE GUEYDAN (CATAHOULA) FORMATION, SOUTHERN TEXAS GULF COAST, William L. Lindeman and Earle F. McBride - - - - -	149
IS THERE A LONGSHORE DRIFT CONVERGENCE ON CENTRAL PADRE ISLAND, TEXAS, - - - - - Richard L. Watson	150

STRATIGRAPHY OF THE UPPER CRETACEOUS AUSTIN GROUP, CENTRAL TEXAS, - - -	151
Kenneth O. Seewald	
STRATIGRAPHIC UTILITY OF SPHAEROIDINELLA CUSHMAN IN LOUISIANA, - - - - -	152
W. P. Leutze	

### SYMPOSIUM

GEOLOGIC HISTORY OF THE GULF BASIN, - - - - -	160
Hunter Yarborough	
BATHYMETRY OF THE GULF OF MEXICO, - - - - -	161
Elazar Uchupi	
SOME PROBLEMS IN MARINE GEOLOGY, GULF OF MEXICO, - - - - -	173
Fred B. Phleger	
RESUME OF JURASSIC TO RECENT SEDIMENTATION HISTORY OF THE GULF OF MEXICO BASIN, E. H. Rainwater - - - - -	179
A HYPOTHESIS CONCERNING THE ORIGIN AND DEVELOPMENT OF SALT STRUCTURES IN THE GULF OF MEXICO SEDIMENTARY BASIN, B. R. Jones, J. W. Antoine and W. R. Bryant -	211
FUTURE HYDROCARBON PROVINCES OF GULF OF MEXICO - CARIBBEAN REGION, - - -	217
A. A. Meyerhoff	
GEOLOGIC HISTORY OF THE FLORIDA-BAHAMA PLATFORM, - - - - -	261
J. E. Banks	
TETONIC CONTROL OF THE CONFIGURATION OF THE BAHAMA BANKS, - - - - -	265
M. Ball	
GEOPHYSICAL STUDIES OF THE CONTINENTAL SLOPE, SCRAP, AND BASIN, EASTERN GULF OF MEXICO, J. W. Antoine and B. R. Jones - - - - -	268
A GRAVITY PROFILE OF THE SOUTH FLORIDA SHELF, - - - - -	278
Woodson R. Oglesby	
RECENT DELTAIC DEPOSITS OF THE MISSISSIPPI RIVER: THEIR DEVELOPMENT AND CHRONOLOGY, David E. Frazier - - - - -	287
DELTA-FRONT DIAPIRS OFF MAGDALENA RIVER, COLOMBIA COMPARED WITH HILLS OFF OTHER LARGE DELTAS, Francis P. Shepard - - - - -	316
DIFFUSION AND SETTLING OF SEDIMENTS AT RIVER MOUTHS: A COMPUTER SIMULA- TION MODEL, G. F. Bonham-Carter and Alex J. Sutherland - - - - -	326
GROUND-WATER FLOW AND THE GEOTHERMAL REGIME OF THE FLORIDIAN PLATEAU, -	339
F. A. Kohout	
ROLE OF MICRO-ORGANISMS IN FORMATION OF LIMESTONES, - - - - -	355
H. S. Puri and Albert Collier	
DEVELOPMENT OF THE BASIN-IN-BASIN HONEYCOMB OF FLORIDA BAY AND THE NORTH- EASTERN CUBAN LAGOON, W. Armstrong Price - - - - -	368
PALEOCLIMATIC SIGNIFICANCE OF THE BRYOZOAN METRARABDOTOS, - - - - -	400
Alan H. Cheetham	
ENVIRONMENTAL RELATIONSHIPS OF RECENT OSTRACODA IN MESQUITE, ARANSAS AND COPANO BAYS, TEXAS GULF COAST, Paul L. Engel and Frederick M. Swain - - - - -	408
CALCAREOUS NANNOPLANKTON ZONATION OF THE CENOZOIC OF THE GULF COAST AND CARIBBEAN-ANTILLEAN AREA AND TRANSOCEANIC CORRELATION, - - - - -	428
William W. Hay, Hans P. Mohler, Peter H. Roth, Ronald R. Schmidt and Joseph E. Boudreaux	
RECENT GEOLOGIC HISTORY OF THE WEST COAST OF FLORIDA; COASTAL MANGROVE SWAMPS, AND FLORDIA BAY, David W. Scholl and Frank C. Craighead - - - - -	481
ORGANIC MATTER IN BOTTOM SEDIMENTS, CHOCTAWHATCHEE BAY, FLORDIA, - - - -	482
James G. Palacas	
DIAPIRS IN THE SOUTHWESTERN GULF OF MEXICO, - - - - -	482
John Ewing	

## GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

PRESIDENT - - - - - Wilford L. Stapp, President  
 Stapp Drilling Company, San Antonio, Texas

PAST PRESIDENT - - - - - Allen M. Borland, Consulting Geologist  
 Lafayette, Louisiana

VICE PRESIDENT - - - - - Marvin D. Horton  
 Chevron Oil Company, Jackson, Mississippi

SECRETARY - - - - - Meriwether L. Frazier, Sr.  
 Cities Service Oil Company, San Antonio, Texas

TREASURER - - - - - Leonard C. Bryant, Southern Petroleum  
 Exploration Company, San Antonio, Texas

### EXECUTIVE COMMITTEE

ALABAMA GEOLOGICAL SOCIETY - - - - - Douglas E. Jones - - - - - University of Alabama

BEAUMONT GEOLOGICAL SOCIETY - - - - - H. P. Vasterling - - - - - Sun Oil Company

CORPUS CHRISTI GEOLOGICAL SOCIETY - - - - - Byron F. Dyer - - - - - Southland Royalty Company

EAST TEXAS GEOLOGICAL SOCIETY - - - - - Harold C. Beard - - - - - Lone Star Producing Company

HOUSTON GEOLOGICAL SOCIETY - - - - - Raymond E. Fairchild - - - - - Trunkline Gas Company

LAFAYETTE GEOLOGICAL SOCIETY - - - - - Olie H. Johnson - - - - - Gulf Oil Corporation

MISSISSIPPI GEOLOGICAL SOCIETY - - - - - Marvin L. Oxley - - - - - Lone Star Producing Company

NEW ORLEANS GEOLOGICAL SOCIETY - - - - - D. I. Andrews - - - - - An-Son Corporation

SHREVEPORT GEOLOGICAL SOCIETY - - - - - Gene C. Sigler - - - - - Sunray DX Oil Company

SOUTHEASTERN GEOLOGICAL SOCIETY - - - - - Norman K. Olson - - - - - Southern Railway System

SOUTH TEXAS GEOLOGICAL SOCIETY - - - - - Wilford L. Stapp - - - - - Stapp Drilling Company

### OFFICERS OF MEMBER SOCIETIES

#### GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

ALABAMA GEOLOGICAL SOCIETY, P. O. Box 6184, University, Alabama

PRESIDENT - - - - - W. Everett Smith, Geological Survey of Alabama

VICE PRESIDENT - - - - - William A. Thomas, Birmingham Southern College

SECRETARY - - - - - Charles W. Copeland, Geological Survey of Alabama

TREASURER - - - - - Thornton L. Neathery, Geological Survey of Alabama

BEAUMONT GEOLOGICAL SOCIETY, Box 2831, Beaumont, Texas

PRESIDENT - - - - - Anthony Tennissen, Lamar College of Technology

VICE PRESIDENT - - - - - Donald Keen, Sun Oil Company

SECRETARY - - - - - Jimmy V. Haddox, Sun Oil Company

TREASURER - - - - - Matt Rakovich, P.G.A.C.

CORPUS CHRISTI GEOLOGICAL SOCIETY, P. O. Box 1068, Corpus Christi, Texas

PRESIDENT - - - - - Paul Strunk, Independent

1st VICE PRESIDENT - - - - - Jim Rutland, Core Service, Incorporated

2nd VICE PRESIDENT - - - - - John Schulz, Tenneco Oil Company

SECRETARY - - - - - Don Haynes, Haynes & V. T. Drilling Company

TREASURER - - - - - Herman Loeb, Union Producing Company

EAST TEXAS GEOLOGICAL SOCIETY, P. O. Box 216, Tyler Texas

PRESIDENT - - - - - Harold C. Beaird, Lone Star Producing Company  
VICE PRESIDENT - - - - - Henry Bercutt, Humble Oil & Refining Company  
SECRETARY - - - - - Ronald Cumella, Atlantic Richfield Company  
TREASURER - - - - - Byron Tolar, Texaco, Incorporated

HOUSTON GEOLOGICAL SOCIETY, 234 Esperson Building, Houston, Texas

PRESIDENT - - - - - Fred L. Smith, Jr., Consultant  
1st VICE PRESIDENT - - - - - James O. Lewis, Consultant  
2nd VICE PRESIDENT - - - - - Fred M. Schall, Jr., Texas Gas Exploration Corporation  
SECRETARY - - - - - John B. Williams, Texas Eastern Transmission Corporation  
TREASURER - - - - - Martin M. Cassidy, Pan American Petroleum Corporation

LAFAYETTE GEOLOGICAL SOCIETY, P. O. Box 51896, Lafayette, Louisiana

PRESIDENT - - - - - Walt Dobie, Phillips Petroleum Company  
1st VICE PRESIDENT - - - - - Charles F. Levert, Jr., Occidental Petroleum Corporation  
2nd VICE PRESIDENT - - - - - Robert Peterman, Independent Geologist  
SECRETARY - - - - - Richard K. Jones, McCord Oil Company  
TREASURER - - - - - Jimmy R. Kirk, Kewanee Oil Company

MISSISSIPPI GEOLOGICAL SOCIETY, P. O. Box 422, Jackson, Mississippi

PRESIDENT - - - - - Julius M. Ridgway, Ridgway Management, Incorporated  
VICE PRESIDENT - - - - - Edward D. Minihan, E. L. Erickson  
SECRETARY - - - - - Kevin E. Cahill, Placid Oil Company  
TREASURER - - - - - Charles G. Champlin, Geologist

NEW ORLEANS GEOLOGICAL SOCIETY, P. O. Box 52172

PRESIDENT - - - - - Wayne H. Grimes, Chevron Oil Company  
1st VICE PRESIDENT - - - - - Frank C. Crawford, Crawford Oil Company  
2nd VICE PRESIDENT - - - - - Robert M. Swords, Consolidated Gas Supply Corporation  
SECRETARY - - - - - Dan E. Hudson, Jr., J. M. Huber Corporation  
TREASURER - - - - - James S. Classen, Pan American Petroleum Corporation  
G.C.A.G.S. REPRESENTATIVE: - - - - - William H. Hintze, Consultant

SHREVEPORT GEOLOGICAL SOCIETY, Box 750, Shreveport, Louisiana

PRESIDENT - - - - - R. Lee Rogers, Jr., Independent  
1st VICE PRESIDENT - - - - - Ernest H. Morrow, Phillips Petroleum Company  
2nd VICE PRESIDENT - - - - - Joseph O. Laird, Independent  
SECRETARY - - - - - John R. Ulteig, Skelly Oil Company  
TREASURER - - - - - Charles F. Wisdom, Sunray DX Oil Company

SOUTHEASTERN GEOLOGICAL SOCIETY, P. O. Box 1634, Tallahassee, Florida

PRESIDENT - - - - - L. Ray Gremillion, New Jersey Zinc Company  
VICE PRESIDENT - - - - - Van D. Robinson, Atlantic Refining Company  
SECRETARY-TREASURER - - - - - J. William Yon, Jr., Florida Board of Conservation

SOUTH TEXAS GEOLOGICAL SOCIETY, 1904 Alamo National Building, San Antonio, Texas

PRESIDENT - - - - - William G. Pittman, Consulting Geologist  
VICE PRESIDENT - - - - - Robert A. Keahey, Lone Star Producing Company  
SECRETARY - - - - - Maurice E. Forney, Consulting Geologist  
TREASURER - - - - - Eugene L. Ames, Jr., Venus Oil Company



**REPORT OF THE PRESIDENT**  
**GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES**  
**1967**

Welcome to San Antonio to all of you and especially our honored guests. San Antonio is to have a gala six months world's fair in 1968 called "HemisFair," and we would urge you to come back next year to see us again. A special salute to our friends from Mexico who are taking an active part in the meetings, and to the authors from afar who are concerned with the geological history of the Gulf of Mexico. We are honoring AAPG officials, marking a new relationship with that worldwide organization.

**THE MEETING.** The South Texas Geological Society is the host for the 17th Annual Convention of the Gulf Coast Association of Geological Societies and we all owe a great many thanks to those who gave so much of their time, energies, and expenses. Some San Antonio geologists are associated with larger companies but most of them are with small companies, or they are independents, consultants, promoters, contractors and laboratory and service company and engineering people who give of their prime time to get the convention going for the advancement of science and the personal satisfaction of having done their duty well. Many thanks to South Texas Geological Society! Thank you fellows and gals for doing so well! Special kudos to M. O. Turner, general chairman, and to the GCAGS officers, M. L. Frazier, secretary, Leonard Bryant, treasurer, in San Antonio, and Marvin Horton, the vice president in Jackson, Mississippi!

Next year the Mississippi Geological Society will host the Gulf Coast at Jackson and we shall all be there with bells on.

**GCAGS and AAPG.** The question has been kicked around for years as to affiliation of the GCAGS with the American Association of Petroleum Geologists. This year the very able and dynamic Michel T. Halbouty as AAPG president, placed a formal call on GCAGS to join them as a section of AAPG, assuring that the GCAGS would continue to run its annual convention and field trips, publish the transactions and carry on just as we always have, without dictation as to elections, finances, or policies.

"That The American Association of Petroleum Geologists formally invite the Gulf Coast Association of Geological Societies to become a section of AAPG, and to state expressly that, as a section of AAPG, GCAGS may retain its present name and have exclusive authority to maintain its freedom and its own autonomy related to scheduling of meetings, finances, publications, selection of speakers, and other pertinent matters; furthermore, the geological boundaries now established by GCAGS are recognized and accepted by AAPG, and any change in these boundaries must be initiated by GCAGS; and further that GCAGS has the right to withdraw as a section at any time."

The question was treated as a constitutional change and the required vote was made by GCAGS societies with the result that we have now accepted the section status. Our convention has for years been designated a regional meeting of AAPG. Each member society must first be recognized by the AAPG before it can be brought into the GCAGS, and most of the geologists in the societies can qualify for AAPG membership and the majority of them are members. The AAPG needs the connection with GCAGS in order to represent all petroleum geologists, and in order to keep in touch with them and better understand their requirements. We have needed the AAPG connection to help us in programs, publications, and special project efforts and have coordination of interests for publication of papers and development of publicity. The regional meetings of the AAPG have replaced the big annual meeting in importance to the members and there are structural changes proposed in AAPG government which probably will show up regional con-

siderations. There are those who have opposed the section status of our association with AAPG, based on some bad experiences in other years, and the fear of losing ground as a regional group through loss of autonomy, but most of us feel that these fears are not substantial. We are looking to years ahead of pleasurable and fruitful relations with AAPG.

PAPERS. Many of the major company geologists have not been encouraged to write papers for GCAGS presentation, in fact the frustrating experience of some has been to work up a paper only to have it turned down by one of their company officials. In order to maintain the high quality of papers and not cause the disappearance of the GCAGS from the scene more vigorous and realistic attitudes must be had in high places. We feel that the GCAGS is useful to all geologists and deserves everyone's support. If the art of finding more oil is to be advanced, then local society and GCAGS meetings is the place for this to be done by way of a paper to be given, followed by publication in GCAGS Transactions or AAPG Bulletins. Discussions among geologists does not compromise a play.

SPECIAL PROJECTS. This committee of GCAGS headed by Marvin Horton, vice president, and co-chairman, Lee Meltzer of New Orleans, is working on several things but more especially the tectonic map of the Gulf Coast regions, which under the leadership of Harold Hickey, and a chief in each society, should be ready next year.

Wilford Lee Stapp  
1967 President

## **REPORT OF THE GENERAL CHAIRMAN SEVENTEENTH ANNUAL MEETING 1967**

Because GCAGS-SEPM conventions have been so successful in past years, the only change you'll find in this year's meeting is the addition of a little more "tradition". Our objectives for staging the 1967 convention are the same as they were in 1950, the first year of GCAGS. These were first, to provide a forum for the presentation of technical papers and second, to publish the annual "GCAGS Transactions". Our total effort has been to maintain the GCAGS "format" and present it in the GCAGS "style".

If this meeting is a success, most of the credit, of course, goes to the members of the South Texas Geological Society. However, we are greatly indebted to last years' committee in Lafayette for their excellent files, outlines, and recommendations. Therefore, instead of improvement, we have only sought refinement of an existing year-to-year success. To maintain this desirable continuity, we can do no less than offer our assistance to the Mississippi Geological Society for next years' meeting in Jackson.

There is something that has been particularly rewarding about staging this years' convention that perhaps comes only to the General Chairman. That is, the total and complete cooperation of each of our committee chairmen. They gladly agreed to help without reservation and of all those asked, not one declined. Since then, they have continued working with near dedication and this, perhaps better than anything else, evidences a common belief in the worthiness of these meetings and expresses a genuine interest in continuing these annual conventions for our common objectives.

M. O. Turner  
General Chairman

## EDITOR'S REPORT

1967

The original theme decided upon for the 1967 program of the GCAGS was "Hidden Trends", including possible favorable areas due to unconformities, buried faults, porosity traps, and structure concealed by overlying formations. In the words of Program Chairman Wayne Wood, "Hidden Trends' would include possible producing trends the structure or trapping mechanism of which is not discernable at what may have been considered adequate drilling depths a few years ago".

In soliciting papers from the editors of member Societies it was indicated that any subject of regional interest would be considered for the program even though it did not conform to the "Hidden Trends" theme. The response was anything but enthusiastic since no papers were contributed spontaneously. Personal solicitation by the Program Chairman and the Editor was necessitated in order to build a program. Since the original appeal for papers was dated November 29, 1966, there was little lag between the close of the 1966 meeting in Lafayette and the initiation of activity by the South Texas Geological Society. This emphasizes the urgency of long range planning for GCAGS programs and publication of the "Transactions". In fact it indicates the need of providing for continuity of operations by the GCAGS. This may well require the employment of an Executive Manager-Editor in the near future. This idea has been presented in previous reports.

Early in February GCASA President Wilford Stapp and Program Chairman Wayne Wood were consulted by Robert O. Vernon and Harbans S. Puri of the Florida Geological Survey regarding the desirability of including in the 1967 GCAGS program a symposium on the "Geologic History of the Gulf of Mexico" being prepared for presentation at Tallahassee at a later date. This suggestion was presented to and accepted by members of the Convention Committee of the GCAGS in San Antonio. Arrangements then were made with Dr. Vernon and Dr. Puri to use a number of the papers prepared for the symposium both for oral presentation and for publication in the "Transactions". Many of the authors are not members of our Societies and are guests of the GCAGS. The Association is fortunate in having these papers, so timely for off-shore exploration, made available for the 1967 program and for publication in the "Transactions".

The Gulf Coast Section of the Society of Economic Paleontologists and Mineralogists cooperated with its customary enthusiasm and promptly lined up half a dozen papers. Several of the symposium treatise fit well into the SEPM theme and have been incorporated in the program. SEPM President Hubert C. Skinner and Editor R. K. Sylvester have been most helpful in obtaining and editing manuscripts for the "Transactions". The GCAGS Editor greatly appreciates their efforts. Particular credit is due Porter Montgomery for his efforts and cooperation in assembling papers for the SEPM.

The Editor acknowledges assistance from the local editorial committee and particularly for the help of Assistant Editor John C. Currie and Ed Owen. President Wilford Stapp and General Chairman M. O. Turner have been especially helpful. It also is important to point out that very close cooperation on the part of Program Chairman Wayne Wood has contributed substantially to the editing of the "Transactions". The work of the Editor was greatly facilitated by the proficient services of Secretaries Dona McClaugherty from Wayne Wood's office and Barbara Mariani in M. O. Turner's office. Acknowledgment of valuable assistance from J. M. Johnson and his staff of The Clegg Company, Printers, also must be included.

It is the hope of the Editor and the entire convention staff that the 1967 "Transactions" will prove to be both interesting and informative.

John R. Sandidge

## SEVENTEENTH ANNUAL CONVENTION COMMITTEES

- GENERAL CHAIRMAN - - - - - M. O. Turner
- VICE CHAIRMEN - - - - - Duward W. Dassow  
William G. Pittman
- PROGRAM COMMITTEE - - - - - A. Wayne Wood, Chmn.  
Members: Allan Tucker, Ed Owen, Louis Haring, W. Vercellino, Charles Edgerton,  
Charles Katz, Jeff Prestridge
- EDITOR - - - - - John R. Sandidge  
Members: John Currie, Ass't. Editor; R. B. Brewer III, Kemp Solcher
- ART EDITOR - - - - - Robert L. Begeman
- PRINTING COMMITTEE - - - - - Charles J. Worrel, Chmn.  
Members: M. E. Forney, Nolan Jeter, Sam Cunningham, Tom West, Jr.
- AWARDS COMMITTEE - - - - - Leland L. Palmer, Chmn.  
Members: Byron Rife, Leavitt Corning, Richard N. Hargis, Thornton Davis,  
Dale H. Rowden
- ADVERTISING COMMITTEE - - - - - Robert A. Keahey, Chmn.  
Members: Don Mount, M. L. Johnson, R. W. Rochon, Richard R. Storm,  
John Douglas, Lee Fountain
- ARRANGEMENTS COMMITTEE - - - - - Robert W. Meier, Chmn.  
Members: Frank Brooner, E. R. Lochte, Bill M. Doyle, James H. Temple,  
Ernest E. Allerkamp
- EXHIBITS COMMITTEE - - - - - Wm. H. Spice, Jr., Chmn.  
Members: Kemp Solcher, Bill N. Camp, F. Jack Bell, Charles D. Schutz,  
E. Owen Scott, Jr.
- HOUSING COMMITTEE - - - - - Eugene L. Ames, Jr., Chmn.  
Members: R. A. Staewen, Hebert K. Davis, Don F. Tobin, Harry W. Miller,  
Carl W. Hemni, Frank C. Kallina
- TRANSPORTATION COMMITTEE - - - - - Ralph Evans, Chmn.  
Members: Taliaferro Cooper, George E. Charlton, Reagan Tucker, H. C. Stacy
- ENTERTAINMENT COMMITTEE - - - - - H. E. Menger, Chmn.  
Members: Nancy Bolton, Charles Turnbull, F. M. McClain, Robert Daubert,  
Arvin Scott, Hyman Corman
- FIELD TRIP COMMITTEE - - - - - L. L. Eubanks, Jr., Chmn.  
Members: John S. Rives, Porter Montgomery, William G. Ellis, George Pinkley,  
Georges N. His, Edman R. Zink, B. Rice
- MEXICO CITY FIELD TRIP COMMITTEE - - - - - Douglas Weatherston, Chmn.  
Members: Ing. Carlos Castillo-Tejero, Ing. Pablo Guzman, Ing. Lauro A. Yzaguirre,  
George Weatherston
- PUBLICITY COMMITTEE - - - - - Harold Herndon, Chmn.  
Members: C. G. Dickinson, Sam H. Caran, John G. Caran, Charlie Kosarek
- FINANCE COMMITTEE - - - - - Leonard C. Bryant, Treasurer  
Stanley W. Blanchard, Assistant Treasurer
- SECRETARY - - - - - M. L. Frazier, Secretary  
Tom E. Green, Jr., Assistant Secretary
- REGISTRATION COMMITTEE - - - - - M. L. Johnson, Chmn.  
Members: Edward M. Warren, Curtis R. Golson, Barton Gilcrease,  
Desk & Derrick Members
- LADIES ACTIVITIES - - - - - Mrs. Wm. G. (Jo) Pittman, Chmn.  
Members: Ladies of South Texas Geological Society Auxiliary



**GULF COAST SECTION**  
**SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS**

OFFICERS

- President:* HUBERT C. SKINNER, Tulane Univ., Dept. of Geol., N. O., La. 70118  
*Past President:* JOHN B. DUNLAP, Jr., Consultant, 167 O. K. Ave., N. O., La. 70123  
*Vice-President:* RICHARD P. ZINGULA  
Humble Oil & Refg. Co., P. O. Box 2180, Houston Texas 77001  
*Secretary:* MRS. GENE ROSS KELLOUGH, 6902 Dillion, Houston, Texas 77017  
*Treasurer:* GENE B. MARTIN, Atlantic-Richfield, Box 1981, Corpus Christi, Texas 78403  
*Editor:* ROBERT K. SYLVESTER, Texaco, Inc., P. O. Box 60252, N. O., La. 70160  
*Program Chairman:* PORTER A. MONTGOMERY  
1517 Milam Building, San Antonio, Texas 78205

BUSINESS REPRESENTATIVES

- H. V. ANDERSON, L. S. U., Department of Geology, Baton Rouge, La. 70803  
W. A. BRANTLEY, Jr., Crosbie-Macomber Lab, 110 Athania Place, Metairie, La. 70003  
H. K. BROOKS, Univ. of Florida, Dept. of Geol., Gainesville, Fla. 32601  
E. ANN BUTLER, Sinclair Research, P. O. Box 7190, Tulsa, Okla. 74105  
J. H. DORMAN, Tenneco, P. O. Box 51345 OCS, Lafayette, Louisiana 70505  
H. E. EVELAND, Lamar State College, Dept. of Geol., Beaumont, Texas 77704  
ALAN JACKSON, Humble Oil & Refg. Co., P. O. Box 1390, Hattiesburg, Miss. 39401  
D. E. JONES, Univ. of Alabama, Dept. of Geol., University, Alabama 35486  
P. A. MONTGOMERY, 1517 Milam Building, San Antonio, Texas 78205  
H. S. PURI, Florida State, 305 Saratoga Drive, Tallahassee, Florida 32302  
P. H. NICHOLS, Hudnall and Pirtle, P. O. Box 1310, Tyler, Texas 75701  
B. J. SCULL, Sun Oil Research Laboratory, Richardson, Texas 75080  
N. J. TARTAMELLA, 4536 Columbine Lane, Corpus Christi, Texas 78415  
W. E. TAYLOR, Union Prod. Co., P. O. Box 1020, Jackson, Miss. 39205  
KEITH YOUNG, University of Texas, Dept. of Geol., Austin, Texas 78712

HONORARY MEMBERS

- APPLIN, ESTHER R., 804 Valencia Street, Jackson, Mississippi 39204  
GARRETT, J. B., JR., Pan Amer. Petr. Corp., P. O. Box 20086, Houston, Texas 70025  
HANNA, MARCUS A., Consulting Geologist, 3328 Charleston, Houston, Texas 77021  
HOWE, HENRY V., L. S. U. - School of Geology, Baton Rouge, La. 70803  
KNIKER, HEDWIG T. (Miss), 761 Baker Ave., Sequin, Texas 78155  
McGLAMERY, WINNIE (Miss), Alabama Apts. B-1, 320 Read St., Tuscaloosa, Alabama 35401  
E. H. RAINWATER, Rt. 4, Box 283-A, Houston, Texas 77027  
SANDIDGE, JOHN R., 1712 Alamo National Bank Bldg., San Antonio, Texas 78205

## REPORT OF THE PRESIDENT, GULF COAST SECTION, S.E.P.M.

*Report of the President, Gulf Coast Section S.E.P.M.*—The total membership of the Gulf Coast Section of the Society of Economic Paleontologists and Mineralogists reached 337 at the close of 1966. This total includes 8 honorary members, 178 members, and 151 associate members, representing an increase of three and one-half percent over 1965 and a record high in membership. This growth is due mainly to the efforts of the previous officers: John B. Dunlap, Jr., President; John J. W. Rogers, Vice President; M. Ray Bane, Secretary; Charles B. Morris, Treasurer; and, David E. Pope, Editor.

Two special committees were formed during 1966 to study the problem of standardizing the presentation of paleoecological data in Gulf Coast work. Fred L. Smith (Houston) and Clarence C. Albers (New Orleans) served as chairmen of these committees. The many hours of work on this project by members of both committees represented unprecedented co-operation and resulted in significant progress. Two fine papers were published in the 1966 *Transactions of the Gulf Coast Association of Geological Societies* as a result of these studies.

One of the future projects suggested at the 1966 Annual Meeting in Lafayette, Louisiana, was the publication of cross-sections along the Gulf Coast including paleoecological data as well as foraminiferal zones. Robert R. Lankford (Rice University, Houston) has been asked to head a temporary committee to study the feasibility of this project and will welcome help and suggestions.

Type Locality Unit IV, comprising eleven localities was included in the 1966 *Transactions*. The first three units were published singly by the Section, but at the 1965 Annual Meeting in Houston it was decided to publish future units in the annual *Transactions*. Dr. Louis de A. Gimbrede (Lafayette) served ably as chairman of the Type Locality Project. We welcome new contributions.

The 1966 Annual Meeting of the Gulf Coast Section was held at Lafayette, Louisiana, in conjunction with the 16th Annual Convention of the Gulf Coast Association of Geological Societies, on October 26-27-28. The highlight of this meeting was a Symposium on Paleocology organized for the Gulf Coast Section by James H. Dorman. The response to the symposium was so strong that two half day sessions were required to schedule all of the papers, a clear indication that the subject is timely. Members of this Section contributed a total of fourteen papers to the program at Lafayette, including the two paleoecology committee reports cited above. This is the largest number presented during our twelve years of existence. The Section Editor, David E. Pope, and James H. Dorman are largely responsible for the planning and success of the outstanding program. In recent years there has been a very rapid increase in interest in the applications of stratigraphy and paleoecology to the solution of Gulf Coast exploration problems, and we expect the members of the Gulf Coast Section to continue presenting and publishing significant contributions in these areas. The 1967 Annual Meeting of the Gulf Coast Section of S. E. P. M. will be held in San Antonio, Texas, on October 25-26-27, in conjunction with the 17th Annual Convention of the Gulf Coast Association of Geological Societies.

A Gulf Coast Section field trip in Central Texas has been scheduled through the efforts of Vice President Richard P. Zingula for September 30 and October 1, 1967. This trip will emphasize environments of deposition, with approximately ten stops in the Lower Cretaceous carbonates and Upper Cretaceous and Tertiary sands and shales. Field Trip Chairman is Kenneth Loep and Co-chairman is William Atlee.

Officers for 1966-67 are: Hubert C. Skinner, President; Richard P. Zingula, Vice President; Gene Ross Kellough, Secretary; Gene B. Martin, Treasurer; and, Robert K. Sylvester, Editor.

Hubert C. Skinner

**BEST PAPER AWARDS, 16TH ANNUAL MEETING  
LAFAYETTE, LOUISIANA**



Bryan J. Sloan, Jr.

**First Place Paper:**

**THE STRUCTURAL HISTORY OF  
THE HOUMA EMBAYMENT**

Mr. Sloan, 511 Pinhook Rd., Lafayette, La., is a partner in the Lafayette consulting firm of Moncrief and Sloan. He has a B. S. degree from the University of Southwestern Louisiana and the M. S. degree from Louisiana State University.

**Second Place Paper:**

**STRATIGRAPHY AND SEDIMENTATION  
OF THE HACKBERRY SHALE AND  
ASSOCIATED BEDS OF SOUTHWESTERN  
LOUISIANA**

Mr. Paine, Box 174, USL, Lafayette, La., has B. S. and M. S. degrees from Montana School of Mines and has worked toward the Ph.D. at Louisiana State University. He has held teaching positions and State Geological Survey Assignments. He was President of the Lafayette Geological Society in 1965. Presently Mr. Paine is Assoc. prof. of geology at Univ. of Southwestern La. and a Consulting Geologist with C.P.G. registration.

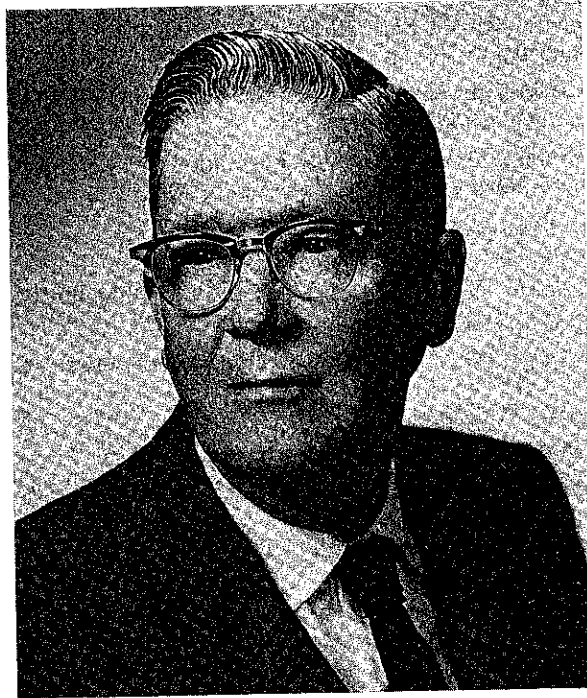


William R. Paine

**Third Place Paper:**

**FORAMINIFERAL PALEOECOLOGY  
AND PALEOENVIRONMENTAL RECONSTRUCTION  
OF THE OLIGOCENE MIDDLE FRIO  
IN CHAMBERS COUNTY, TEXAS**

Authors are Robert E. Gernant and Robert V. Kesling of the University of Michigan, Ann Arbor, Michigan.



## *Dedication*

The Officers of the  
GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES  
and the  
CONVENTION COMMITTEES

respectfully dedicate this volume to our untiring fellow worker whose efforts have been an inspiration to all of us, whose talents have given the touch of quality to our work, whose devotion to and interest in Gulf Coast geology and paleontology have given us new breadth and confidence in our profession, whose affection for his fellow geologists and his students have stirred respect and friendship in us all and for whose presence we are grateful,

JOHN ROY SANDIDGE

Geologist, Paleontologist, Stratigrapher, Teacher,  
Research Worker, Author, Editor,  
Gentleman and Friend



## GEOLOGICAL CONTRIBUTIONS AND PUBLICATIONS:

- The Recurrent Brachiopods of the Lower Cretaceous of Northern Texas.  
(American Journal of Science, Vol. XV, April 1928)
- Significant Foraminifera from the Ripley Formation of Alabama.  
(American Midland Naturalist, Vol. XIII, No. 4, July 1932)
- Foraminifera from the Ripley Formation of Western Alabama.  
(Journal of Paleontology, Vol. 6, No. 3, Sept. 1932)
- Fossil Foraminifera from the Cretaceous, Ripley Formation, of Alabama.  
(American Midland Naturalist, Vol. XIII, No. 5, 1932)
- Additional Foraminifera From the Ripley Formation of Alabama.  
(American Midland Naturalist, Vol. XIII, No. 6, 1932)
- Foraminifera from the Jurassic in Montana.  
(American Midland Naturalist, Vol. XIV, No. 2, 1933)
- Cambrian Foraminifera: Chapman's Species from the Dolgelly Beds of England.  
(Bulletin of the Free Institute of Science of Philadelphia-February 1933)
- Expanding Activities of Paleontologists - S.E.P.M. Presidential address.  
(Bulletin of A.A.P.G., Vol. 30, No. 7, July 1946)
- A Review of Edwards Limestone Production with Special Reference to South-Central Texas - Symposium on Edwards Limestone in Central Texas.  
(Bureau of Economic Geology - University of Texas Publication No. 5905 - 1959)
- Deep Edwards Prospects: A Reappraisal.  
(Bulletin of S.T.G.S., Vol. I, No. 11, June 1961 and Contributions to the Geology of South Texas, S.T.G.S. - 1962)
- October, 1951 - President of S.T.G.S. - Conducted 18th Annual Meeting, in conjunction with 1951 Regional Meeting of A.A.P.G., at Austin, Texas.
- October, 1953 - S.T.G.S. 19th Field Trip "Taylor to Glen Rose" - Committee for Paleontology - assisted in preparation of guide book, and in field leadership.
- May, 1954 - S.T.G.S. 20th Field Trip - "Fault Line" - Chairman of Field Trip Committee - Field leader.
- November, 1957 - S.T.G.S. Fall Field Trip - "Lower Cretaceous" - Trip chairman.
- December, 1958 - S.T.G.S. Field Trip - "Falls City Area - Uranium" - Editor of Guide Book.
- July, 1961 - "Comanchean Reef Trend, an Appraisal", Oil and Gas Journal, July 24.
- Prior to 1962 - Contributed to numerous investigations by others, particularly the Ouachita Facies, Jurassic and Lower Cretaceous stratigraphy, and stratigraphic relationships of the uranium deposits of Karnes County.

## BIOGRAPHICAL SUMMARY

MAJOR FIELDS OF STUDY: GEOLOGY, PALEONTOLOGY, STRATIGRAPHY. Born, Ft. Worth, Texas, December 15, 1897; married Ida Thompson, March 16, 1929 at Baltimore, Maryland. B. A. Texas Christian University, 1920; M. S. Vanderbilt University, 1922; Ph. D. in geology, Johns Hopkins University, 1928; professor of biology and geology Erskine College, S. C., 1922-24; assistant to W. C. Alden, U. S. Geological Survey, summer 1925; assistant professor of geology, Birmingham-Southern College, 1926-27; instructor in geology, Princeton University, 1928-30, assistant professor, 1930-33; paleontologist and geologist, Magnolia Petroleum Company, San Antonio, 1933-50, senior geologist, 1950-59; supervisor of exploration geology, Mobil Oil Company, Corpus Christi, 1959-60; professor of geology and chairman of geology department, San Antonio College, 1960-. Consultant, Sinclair Exploration Company, New York, 1928-33; paleontologist, North European Oil Company, Oldenburg, Germany, June-October 1929; Research worker, Bahama expedition of the Princeton International Summer School of Geology and Natural Resources, 1931; Princeton geological expedition, Red Lodge, Montana, summer 1932. Phi Beta Kappa, Johns Hopkins, Gamma Alpha and Sigma Xi; fellow, Geological Society of America and Paleontological Society; member, American Association of Petroleum Geologists, Society of Economic Paleontologists and Mineralogists (vice president, 1940, president, 1946); South Texas Geological Society, president, South Texas Geological Society, 1956; Associate Editor, A.A.P.G. Bulletin since 1946.

1967  
V. XVII

## WHY AND WHITHER G.C.A.G.S.

LESLIE BOWLING  
Oil and Gas Consultant  
New Orleans, Louisiana

### A B S T R A C T

The limitations of four AAPG sponsored regional meetings held in the Gulf Coast area between 1946-49 resulted in the design of an Association of Geological Societies for two purposes, to hold an annual meeting and to implement a means of rapid publication. GCAGS was founded May 15, 1951 and the first Annual Meeting was held in New Orleans on November 15, 16 and 17, 1951.

A strong wedge of disunity was driven into the Association in its embryonic stage. It was driven ever deeper until about 1957. Since that time the wound has been slowly healing.

The issue has been the question of GCAGS becoming a section of AAPG. The last blow was struck in 1967 with Mike Halbouty wielding the hammer. Mike, representing AAPG, submitted a resolution on March 2, 1967 inviting GCAGS to become a section of AAPG. It was amended by GCAGS, approved by AAPG and as of this date the invitation has been accepted and approved by a majority of the member societies.

GCAGS officially notified AAPG of its acceptance on July 10, 1967 and the Executive Committee of AAPG has approved. The formality of approval by the Business Committee of AAPG is awaited.

Henceforth it is anticipated the history of GCAGS will be an accumulation of dates and statistics, but, only if it maintains its autonomy and political freedom.

Eighteen years ago an idea was born and, like Topsy, it just grew. Topsy is the Gulf Coast Association of Geological Societies. This idea stemmed from the four regional meetings sponsored by The American Association of Petroleum Geologists held in 1946, 1947, 1948 and 1949 in Biloxi, San Antonio, Houston and Biloxi respectively. These meetings were hosted by local societies under AAPG rules of procedure.

The initial meeting was held at the suggestion of Earl Noble, president of AAPG in 1946, who must have appreciated the state of provincialism into which the profession and the AAPG was steadily progressing. AAPG, also like Topsy, just grew. Its scope of activity was no longer provincial USA, but worldwide.

The period 1946-49 was subsequent to World II and was the heyday of exploration in the Gulf Coast and in other provinces of the Americas as well as the beginning of exploration in new basins of the world, and in the Gulf Coast offshore. All industry had its eyes on the Gulf Coast.

New techniques, methods, tools and technicians were being introduced to the industry at a rapid rate which served to sharpen the pencil of the exploration earth scientists. The contributions of the service companies and their technicians are certainly due their just place in my opinion. They are recognized in GCAGS activities.

The four meetings previously mentioned clearly demonstrated to a few of us the limitations of the AAPG sponsored regional meetings, with particular respect to the Gulf Coast. Very few of the excellent papers presented were published, and those belatedly. It became crystal clear at the close of the Biloxi meeting in 1949 that the Gulf Coast needed:

1. An annual meeting
2. A rapid means of publication
3. A less rigid editorial policy

4. Less stringent membership requirements
5. Communication with all facets of the industry
6. More flexible policies with respect to convention management
7. An organization free from politics

An association of geological societies run by a steering committee composed of one representative from each member society with the aim of holding an annual meeting and publishing available papers was designed in 1949-50 and a reservation for convention space in November, 1951, was made.

A. P. Claudet, president of New Orleans Geological Society in 1950 was enthusiastic about the design and arranged a meeting in Baton Rouge on May 12, 1950 which was attended by T. H. Philpott, Phillip R. Allen, W. B. Neal, D. D. Utterback and Francis Stein, all representatives of Louisiana geological societies. The general design was favorably received.

As a result, a resolution incorporating the previously mentioned needs and naming the New Orleans Geological Society as sponsor was submitted to the New Orleans Geological Society and adopted on November 21, 1950. The resolution, revised as a result of discussion, was forwarded to all geological societies in the Gulf Coast on December 1, 1950.

The letter of proposal of the New Orleans society dated December 1, 1950 was sent to the Corpus Christi, South Texas, Houston, East Texas, South Louisiana, Shreveport, New Orleans, Mississippi and Southeastern Geological Societies. All evidenced interest. By request, the Houston Geological Society hosted the initial meeting of representatives of the interested societies which was held in Houston, Texas on March 14, 1951 at The Houston Club. R. D. Sprague, Mississippi; E. L. Earl, Houston; Wm. F. Farley, South Louisiana; T. H. Philpott, Shreveport; John R. Sandidge, South Texas; R. K. Theis, East Texas; W. H. Wallace, Jr., Corpus

Christi and Leslie Bowling, New Orleans attended this meeting.

The design was favorably received and all agreed to submit it to their respective societies immediately for consideration and adoption. The South Texas and Houston societies indicated their preference for a section of AAPG rather than an association of societies.

The history of GCAGS would normally have been a dry annual summary of statistics from this point except for a sequence of events beginning with the business committee meeting of the AAPG in St. Louis in March, 1951. One of the District Representatives delivered a scathing tirade at the annual business meeting denouncing the embryonic GCAGS and its supporters for the formation of a rump organization that was neither affiliated with nor under the jurisdiction of AAPG as a section or in any other manner.

This wedge was to be driven ever deeper over the next six years during which it became a real threat at times to the unity of GCAGS. The wound has been slowly healing since 1957.

The birthday of GCAGS was May 15, 1951. The Corpus Christi, Houston, East Texas, Shreveport, South Louisiana, Mississippi and New Orleans Geological Societies had individually approved the proposals submitted to their delegates at the March 14, 1951 meeting. Their respective delegates again met on May 15, 1951 in Houston and adopted the resolutions previously considered. South Texas rejected the design in favor of a section.

The Steering Committee then proceeded to organize, to arrange a program and to publish the Transactions for the first Annual Meeting held November 15, 16, 17, 1951 in New Orleans. I will admit the ink of the first Transactions was slightly wet.

Whereas there were no provisions in the by-laws of AAPG in 1951 for the affiliation of an Association of Geological Societies, an inquiry was directed to AAPG in August, 1951, to determine such requirements and whether amendments to the by-laws could be affected to accomplish affiliation of GCAGS.

The previously mentioned wedge was struck a strong blow when Houston advised on December 20, 1951, immediately after the first Annual Meeting, that it was withdrawing from GCAGS as a protest against lack of progress in forming a section.

However, it indicated a desire to maintain a provisional position and invited GCAGS delegates and delegates from non-member societies to hold a meeting in Houston to discuss the matter. Houston advised of its intention at such meeting of submitting a proposed constitution and by-laws in accord with AAPG standards and that in one of the by-laws would be expressed the aim of the Association to become a section of AAPG.

GCAGS petitioned AAPG for affiliation on January 7, 1952. AAPG advised it should be organized and operating to the extent that it should be able to submit its constitution and by-laws, aims and chain of authority. In the interest of time the constitutional requirement might be waived if the individual member societies would ratify the request for affiliation. This was subsequently accomplished with some travail. Houston in-

itially rejected affiliation in favor of a section and East Texas tabled action until the question of sectionizing was settled. As a result, AAPG could not consider the application of GCAGS for affiliation. Affiliation of its member societies is now a requirement of GCAGS.

The invitation of the Houston Society was accepted and the Steering Committee meeting was held on January 9, 1952. All delegates were present, including the delegate from the Houston Society, a provisional member, and one from the South Texas Society, a non-member society.

The Houston and South Texas Societies pounded the wedge for making GCAGS a section of AAPG. The member societies were in favor of a status quo position. However, in an effort to reach accord the member societies agreed to resubmit the question of becoming a section to their respective societies with the votes of AAPG members to be counted separately.

Houston submitted a proposed constitution in accord with its expressed intentions. It was reviewed, revised as of April 22 and submitted to all member societies on April 30, 1952 for consideration and approval. Shreveport and Jackson rejected it.

The second annual meeting of GCAGS was held in Corpus Christi on November 6, 7, and 8, 1952. Its success further impressed the need for this type of operating medium.

During early 1953 a constitution committee reviewed the revised draft of April 22, 1952, made further amendments and submitted it to the Steering Committee on February 16, 1953. It was approved and forwarded on that date to AAPG for approval as to form. It was rejected by AAPG and a revised form acceptable to AAPG was submitted to GCAGS. This constitutional form was rejected by the majority of the GCAGS member societies, including Houston.

In the meantime, the member societies of GCAGS had individually considered the question of becoming a section of AAPG. I believe the basic issue at that time of becoming a section was retrogression to the point of beginning, loss of autonomy and domination by two member societies. Corpus Christi, South Louisiana, New Orleans and East Texas indicated their preference to maintain the status quo position.

The Baton Rouge Geological Society became a member of GCAGS in October, 1952 and the South Texas and Tallahassee Societies in 1953. Though not a prerequisite, South Texas favored the immediate formation of a Section.

The third year of life of GCAGS was somewhat more peaceful. The annual meeting was held in Shreveport with the usual success.

The constitution, as ultimately revised February 19, 1954 and as rejected by AAPG, was formally adopted on August 23, 1954. The question of GCAGS becoming a section of AAPG was again at issue though not as heated as in previous years. The question of publication of papers in the Bulletin of the AAPG that had been published in the Transactions of GCAGS was raised and resolved, not necessarily to the satisfaction of everyone.

The fourth annual meeting was held in Houston in 1954 with the usual success. The Beaumont Geological

Society became a non-voting member of GCAGS in 1955, subject to their affiliation with AAPG.

Mr. G. Moses Knebel, president of AAPG in 1955 raised the question of sectionizing GCAGS. After investigating, he was in accord with GCAGS, except for distribution of the Transactions which he considered inadequate.

1956 was rather quiet with the annual meeting being held in San Antonio with the usual success. The host, South Texas Geological Society, was very disappointed in that a sizeable profit remained in spite of its efforts to break even.

The wedge was struck another blow in 1957. GCAGS extended AAPG an invitation to hold a meeting of its Executive Committee in New Orleans. An attempt at having the invitation amended to designate the GCAGS meeting as a regional meeting of AAPG failed. The Steering Committee of GCAGS was not authorized and there was not time for the member societies to individually approve.

In addition, I was appointed Chairman of the Business Committee of AAPG, the first on the present annual basis, in 1957. I was approached as to the possibility of sectionizing GCAGS. My advice was candidly to keep their cotton chopping hands off! The question of the GCAGS becoming a section of AAPG has been a matter at issue many times in the interim 1957 to 1966, particularly when individuals from the Gulf Coast become officers of AAPG. The issue apparently is a favorite for a crusade. Any number of committees over the life of GCAGS reviewed the issue and their recommendations have been the same — reject or table action.

Mike Halbouty made what may be the last approach when he stormed the Executive Committee of GCAGS in Lafayette in 1966. As a result Al Borland, chairman, appointed Duward Dassow, Raymond Fairchild and myself as a committee to again review the issue.

I reviewed the available GCAGS files and the review and recommendation of the committee formed during 1965 for the same purpose. It became obvious that any further review would be repetitious. Legal opinions were obtained from three attorneys on the status of the GCAGS if it became a section of AAPG under the existing constitution of the AAPG. The common opinion was loss of autonomy by GCAGS. These legal opinions were forwarded to AAPG for review by their counsel and a reply was invited. The answer was similar to that of previous requests . . . . . a bunch of gobbledegook.

The results of our committee efforts were presented to the Executive Committee meeting of GCAGS on March 2, 1967 in San Antonio. Mike Halbouty presented a resolution, approved by the Executive Committee of AAPG, inviting GCAGS to become a section of the AAPG. Our committee was charged to review the resolution submitted and were invited to amend it if we so desired.

To be brief, I give you the position of the issue as of even date. I quote the resolution as presented by Mike and the amended resolution presented by GCAGS to AAPG which was subsequently approved by AAPG:

"Whereas the Executive Committee of the AAPG at its meeting on February 10, 1967 unanimously adopted the following resolution: "That the American Association of Petroleum Geologists formally invite the Gulf Coast Association of Geological Societies to become a section of AAPG, and to state expressly that, as a section of AAPG, GCAGS may retain its present name and have exclusive authority to maintain its freedom and its own autonomy related to scheduling of meetings, finances, publications, selection of speakers, and other pertinent matters; furthermore, the geological boundaries now established by GCAGS are recognized by AAPG, and any change in these boundaries must be initiated by GCAGS; and further, that GCAGS has the right to withdraw as a section at any time."

"Whereas said resolution was presented to the Executive Committee of the GCAGS at its scheduled official meeting in San Antonio on March 2, 1967 by M. T. Halbouty, President of AAPG."

Whereas Mr. Halbouty indicated the Executive Committee of the AAPG would consider any revisions in said resolution by GCAGS.

Then be it resolved "that GCAGS accept the invitation of AAPG to become identified as a section of AAPG with the understanding that irrespective of present, revised or future definitions and/or requirements of a section (or any other category under which the two associations may be related at any time or from time to time) under the constitution and by-laws of AAPG, both shall:

- (1) retain and maintain complete autonomy and shall be completely independent in all affairs of the respective associations, including but not limited to policies, geographical boundaries, meetings, speakers, editorial policies, publications, finances, reports and any other matters pertinent to the respective associations.
- (2) Either association may withdraw from the relationship by tendering written notice to the other, to become effective thirty (30) days after date of notice".

This amended resolution has been approved by GCAGS. AAPG was officially advised of the acceptance of the invitation on July 10, 1967.

In summary, GCAGS has demonstrated the sound principles on which it is based. It is a non-political, democratic, dynamic and flexible organization. It has no quarrel nor has it ever interfered with the plans, aims or goals of any other organization. The soundness of the basic principles on which it was founded is evidenced by its success and by the formation of similar associations or federations throughout the country.

In my opinion, two of the basic reasons for its outstanding success are (1) it is an association of societies, not of individual membership and, as a result, it is politically a free organization and (2) its communications with all facets of the industry are optimum.

Whither G.C.A.G.C.? I would conclude that G.C.A.G.S. will continue along its present successful road only, and I repeat only, if it maintains its autonomy, its present non-political democratic and flexible aspects and its present communications.

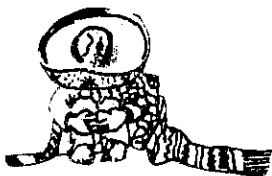


# SOUTH TEXAS GEOLOGICAL SOCIETY

SAN ANTONIO, TEXAS

## 1967-68 OFFICERS

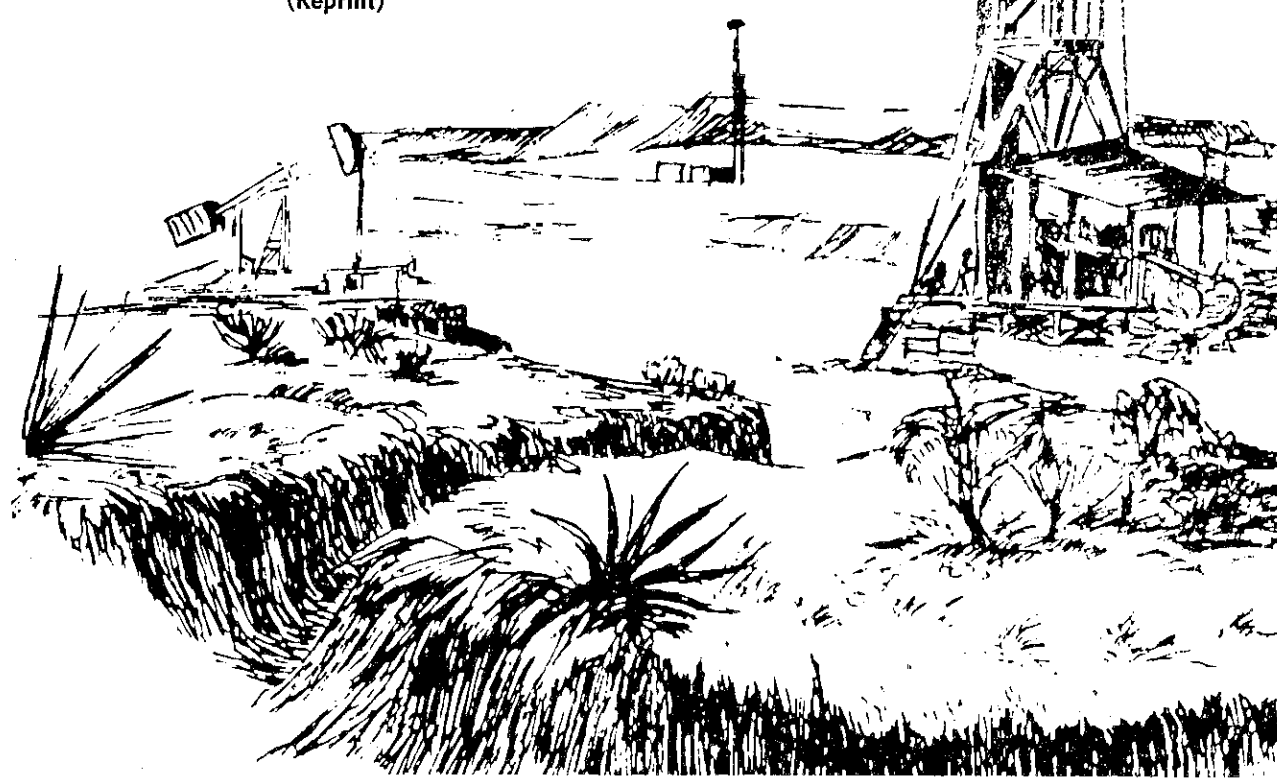
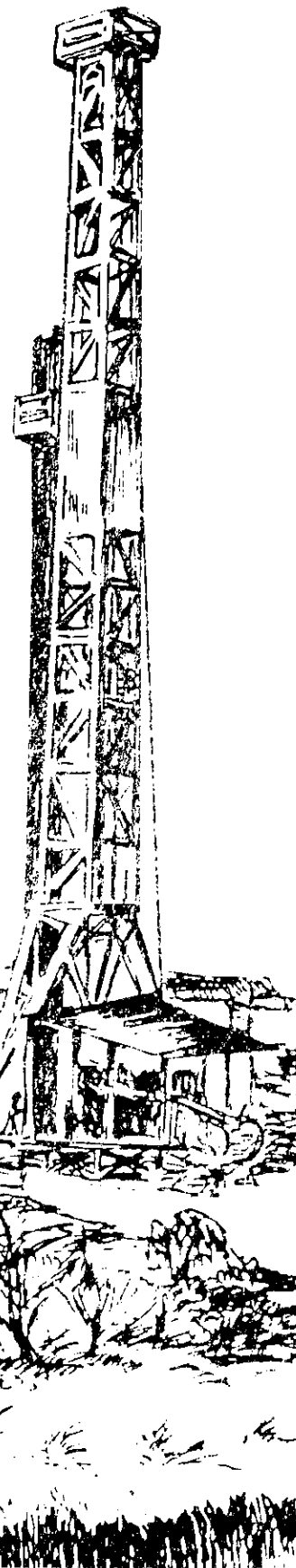
William G. Pittman ..... *President*  
 Robert A. Keahey ..... *Vice President*  
 Eugene L. Ames, Jr. .... *Treasurer*  
 Maurice E. (Bud) Forney ..... *Secretary*  
 Charles J. Worrel ..... *Executive Committee*  
 Louis H. Haring, Jr. .... *Executive Committee*



## RECENT PUBLICATIONS

Available: 240 Milam Building

1967 Contributions to Geology of South Texas ..... \$12.50  
 1967 Fall Field Trip — San Antonio, Hondo, ..... \$ 6.00  
   Eagle Pass, Laredo  
 1967 Photo-Directory ..... \$ 3.50  
 1962 Contributions to Geology of South Texas ..... \$10.00  
 (Reprint)



---

# HOUSTON GEOLOGICAL SOCIETY

234 ESPERSON BUILDING  
HOUSTON, TEXAS 77002  
CApitol 3-9309



## 1966-1967

### OFFICERS

FRED L. SMITH, JR., PRESIDENT  
CONSULTANT  
1226 BANK OF THE SOUTHWEST BLDG., 77002

JAMES D. LEWIS, 1ST VICE PRESIDENT  
CONSULTANT  
1219 AMERICANA BUILDING 77002

FRED M. SCHALL JR., 2ND VICE PRESIDENT  
TEXAS GAS EXPLORATION CORP.  
P. O. BOX 52310, 77052

JOHN B. WILLIAMS, SECRETARY  
TEXAS EASTERN TRANSMISSION CORP.  
P. O. BOX 2521, 77001

MARTIN M. CASSIDY, TREASURER  
PAN AMERICAN PETROLEUM CORP.  
P. O. BOX 3092, 77001

### EXECUTIVE COMMITTEEMEN

GEORGE E. CARVER, JR.  
ASHLAND OIL & REFINING CO.  
P. O. BOX 1503, 77001

FLOYD B. WILCOX  
CABOT CORPORATION  
650 MAIN BUILDING, 77002

HAL H. BYBEE  
CONTINENTAL OIL COMPANY  
P. O. BOX 2197, 77001

LEWIS J. HUBKA, JR.  
ASHLAND OIL & REFINING CO.  
P. O. BOX 1503, 77001

EX-OFFICIO

JESSE L. GEORGE, JR.  
NEWMONT OIL COMPANY  
1135 CAPITAL NATIONAL BANK BLDG., 77002

BULLETIN EDITOR  
MCINNIS S. NEWBY  
NORTH CENTRAL OIL COMPANY  
SUITE 1000  
1300 MAIN STREET, 77002

# NEW ORLEANS GEOLOGICAL SOCIETY

## OFFICERS

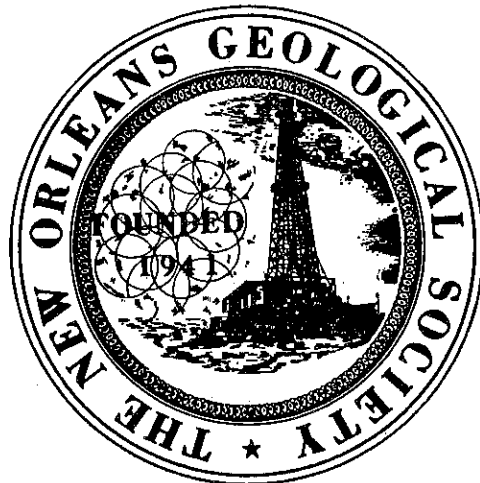
H. G. Collier, Jr.  
President

G. Briggs  
First Vice President

R. M. Danos  
Second Vice President

R. M. Swords  
Secretary

R. G. Pfister  
Treasurer



## DIRECTORS

W. H. Hintze  
E. A. Gibson  
R. M. Jemison, Jr.  
D. N. Rockwood

## PUBLICATIONS

<b>ELECTRIC LOGS OF SOUTH LOUISIANA (Sept. 1962)</b> .....	\$ 6.00
A manual designed for geologists who are not specialists but who require a sound background in the response of electric logs to the many different chemical and physical conditions encountered within the zone of investigation of the electric logs—Illustrated by approximately 75 electric logs, supplemented by micrologs, radioactivity logs, etc.	
<b>SALT DOMES OF SOUTH LOUISIANA</b> .....	\$12.00
Revised Vol. 1 (Oct. 1963) Including Binder	
Vol. II (March, 1962) .....	\$ 8.00
Maps and data on 19 of the salt domes of South Louisiana (including Offshore), bound in an attractive vinylplastic looseleaf binder	
<b>GUIDEBOOK—Fieldtrip—Peninsula of Yucatan, Mexico (Feb., 1962)</b> .....	\$ 6.50
<b>GUIDEBOOK—Fieldtrip—Jefferson Island Salt Dome (1961)</b> .....	\$ 1.00
<b>REGIONAL CROSS SECTIONS, (Published 1954-1956). Total set of 8</b> .....	\$25.00
<b>DIRECTORY (1965-66)</b> .....	\$ 2.00
<b>OIL &amp; GAS FIELDS OF SOUTHEAST LOUISIANA—Vol. 1</b> .....	\$10.00

Members Names, Addresses and Business Affiliations

Orders may be mailed to:

**NEW ORLEANS GEOLOGICAL SOCIETY**

Box 52172

NEW ORLEANS, LOUISIANA 70160

---

SOUTHEASTERN GEOLOGICAL SOCIETY

P. O. Box 1634  
Tallahassee, Florida 32302

*President - L. Ray Gremillion  
New Jersey Zinc Company*

*Vice President - Van D. Robinson  
Atlantic Richfield Company*

*Secretary-Treasurer - J. William Yon, Jr.  
Florida Board of Conservation - Division of Geology*

*Past-President - Joseph E. Banks  
Coastal Petroleum Company*

\*\*\*\*\*

INFORMALLY ASSOCIATED SOCIETIES

ALABAMA GEOLOGICAL SOCIETY  
P.O. Box 6184  
University, Alabama 35486  
*President - W. Everett Smith*

MIAMI GEOLOGICAL SOCIETY  
c/o Shell Development Company  
4029 Ponce de Leon Boulevard  
Coral Gables, Florida 33146  
*President - Virgil Sleight*

GEORGIA GEOLOGICAL SOCIETY  
c/o Southern Railway System  
270 Peachtree Street, N.W.  
Atlanta, Georgia 30303  
*President - Norman K. Olson*

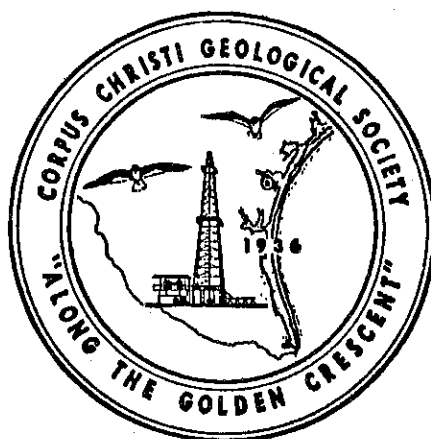
\*\*\*\*\*

PUBLICATIONS OF SOUTHEASTERN GEOLOGICAL SOCIETY

- 1954 No. 8      *Carbonate Deposits of South Florida (\$3.00)*
- 1960 No. 9      *Late Cenozoic Stratigraphy and Sedimentation of Central Florida (\$3.00)*
- 1963 No. 10     *Summary of Paleocene and Eocene Stratigraphy and Economic Geology of Southeastern Alabama (\$2.00)*
- 1965 No. 11     *Highlights of the Cretaceous and Crystalline Terrains of Georgia (\$2.00)*
- 1966 No. 12     *Miocene-Pliocene Series of the Georgia-Florida area (\$3.00)*
- 1967 No. 13     *Miocene-Pliocene Problems of Peninsular Florida (\$1.50)*

# CORPUS CHRISTI GEOLOGICAL SOCIETY

P. M. STRUNK, *President*  
 J. W. RUTLAND, JR., *1st Vice President*  
 J. T. SCHULZ, *2nd Vice President*  
 R. N. HOLDEN, *Secretary*



H. LOEB, *Treasurer*  
 R. S. Robertson, *Advisor*  
 R. O. McGinnis, *Advisor*  
 D. R. Boyd, *Advisor*

## PUBLICATIONS

**Annual Field Trip Guidebooks.** Includes road logs and articles on the geology of the area and the specific stops.

1950	Corpus Christi to Laredo to Rio Grande City. 7pp.	\$1.00
1961	"Geology of the Pleistocene to Jurassic of Northeastern Mexico." Nuevo Laredo to Monterrey to Reynosa, Mexico. 60pp. 10pl.	\$4.00
1962	"Sedimentology of South Texas." Corpus Christi to Brownsville. 83pp. 43pl.	\$3.50
1963	"Geology of Peregrina Canyon and Sierra de El Abra." Corpus Christi to Cds. Valles and Victoria, Mexico 107pp., 29pl.	\$7.00
1965	"Upper Cretaceous Asphalt Deposits of the Rio Grande Embayment" Hondo to Eagle Pass. 67pp. 38pl.	\$5.00
1966	"Geology of the Austin-Llano Area Central Texas." 131 pp.	\$5.00
	"Cretaceous, Wilcox, and Frio Symposia", 1962. 90pp. 45 Illustrations	\$4.25
	Photo-Directory of C.C.G.S. Members, 1966-67	\$3.50
	"Typical Oil & Gas Fields of South Texas", Volume I, 1967. 212pp.	\$9.00

### Cross Sections:

	Small	Large
Cameron to Kenedy Counties, Texas, 1955	\$2.50	\$3.50
Kenedy to Calhoun Counties, Texas, 1955	\$2.50	\$3.50
Zapata to Cameron Counties, Texas, 1954	\$2.50	\$3.50
Webb to Kleberg Counties, Texas, 1954	\$2.50	\$3.50

### ★ FRIO CROSS SECTIONS — 1964 ★

Vertical scale: 1" = 800'

Horizontal scale: 1" = 8000'

### ★ DIP SECTIONS ★

A — A' Starr to Cameron Counties, Texas	\$2.00
B — B' Live Oak to Nueces Counties, Texas	\$2.00
C — C' DeWitt to Calhoun Counties, Texas	\$2.00

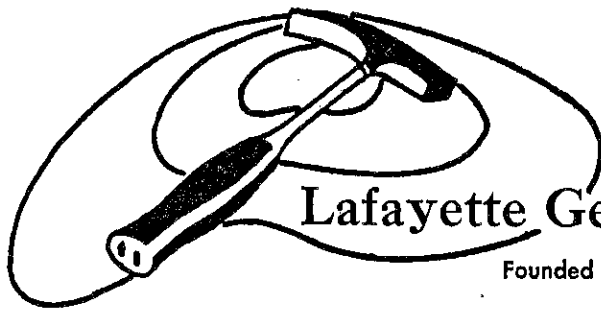
### ★ STRIKE SECTIONS ★

D — D' Hidalgo to Nueces Counties, Texas	\$2.00
E — E' Nueces to Victoria Counties, Texas	\$2.00

★ SAVE \$2.50! THE COMPLETE SET OF FIVE FRIO CROSS SECTIONS MAY BE ORDERED FOR ONLY \$7.50! ★

Please add \$.25 per item for postage and handling and 2% Texas sales tax if purchased within the state. Mail orders to:

Publications Department  
 Corpus Christi Geological Society  
 P. O. Box 1068  
 Corpus Christi, Texas 78403



# Lafayette Geological Society

Founded December 1952

1967

President .....	C. W. Dobie
1st Vice-President .....	Charles F. Levert, Jr.
2nd Vice-President .....	Robert E. Peterman
Secretary .....	Jimmy R. Kirk
Treasurer .....	Richard K. Jones
Directors .....	Charles A. Barton Scott J. Lysinger Robert J. Bell
Editor .....	Bob Holleman

## PUBLICATIONS

1962 ..	Stratigraphic Card Index of Foraminifera Papers in the Journal of Paleontology through 1962 .....	\$ 4.00
1962 ..	Camerina and Cibicides Hazzardi Stratigraphic Intervals of Southwest Louisiana (Maps and Cross-Sections) .....	\$35.00
1964 ..	Typical Fields of Southwestern Louisiana .....	\$12.00
1965 ..	Stratigraphic and Geographic Index of Cushman's Contribution through 1964 .....	\$ 6.00
1967 ..	Supplement to 1964 Typical Fields of Southwestern Louisiana .....	\$ 2.75
1967 ..	Lafayette Photo Directory (Geologists, Geophysicists, Landmen and Scouts) .....	\$ 3.50
Other publications offered, including four sets of South Louisiana type logs (Logs 1 through 114)		

Order through: Secretary

Lafayette Geological Society  
Box 51896, OCS  
Lafayette, Louisiana 70501