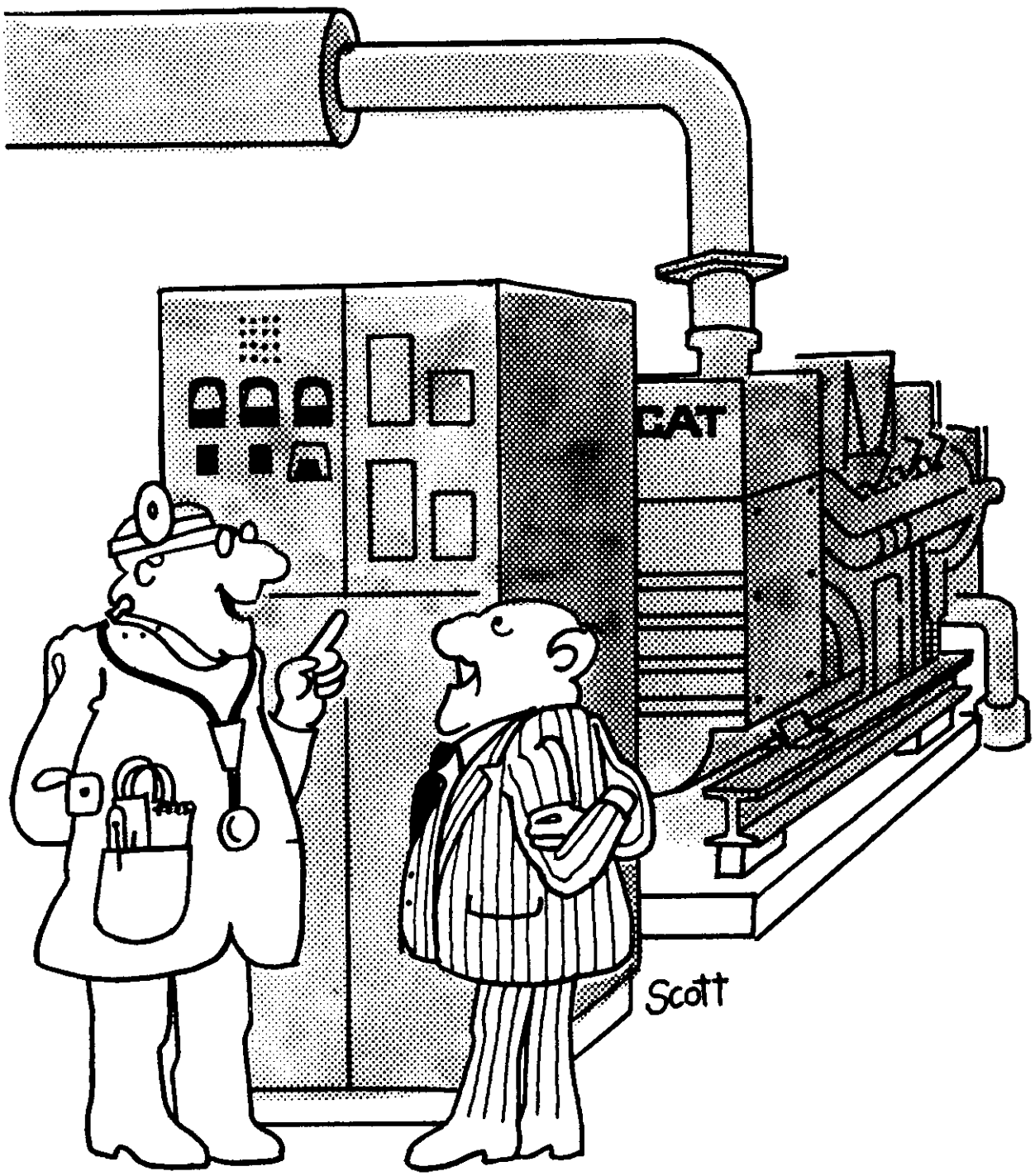
LOUISIANA ENGINEER
February, 1979

ENGINEERS



People Bringing Purpose to Progress

National Engineers Week - February 18-24



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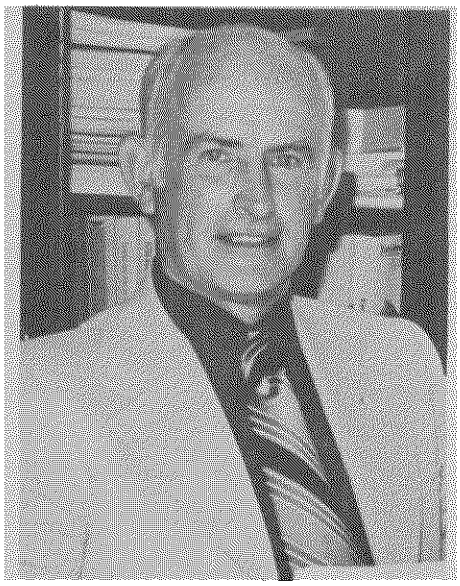

A new and exciting program has recently been initiated for engineers in Louisiana. The program is the direct result of diligent and persistent efforts by several of our engineers. It would be unfair to some I'd inevitably miss to try to name the responsible persons. I must, however, mention the name of Vince Forte, who, with several other engineers, stuck with an idea until it became a reality.

I'm referring, of course, to the LEF (Louisiana Engineering Foundation), which received its charter and was officially incorporated on November 22, 1978. The charter members of the board of directors have been duly elected or appointed and have already held their first meeting. At the first meeting, the bylaws of the LEF were somewhat finalized but not officially approved. By the time this publication is issued, the bylaws will probably have been polished and finally approved by the board of directors.

This is a **big moment** for engineers in Louisiana. We can look forward to exciting times in engineering, and the foundation can play a significant role in this future. To succeed in accomplishing its objectives, the foundation needs and deserves our support. This is not a one-shot affair but one that should continue indefinitely.

The main objectives of the Louisiana Engineering Foundation are "to promote the profession of engineering exclusively through educational and scientific means and to assist the engineering profession in Louisiana in carrying out such purpose." Though broadly stated, these objectives can be accomplished over a very long period of time. I'd rather think that these efforts should continue indefinitely or at least as long as engineering exists. We hope to reach every engineer in Louisiana, as well as non-resident engineers, with the impact of this organization and program.

Please note very carefully the similarity of the objectives of the Louisiana Engineering Foundation with the role of Engineers Week activities. As plans are being made for Engineers Week, we should be reminded that **all engineers** are expected to participate. We have no right to sit back and let others do our jobs for us. The image of the engineering profession is formed by all engineers, and it becomes our responsibility to see that it is publicly an outstanding image.

You will be hearing more about the LEF. Please do not confuse this with the Louisiana Engineering Society, as these are two distinctly different organizations. Membership in one of these organizations does not imply membership in the other, nor is it necessary to be a member of one to qualify for membership in the other. We dream of the possibility of all Louisiana engineers becoming members of both of these organizations and participating in activities that promote the engineering profession.

The LEF should provide a means of bringing all engineering professions closer together. A common meeting place with coordinated programs should be available. We should be able to improve communication among the disciplines to avoid conflicts in the developments and interpretations of local and state ordinances as they affect engineers. Our intersociety relations will receive a real shot in the arm with this development. Please give the LEF a chance to work for you by giving it your full support

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February, 1979

LOUISIANA ENGINEER

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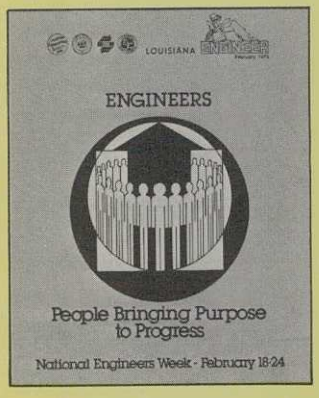

About the Cover:

The President of the United States and the Governor of Louisiana have officially proclaimed February 18-24, 1979, as Engineers Week. This year's theme is "Engineers—People Bringing Purpose to Progress." For details, turn to page 6.

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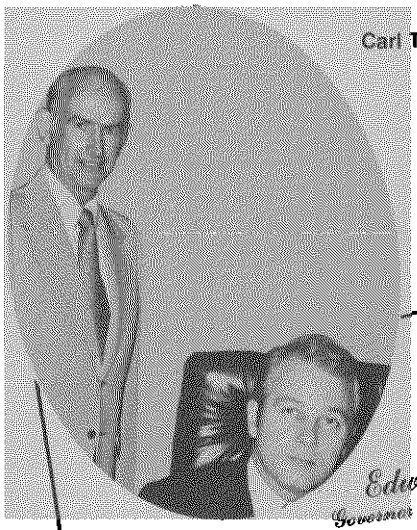
Engineers Week Proclaimed Throughout the Land

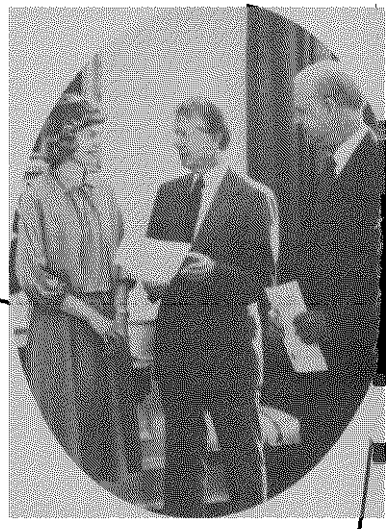
On November 30, President Jimmy Carter met with Paula Wells, P.E., vice president of Wells Engineers, Inc., Omaha, and Donald G. Weinert, P.E., executive director of the National Society of Professional Engineers, to present an official proclamation designating February 18-24, 1979, as National Engineers Week (see photos). Mrs. Wells is chairman of the annual nationwide observance.

The theme for Engineers Week in 1979 is "Engineers—People Bringing Purpose to Progress." In his proclamation, Carter lauded the myriad contributions engineers have made, and continue to make, toward human progress, commenting, ". . . we look more than ever with pride, appreciation, hope and confidence to all members of this vital profession."

NSPE has sponsored National Engineers Week since 1951.



Carl Thomas, P.E., LES President, with Gov. Edwards.



Louisiana

Edwards
Governor

Proclamation

WHEREAS, National Engineers' Week will be celebrated February 18-24, 1979, with the purpose to familiarize the public with the work of engineers and to honor members of the profession; and

WHEREAS, engineers throughout Louisiana will conduct special programs emphasizing the 1979 theme, "Engineers.... People Bringing Purpose to Progress"; and

WHEREAS, it is particularly important at this time to take a long look at progress, the kind of human progress which has made the past century's achievements the envy of the world; and

WHEREAS, people bringing purpose to progress is an all encompassing concept, with ramifications not only to the engineering community, but to every citizen; and

NOW, THEREFORE, I, EDWIN EDWARDS, Governor of the State of Louisiana, do hereby proclaim the week of February 18-24, 1979, as

ENGINEERS' WEEK

and urge all citizens to make progress a positive force in their lives and join with me in paying honor to the engineers of Louisiana.

In Witness Whereof, I have hereunto set my hand officially and caused to be affixed the Great Seal of the State of Louisiana, at the Capitol, in the City of Baton Rouge, on this the 5th day of January A.D. 1979

Governor of Louisiana

Attest By
The Governor

Secretary of State

THE WHITE HOUSE
WASHINGTON

National Engineers Week
February 18 - 24, 1979

It is a pleasure for me to greet and commend the professional engineers who contribute so significantly to our Nation's development.

In each stage of history the work of engineers has reflected the needs, aspirations and visions of the people of that era. The aqueducts, roads and monuments of the ancient worlds, the castles and cathedrals of the Middle Ages, the machines, factories and railroads of the first industrial revolution; the automobile, electric power and the current marvels of modern chemistry, electronics and our aerospace age: all these comprise a vast panorama of human progress covering thousands of years.

Today's engineers continue their contributions to people everywhere as they help us extend life, its benefits and its enjoyment. In these efforts they face unprecedented challenges as they seek to improve our efficiency in the use of energy and material resources, to reduce adverse environmental impact and to increase innovation which stimulates new economic growth.

As we celebrate National Engineers Week, we look more than ever with pride, appreciation, hope and confidence to all members of this vital profession.

Jimmy Carter

Should Lay Members Be On Licensing Boards?

The issue of naming lay members to state licensing boards is again expected to come before the 1979 Louisiana Legislature. How do you feel? Here are two opposite views on the subject. Complete the form below and return it to the LOUISIANA ENGINEER. *We would like the views of members of the engineering profession.*

AGAINST

It has been suggested that lay members should be added to professional licensing boards as a means to protect consumers. In the opinion of many, this is an ill-conceived notion which would be likely to hurt consumers more than to help them.

A professional licensing board has only two basic functions, namely, (1) to determine whether a person has the necessary qualifications to practice a given profession, and (2) to determine whether a person has practiced in an improper manner. How, then, is it in the consumers' best interest to have these matters decided by persons who have no training or technical knowledge in that area?

How, for example, could a lawyer reach an informed judgment on whether someone possessed the knowledge and skill required to practice medicine? Or how could one determine whether a physician had used an improper surgical procedure or one for which he lacked adequate training?

Implicit in the whole concept of professional licensing boards in the first place is that the public itself is not qualified to determine competence. Otherwise, there would be no need to license anyone.

It has been argued that by having lay members on boards, the public could have "input" and also could have an opportunity to observe the workings of professional boards. The public can attend meetings of professional boards, and it is hard to imagine that any board would deny a citizen the opportunity to voice his or her concerns. The fact is, however, that virtually very few ever avail themselves of this opportunity—including even the most avid so-called consumer advocates.

Consumers are best protected by having rules made and administered by qualified persons. And no one has a greater incentive to "police" any profession than its own members since they know that any incompetent, indifferent or unethical practitioner reflects unfavorably on the profession as a whole.

FOR

For a long time, it was assumed that only members of a particular occupational group were competent to sit in judgment on their own qualifications, types of examinations or disciplinary matters. This view no longer seems to prevail.

All across the country, average citizens are reminding us that licensing was created to protect the public and its interests rather than those of the regulated group. It makes sense, therefore, for lay persons to share in board decision making.

There is some precedent. Legislators and jurors are persons who make crucial and binding decisions on sometimes very technical matters. They may secure the testimony of experts when necessary, but it is their own judgment which prevails. They make the decisions.

Even the most high-minded and best-intentioned groups—doctors, real estate experts, engineers—can develop an ingrown psychology when everyone shares the same occupation and economic interest. Ideally, public members will stimulate fresh insights and provide a missing point of view.

Public members may not know much about technical aspects of an occupation, but they can contribute to board deliberations by raising questions on such topics as appropriateness of entrance requirements, board rules, tests, fees and disciplinary procedures.

Regulatory agencies often are viewed as overly protective of those whom they regulate. Whether this is true or not, certainly public members would not be inhibited by past professional contacts or business relationships. They can be effective spokesmen for the average citizen as well as members of the professions involved. Indeed, public members should create an important link with the legislature and the general public.

A number of states now require public members on licensing boards. We have nothing to fear and much to gain by passing a public member bill in Louisiana. Don't you agree?

MAIL TO: LES
P. O. Box 2683
Baton Rouge, LA 70821

☐ I support lay members on the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

☐ I oppose lay members on the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

My reasons: _____

_____

_____

State Winners—NSPE Scholarship Program

The National Society of Professional Engineers (NSPE) made available 91 grants and scholarships to aid high school seniors interested in pursuing engineering careers in the 1978-79 program. These scholarships are provided with the cooperation of 31 leading companies and educational institutions.

The Vocational Guidance Committee of LES met in Alexandria on January 8, 1979, to consider 58 applications submitted from the LES chapters. The number of applications submitted by chapter are:

Alexandria	21
Baton Rouge	1
Lafayette	3
Lake Charles	1
Monroe	8
New Orleans	14
Shreveport	10

The LES committee reported the high quality of the 58 applications received made their selection for state finalists very challenging. The state winners with scholarships desired submitted to NSPE on January 11 for consideration in the national competition were:

NEW ORLEANS CHAPTER
- Carol Eunice Roach
  ARMCO Scholarship
- Robert E. Vaughan
  Rice University
- Brett Dixon Hansen
  Rice University
- Jeffery Brent Meitz
  University of Texas
- Renee Marie LaBorde
  Ladies Auxiliary Scholarship
- Joyce Helen Fabre
  Ladies Auxiliary Scholarship

ALEXANDRIA CHAPTER
- Peter Rene Arnold
  Ashland Oil Scholarship
- Charla Gwynn Cushing
  Phillips Petroleum Scholarship
- Norman L. Fortenberry
  NSPE Grant
- William L. Brown
  NSPE Grant

SHREVEPORT CHAPTER
- Karl Anthony Doss
  Cornell University
- Richard Alan Nies
  NSPE Grant

MONROE CHAPTER
- Tresa Marlene Houck
  Rust Engineering Scholarship
- Rowland Evans Reed
  Rust Engineering Scholarship
- Deborah Jane Bell
  NSPE Grant
- Ronald Hobart Thompson
  NSPE Grant

LAFAYETTE CHAPTER
- Jeffery M. Aubert
  NSPE Grant
- Harold M. J. Breaux
  NSPE Grant

Congratulations to each of the students submitting applications and especially to the 18 state finalists, the scholarship committee and the chapter members involved in this most worthwhile program.

The list of the 18 LES state finalists was ranked 1 to 18 by the LES committee. After NSPE picks the national winners in March 1979, LES will offer its $1,000 scholarship to one of these finalists. The LES $1,000 scholarship is given to a student desiring to attend Louisiana Tech, LSU, McNeese, Southern, Tulane, UNO or USL.

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Louisiana Pioneers and Engineers.

We are one of the oldest engineering firms incorporated in Louisiana. Our very first assignment was to electrify the mule-drawn trolley cars on the St. Charles Street Railway Co. line in New Orleans in 1895.

Subsequently, we built the original Lake Pontchartrain Causeway, the New Orleans Harbor Grain Elevators, the U. S. Army Supply Base in New Orleans, and we laid the first high-pressure pipeline across the Mississippi River.

We have a broad, *local* background for energy engineering, industrial power, chemical and petrochemical plants, pulp and paper mills, pipelines, and construction supervision. And it's our *local* people and our *local* project experience and our *local* capabilities that we offer to firms who want to develop major facilities in Louisiana.

Pictured here are some of our senior executives who direct our operations worldwide . . . people who along with some 700 others live here in Monroe . . . people you'll like doing business with.

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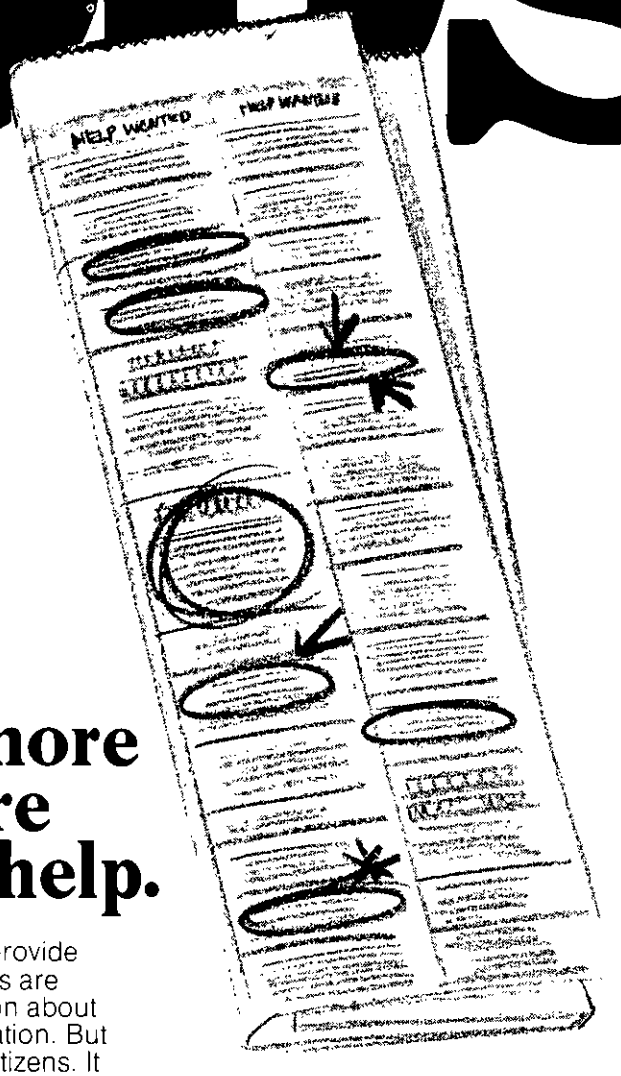
Jobs



Louisiana needs more of them. And we're doing our best to help.

Louisiana needs jobs and new industry can help provide them. That's why our teams of industrial specialists are regularly talking to prospects throughout the nation about new sites available for plant expansion and re-location. But new industry means more than just jobs for our citizens. It means helping present industries and services. It means improving our communities and building new ones. It means boosting our overall economy and helping our state grow and prosper through additional taxes.

We have plenty of the natural and human resources necessary to attract new industry here. But among the basic necessities are additional supplies of electric energy to power new industries in the most efficient way. And your investor-owned electric companies of Louisiana are planning ahead and building the facilities to handle these demands.

New jobs are important to our area if we are to progress economically, and we're helping all we can.

Supporting the wise and efficient use of energy.

YOUR FIVE LOUISIANA INVESTOR-OWNED ELECTRIC COMPANIES

Central Louisiana Electric Company Gulf States Utilities Company Louisiana Power & Light Company New Orleans Public Service Inc. Southwestern Electric Power Company

MEMBERSHIP APPLICATION

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
2029 K Street, NW
Washington, DC 20006
202/331-7020

NAME _____ (LAST) _____ (FIRST) _____ (MIDDLE)

ADDRESS _____

_____ (CITY) _____ (STATE) _____ (ZIP) ☐ HOME ☐ OFFICE

JOB TITLE _____

EMPLOYER _____

BIRTH DATE _____ PRESENT DATE _____

PHONE HOME _____ OFFICE _____ SIGNATURE _____

Registration

Please check appropriate box

☐ PE ☐ EIT ☐ LS

STATE _____

NUMBER _____

YEAR _____

Have you ever held membership in NSPE before?
☐ NO ☐ YES _____
Termination Date _____

Current Practice Specialty

☐ Electrical (EL)
☐ Mechanical (ME)
☐ Agricultural (AG)
☐ Chemical (CH)
☐ Civil (CI)
☐ Industrial (IN)
☐ Mining (MI)
☐ Petroleum (PT)
☐ Architectural (AR)
☐ Other

Areas of Employment

☐ Private Practice (PEP)
☐ Construction (CON)
☐ Government (GOV)
☐ Education (EDU)
☐ Industry (IND)
☐ Other

Education

DEGREE _____ MAJOR _____ UNIVERSITY _____ YEAR GRAD. _____

ADVANCED DEGREES _____ TECHNICAL SOCIETY MEMBERSHIP AND GRADES _____

Grades of Membership Available

Please check appropriate box

☐ **MEMBER: $50**
Holds a valid license or certificate of registration as a professional engineer issued by any state or territory of the United States or Canada.

☐ **ASSOCIATE OVER 30: $50**

☐ **ASSOCIATE UNDER 30: $25**

1. An engineer who has successfully completed the examination as an engineer-in-training given by a state board in any state or territory of the United States or Canada; or
2. a graduate engineer pursuing an engineering career or engaged in postgraduate engineering study.

☐ **SURVEYOR: $50**
A person licensed to practice land surveying in any state or territory of the United States.

☐ **SENIOR ASSOCIATE: $50**
Must meet all three requirements

1. Has graduated from an engineering college or university with curricula accredited by the ECPD *(Engineers' Council for Professional Development)*;
2. has not less than twelve years of acceptable engineering experience; and
3. is a member of an engineering society in a grade approved by the NSPE Board of Directors.

☐ **STUDENT: $7**
An undergraduate engineering student or full-time graduate student.

You May Prorate Your Dues According To the Following Schedule

Sept. 1 - Feb. 28 100%
March 1 - May 31 75% of total
June 1 - Aug. 31 50% of total

Student dues are not to be prorated.
Make checks payable to NSPE.

SPECIAL FIRST YEAR DUES RATE—This rate covers national, state, and local dues for the first year. The rate in following years will be higher and will vary according to state and chapter. This rate is approximately a 40% reduction.

These rates do not apply in Florida, Kansas, North Carolina, Puerto Rico and Wisconsin. If you live in one of these states, simply mail in the application and you will be invoiced.

NSPE USE ONLY

No.			STATE	CHP	RES
GRADE	ORIG	SLVL	SSCH	A PUBS	N STA
N DATE	N PAY	S PAY	C PAY	V PAY	PRAC PAY

LES Board of Directors Meeting Minutes

The following is a summary of the minutes of the Dec. 8, 1978, meeting of the LES Board of Directors.

1. Seventeen members of the Board and eight visitors were present at the meeting. H. G. Sneed, P.E., a past president of the Bayou chapter welcomed and thanked the Board for holding its meeting in the Bayou chapter area.

2. Carl Thomas, P.E., president, announced the dates of March 9, April 21 and May 25, 1979, as potential meeting dates for the next three meetings of the Board. March 9 was approved for the next meeting to be held in Lafayette. The April 21 date will be in conjunction with the LES Spring Meeting in Lake Charles. The May 25 date was accepted on a tentative basis only.

3. Four choices were presented to the Board for selection of a hotel and site for the 1979 LES Annual Summer Meeting. The Board selected the Sheraton Hotel, Biloxi, on the dates July 30-August 1. (Since action by the Board, the Sheraton cannot accommodate LES, and the Broadwater Beach Hotel has been booked for the same dates.)

4. Bob Blanche, P.E., Membership Committee chairman, reported on membership. With 40% of the year completed, LES has reached 38.5% of its quota. He congratulated the Baton Rouge chapter for reaching 63% of its quota and leading the contest. A delinquent list of 157 members was distributed to the chapters for follow-up action.

5. The financial report for the year to date was reported in order by John Ritter, P.E., secretary-treasurer.

6. Chapter reports were given by each chapter president present. The majority discussed activities concerning scholarships, meetings, Engineers Week plans and Honors and Awards nominations.

7. Art DeFraites, P.E., chairman of the Liaison Committee with the State Board, reported that his committee had studied the feasibility of requesting additional funds from the State Board to support the magazine. It was recommended that LES not approach the Board at this time.

8. Announcements by Carl Thomas: the amicus curiae brief about the 10-year prescriptive period case was filed, with results expected in late December; the brief on the West Baton Rouge Parish School Board vs. T. R. Ray case concerning contracting of services was reported being reviewed by the legislative committee; the NSPE winter meeting will be held January 22-27, 1979, in Oklahoma City, with travel approval for representatives from PEI, PEC, PEG and PEPP; the annual observance of Engineers Week will be February 18-24, 1979; the articles of incorporation for the LEF were filed on November 14, 1978, and the first meeting of the LEF Board of Directors was scheduled for December 9 in Baton Rouge.

9. Francis Roy, P.E., presented some interesting comments from a survey conducted by IEEE explaining the reasons why engineers do not register.

10. A lengthy discussion ensued on a resolution about funding the office of Health Service and Environmental Quality of the Department of Health and Human Resources, which was submitted by PEG.

The approved resolution reads, "The LES will pursue whatever course of action required to encourage adequate funding and proper organization of the office of Health Service and Environmental Quality of the Department of Health and Human Resources." It was moved and passed that the president appoint a task force consisting of PEPP, PEG, PEI and PEC and the Legislative Committee to implement the resolution.

11. A lengthy discussion was held on water standards. Dudley Hixson reported that the State Health Department is trying to raise water standards, while EPA is trying to relax them. The threat seems to be to smaller communities which would be forced to adopt water quality standards the Louisiana Health Department wants implemented on intermittent streams. This would require them to have advanced waste water systems, and smaller towns just cannot afford it.

EPA does not require advanced waste water systems.

EPA is in favor of lowering water quality standards on intermittent streams, and the state is trying to raise those standards. Richard Meyer, P.E., chairman of PEPP, advised that EPA had come to him specifically asking for help on the problem. As a result, a meeting was called in Baton Rouge.

An ad hoc committee from CEC/L and LES-PEPP is working to prepare a position paper on a proposed addendum to the Louisiana Water Quality Plan. PEPP will be coming to the Board of Directors for permission to become involved in this problem.

12. An LES brochure on promoting Waldemar S. Nelson, P.E., as president-elect of NSPE for 1981 was distributed. Each person attending the Oklahoma City NSPE meeting was asked to take a supply and politic for Nelson among the delegates at the meeting.

13. The Board approved a $50 contribution for the 1979 Louisiana State Science Fair.

14. The Board was requested by the education committee to take scholarship activity out of the vocational guidance sub-committee and make it a standing committee of the society. The matter will be discussed at the next Board meeting.

15. It was approved that Paul Hale, P.E., be granted permission, in accordance with the NSPE travel policy guidelines, to attend the NSPE scholarship selection committee meeting to be held in Denver on March 1-2, 1979. Paul Hale was further instructed to invite the NSPE scholarship selection committee to hold its 1980 meeting in New Orleans.

16. The president appointed and the Board ratified the 1979 nominating committee: E. E. Moncla, P.E., chairman; James L. Meyer, P.E.; and Malcolm Hurstell, P.E. The remainder of the committee is made up of the eight chapter presidents.



Potpourri

R. C. "Doc" Spears
LES Executive Secretary

Prescriptive Period Upheld By Louisiana Supreme Court

The case, "Mrs. Elizabeth A. Daigreport Burmaster, Inc. vs. Gravity Drainage District No. 2 of the Parish of St. Charles and Fromherz Engineers," concerned a decision of the District Court decreeing LSA-R-S. 9:2772, the Louisiana statute prescribing a 10-year period of liability for design professionals, unconstitutional. The case was filed 16 years after completion of the project.

The Louisiana Engineering Society, with support of the Consulting Engineers Council of Louisiana and the American Society of Civil Engineers, Louisiana section, had attorney **Gray Sexton** prepare and submit an "amicus curiae" brief on the case.

It was not the purpose of the brief to advocate generally the appellant's position or to otherwise seek judgment in favor of Fromherz Engineers. Rather, the brief presented a cursory discussion of those policy considerations in favor of the proposition that the 10-year prescriptive period is **not** special legislation. To the contrary, it is a valid exercise of legislation well designed to ably serve legitimate public interests.

Oral arguments were held before the Louisiana Supreme Court on November 14, 1978, and a unanimous decision was made that the 10-year prescriptive period for design professionals is constitutional.

LES and CEC/L File "Amicus Curiae" Brief on Contracting Services Case

The case, **West Baton Rouge Parish School Board vs. T. R. Ray, Inc.,** appeared to have serious implications on the practice of engineering and architecture in Louisiana. Therefore, LES and CEC/L authorized **Gray Sexton,** attorney, to conduct an investigation and offer recommendations.

In the case, an architect, working for an engineering firm, approached the school board and was ultimately successful in obtaining a contract for architectural services. This architect was not an officer in the firm at the time the contract was signed.

After certain work was performed under the contract, the architect terminated his employment. The school board notified the engineering firm that the contract was terminated because the firm had no architects on its staff. The firm started arbitration procedures.

Suit was filed by the school board to enjoin the arbitration, and the trial court, after a lengthy trial, granted judgment in favor of the school board. The court concluded that since the contract had been signed by an entity not licensed to practice architecture in Louisiana and since it was in violation of the architect's licensing statute, the contract was null and void.

The engineering firm appealed the conclusion of the trial court. On appeal, the attorney for the engineering firm and its principal argued that he had not contracted to "perform" architectural services; to the contrary, he had merely contracted to "deliver" architectural services.

Surprisingly, the Court of Appeals adopted this argument, reversed the decision of the trial court, and maintained the integrity and enforceability of the contract with the school board. The Louisiana Supreme Court granted writs and agreed to hear the case

It is the opinion of our attorney that if the Appeals Court decision is upheld, this litigation will have a profound and long lasting effect on design professionals in Louisiana.

The LES and CEC/L approved filing an "amicus curiae" brief. It was not the purpose of the brief to advocate generally the appellant's position or to otherwise seek judgment in favor of the West Baton Rouge Parish School Board. Rather, it was to show that the public cannot be protected from unscrupulous practices if people who are not licensed to perform engineering services are allowed to contract for those services. The brief concludes that the Supreme Court should reverse the decision of the Court of Appeals and reinstate the decision of the trial court.

The brief was filed on December 7, 1978. Oral arguments were held before the Louisiana Supreme Court on December 14. Results should be forthcoming in 30 to 45 days.

Louisiana Engineering Society Names 1979 Award Winners

The Honors and Awards Committee met December 14, 1978, in Baton Rouge to select nominees for recommendation to the Board of Direction for the six LES awards. After carefully considering the outstanding nominees for each award, the following were unanimously recommended for the award indicated:

Andrew M. Lockett Civic Activities Award
Hugh B. Balfour, P.E. - Monroe

A. B. Paterson Engineer in Management Award
Roger P. Gussinger, P.E. - Baton Rouge

Charles M. Kerr Public Relations Award
James S. Janssen, P.E. - New Orleans

James M. Todd Technological Advancement Award
Pierre A. Lapeyre, P.E. - Houma

F. Hugh Coughlin Young Engineer Award
James F. Guion, P.E. - Houma

Leo M. Odom Professional Service Award
Fred C. Culpepper, P.E. - Monroe

The LES Board of Direction approved the selections of the Honors and Awards Committee in January, 1979. Congratulations to each of these outstanding engineers. The presentation ceremony will be held April 20 at the LES Spring Meeting in Lake Charles. Biographical data on each award recipient will be carried in the April LOUISIANA ENGINEER.

A Challenge to All Louisiana Engineers

Just because you receive the LOUISIANA ENGINEER magazine, you are not a member of the Louisiana Engineering Society. The magazine is mailed to over 7000 registered engineers and engineers-in-training residing and working in the state. Only approximately 2500 belong to the Society. Never before have so few done so much for so many engineers. It is a fact.

The Louisiana Engineering Society is due a big vote of thanks by all engineers in the state of Louisiana for what it has done for the engineering community during the past 80 years. Engineers in the state should recognize that every good thing LES has done on behalf of engineers has benefited all engineers.

The Louisiana Engineering Society was founded on the idea that engineers working together can advance the interests of the profession and better protect and improve public life, health and property.

We offer you an invitation and a challenge to become a part of the society which is dedicated to the idea of helping engineers. If you receive this magazine and are not a member of LES, drop a note to LES, P.O. Box 2683, Baton Rouge, LA 70821 and request a membership application.

"Every man owes a part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere."
Teddy Roosevelt.

Professional Engineers' License Guide Now Available by Mail

A new edition of the *Professional Engineer's License Guide, What You Need to Know and Do to Obtain PE (and EIT) Registration*, has been published. The book by Dr. Joseph D. Eckard Jr., P.E., may be obtained for $6.95 (paper) and $11.95 (cloth) from Herman Publishing, Inc., 45 Newbury St., Boston, MA 02116.

The purpose of the guide is to assist you in becoming a registered professional engineer or engineer-in-training. It details the steps you must take, describes what to expect at each step, answers questions you probably will have, provides reference to necessary information and presents successfully used techniques for organizing and executing your registration program.

The 108-page book covers the entire registration process from the decision to register through completing the application, preparing for and taking the exam and, finally, purchasing the seal.

Appendices include three extremely useful checklists. The first is a timetable that lists all necessary steps and when they must be taken. Another sets up an orderly system for study and review by subject area, and the third lists equipment and references to take to the exam.

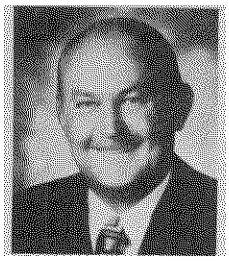
Registration provides the legal recognition an engineer needs to supervise projects affecting public safety, accept work as an engineering consultant and assume responsibility as a principal in a professional corporation. In a growing number of companies, registration is a requirement for advancement.

Ford, Bacon and Davis Finishes Work On New Orleans Sewer Plant

Work designed to enlarge the capacity of the New Orleans East Bank Sewer Treatment Plant has been completed by **Ford, Bacon & Davis (F,B&D).**

F,B&D was in charge of design and construction supervision services for the project, which consisted of three miles of large-diameter steel pipe from the Inner Harbor Navigational Canal to the East Bank plant. Included in the work was a 66-inch diameter pipe across the canal, with parts of the job involving 72-inch pipe.

The work was funded in part by a U.S. Environmental Protection Agency grant.



Jack H. Clabaugh, P.E.

Bovay's Baton Rouge Office Manager Moves to Houston

Bovay Engineers, Inc. a Houston headquartered international engineering firm, announced in December that **Jack H. Clabaugh, P.E.**, vice president and manager of Bovay's Baton Rouge office will assume the post of manager of the Houston office.

As Houston's new office manager, Clabaugh will administer the planning and design activities of a staff of nearly 200.

Clabaugh became Bovay's Baton Rouge office manager in 1971. Before joining Bovay, he held engineering and managerial positions for Cabot Corp., Pampas, TX, and Dow Chemical Company in Midland, MI. He received his BSME from Oklahoma State University in 1951, and he has been a member of LES and NSPE since 1972.

Nominations Sought for Engineers Selection Board

The chairman of the LES nominating committee for the Engineers Selection Board will be **James Porter, P.E.**, chairman of LES-PEG. He has notified all practice divisions to submit nominations by March 1, 1979. This committee will pick nominees for the two LES positions. A joint LES and CEC/L ballot will be mailed to all registered engineers in the state in May 1979.

There will be two LES positions to fill on the selection board this year during the term July 1, 1979, to June 30, 1980, to replace **Wendell P. Shiflett, P.E.**, and for the term January 1 to December 31, 1980, to replace **Alvin R. Hudspeth, P.E.**

The Engineers Selection Board is composed of seven members; two elected by LES; two elected by CEC/L; two appointed by the governor; and one assigned by the user agency for each project under consideration.

At any time prior to April 1, 1979, any 25 voting members of LES may send to the secretary-treasurer a petition listing additional nominees for the selection board. A statement of the willingness to serve of each additional nominee must accompany the petition.

Date Set for Major ASCE Conference

"Civil Engineering . . . Responding to the Challenges of Engineering Practice" is the theme of a **National Conference on Civil Engineering Education** sponsored by the American Society of Civil Engineers to be held April 19-21, 1979, at the University of Wisconsin, Madison.

Representatives from government, industry, engineering societies, students, engineering educators and others concerned with engineering education and practice are urged to attend. Strong participation by practicing engineers is a particular goal, as it is important that graduates be well prepared to enter practice.

For further information, contact Dr. George K. Wadlin, ASCE coordinator, 345 East 47th Street, N.Y. 10017, phone (212) 644-7669 or Professor William E. Saul, program chairman, Department of Civil and Environmental Engineering, 1415 West Johnson Drive, 2205 Engineering Building, Madison, WI 53706, (608) 262-3542.

Walk Named President-Elect of New Orleans Chamber of Commerce

Frank H. Walk, P.E., has been named president-elect of the New Orleans Chamber of Commerce, New Orleans, for 1979. He has been a prime mover in the industrial and economic development of the greater New Orleans area for 20 years and he is president of Walk, Haydel & Associates, a multi-discipline organization with offices in New Orleans and Baton Rouge.

Walk was awarded the LES Andrew M. Lockett Medal for distinguished civic service in 1977. The Society congratulates him again for his participation in the civic well being of his community, parish and the state of Louisiana.

New Consulting Firm In Baton Rouge

W. Daniel Nesbit Jr., P.E., has opened an office for the practice of electrical engineering in Baton Rouge. The firm is W. Daniel Nesbit Jr., Consulting Engineering, and is located in the Ortlieb Building, I-12 at Drusilla, Baton Rouge.

Nesbit has been a member of the Louisiana Engineering Society and the National Society of Professional Engineers since 1975.

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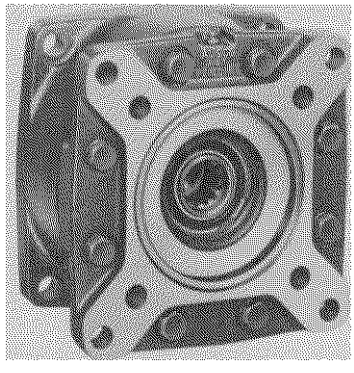

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Model	Torque Capacity, lb. in.	Release Pressure, psi	Working Pressure, psi
30070	20,000	180	3000
30080	30,000	225	3000

Space-saving size, 11.1" x 11.1" x 6.5"

Spring loaded, hydraulically released. Complete self-contained package. No alignment problems — bolts directly into power train. Rugged cast construction. Shaft double-bearing supported. For more information, write or phone Auto Specialties Manufacturing Co., Brake Division, St. Joseph, Michigan 49085. Phone 616/982-2373.

AUSCO DISC BRAKES/CLUTCHES

Members of LES Take Note: What Kind of Member Are You?

The following article defining kinds of members was published in the *West Virginia Society of Professional Engineers* magazine:

"A lot of members are like wheelbarrows; not good unless pushed. Some are like canoes; need to be paddled. Some are like kites; if a string isn't on them, they will fly away. Some are like kittens; they are more contented when petted.

"Some are like footballs; you can't tell which way they'll bounce next. Some are like balloons; full of wind and ready to blow up. Some are like trailers; they have to be pulled. Some are like lights; they keep going on and off.

"Many fortunately, are like the North Star, there when you need them, dependable, ever loyal and a guide to all people."

LES Meetings for 1979 Have Been Scheduled

Three state meetings and one regional meeting of the society have been scheduled, and hotel arrangements have been made. Please mark these dates and places on your 1979 activities calendar:

April 19-20-21 — LES Spring Meeting, Awards Banquet, Student Paper Presentations. Sheraton-Chateau Charles Motor Inn, Lake Charles.

July 30-31-Aug 31— LES Annual Meeting, Installation of Officers, The Broadwater Beach, Biloxi, Mississippi.

Sept. 13-14-15 — LES Chapter Officers Training Conference, Sheraton Inn, Alexandria

Oct. 10-11 — NSPE Southwestern Regional Meeting, Monteleone Hotel, New Orleans. LES is the host for the seven-state region.

1978 EJC Salary Survey Shows Engineers' Annual Median Earnings

The 1978 Engineers' Salary survey conducted by the Engineering Manpower Commission (EMC) of the Engineers Joint Council (EJC) presents some interesting statistics. This EMC survey is the 13th published to provide basic salary information on engineering graduates in the United States. Salaries are analyzed on the basis of experience, defined as the number of years since attaining a baccalaureate degree.

The data is presented in graphic and tabular form to show upper and lower decile, upper and lower quartile, median and mean salary by years since the baccalaureate degree.

The coverage of this survey includes 1035 establishments covering 179,641 engineering graduates. EMC estimates that the survey produced data on about one-quarter of the graduate engineers doing engineering or related work in the United States.

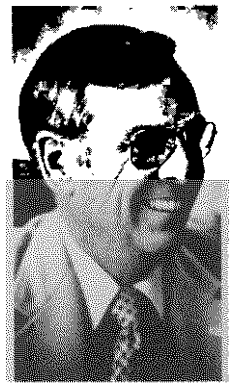
It is a very comprehensive publication. It contains trend curves, industry curves and tables, all non-manufacturing industry and regional curves and tables for industry and government.

For example, the annual median salaries for from two to 10 years since degree are shown in the South Central Region (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas) and the South Atlantic Region (Delaware, Washington, D.C., Florida Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia).

Annual Median Salaries for Two to 10 Years.

Years Since BS	2	4	6	8	10
South Central Median Salary	$17,950	19,500	21,100	22,700	24,300
South Atlantic Median Salary	$17,200	19,150	21,100	23,050	24,950

A lot of business problems are really communications problems in disguise.



"To find solutions, turn to the company uniquely qualified to help—South Central Bell."

John R. Mitchell
General Manager—Marketing

"Whatever business you're in, communications is playing a larger part in it than ever before.

And poor communications create larger problems than ever. In production. Customer relations. Personnel. Almost any area of your business. And you may not even recognize the real cause.

But you can turn to South Central Bell for real help. It's our business to come up with communications solutions to tough problems.

We've been learning a lot about your business. To solve your problems, we have to know your problems. So we've been committed to learning Louisiana business in depth—industry by industry. And we can put that knowledge to work for you.

Our teams of communications experts specialize in particular industries: health care, hotel/motel, package goods and education, to name a few. Each team is headed by an Account Executive who analyzes your problem, then directs our resources toward solving it.

We stand behind your systems end to end. Whether the solution to your problem is improved voice communications, data communications, or a complex mix of both, we take total responsibility for the design, supply, installation, maintenance and repair of your system.

For more information, call South Central Bell. And get a problem solving Account Executive working for you."

The system is the solution.

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Join the Louisiana Engineering Foundation

The Louisiana Engineering Foundation, Inc. (LEF) is an independent, nonprofit, engineering organization for engineers of all disciplines and interests and for individuals in other professions and endeavors related to engineering. Its purposes are to provide an engineering educational program, to unite the Louisiana engineering community and to advise and interpret the art, science and technology of engineering for the benefit and welfare of the public.

One goal of the Louisiana Engineering Foundation is to develop a permanent Louisiana Engineers Center and to construct an Engineers Center building in the state capital of Louisiana.

It is proposed that this center will serve as the permanent headquarters for professional and technical societies and other engineering organizations. The funding for this venture will be through contributions from individual engineers, firms and companies which employ engineers. LEF hopes to be the window through which the public views the engineering profession in Louisiana.

The LEF board of directors has set a minimum membership contribution for 1979 at $10.00. Each engineer receiving the LOUISIANA ENGINEER is requested to complete the form below and return it to LEF, P. O. Box 2683, Baton Rouge, LA 70821 with a pledge and a check.

FUND GOAL FOR LEF
LES Chapter Members and other Engineers Share

Chapter	*Share
Alexandria	$16,300
Baton Rouge	53,900
Bayou	14,700
Lafayette	24,300
Lake Charles	13,900
Monroe	19,200
New Orleans	97,500
Shreveport	30,000
Other Engineers (non LES members)	**700,000
Firm, Company Contributions	230,200
TOTAL	$1,200,000

*Based on $100 per person from 1978 LES membership audit. (Members, Associate Members, Life Members, and Affiliated Members).

**Based on 7,000 Louisiana Engineers who are not members of LES.

LOUISIANA ENGINEERING FOUNDATION MEMBERSHIP APPLICATION

Name _____ Total Pledge _____

Business Address _____ Cash/Check Attached _____

Home Address _____ Bal. Due $ _____

Telephone _____ Date _____ 19____

I hereby Pledge to
LOUISIANA ENGINEERING FOUNDATION
for our 1.2 Million Investment in Engineering

a total of _____ Dollars $_____

$_____ paid herewith, the remainder payable $ _____ Monthly ☐ Quarterly ☐ or Annually ☐ beginning

or as follows: _____

Pledge payments may be made over a period of three years; no time limits on other pledges. This pledge shall be terminable at any time in the event of the death of the pledger.

I would like ☐ not like ☐ an official receipt from the Louisiana Engineering Foundation.
Make checks payable to Louisiana Engineering Foundation.
Contributions are deductible for federal income tax purposes.



Vliet's Views

Daniel H. Vliet
Executive Secretary
Louisiana State Board of Registration for Professional Engineers and Land Surveyors

For more than 16 years corporations and certain other firms that provide, or offer to provide, engineering or land surveying services have been required to qualify with the Registration Board. In the beginning, renewal of the qualifications of such firms was not required. Later the rules were amended to require renewal of qualifications every two years. Now firms are required to renew their qualifications every year during the period from May to July. (If a corporation has not renewed its qualification with the Board since May 1978, it is not authorized to provide professional services.)

Significant changes were made during the last 15 months to the regulations that govern engineering and land surveying firms. In the past no fees were charged. Now the Board charges a qualification fee of $35 and an annual renewal fee of $10. Certificates of Qualification are issued, bearing the signature of the chairman and secretary and the seal of the Board. Renewal notices will be mailed in late April or early May of each year, and the Board is even considering the publication of a separate roster of these firms.

Although the regulations primarily apply to corporations, they also pertain to partnerships and some proprietorships. Excluded from compliance with the regulations are individual proprietorships which bear the name of the owner who is a registered Professional Engineer or Land Surveyor.

The regulations recognize that certain engineering and land surveying firms may provide professional services if the public welfare is protected. The intent of the regulations is to prevent the practice of engineering or land surveying by those who, except for the use of a corporate firm, would not be eligible to practice the professions of engineering or land surveying.

The regulations specify that professional services provided by a corporation must be executed by or must be under the direct supervision of a professional engineer or land surveyor registered in Louisiana. This engineer or land surveyor must be either a full-time active employee whose primary occupation or employment is with the corporation, or a majority stockholder of the corporation unless all other stockholders are registered professional engineers or land surveyors in Louisiana. Thus a corporation can qualify on the basis of having only one of its employees or owners registered.

The Engineers Joint Council (EJC) has recently issued a bulletin which provides a synoptic interpretation of the legal restraints on corporate practice in the various jurisdictions that register professional engineers. In this bulletin Louisiana is listed in a

Continued on page 18

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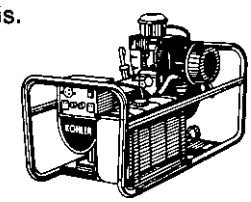

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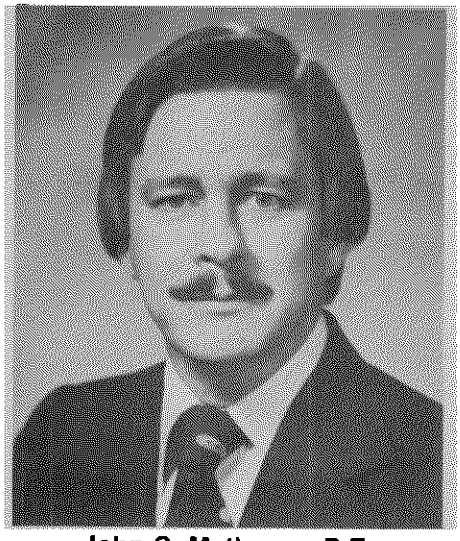

John S. Matherne, P.E.

Matherne Named New Vice-President of Bovay Baton Rouge Office

Bovay Engineers, Inc. announces the appointment of John S. Matherne, P.E., as vice president and manager of Bovay's Baton Rouge office. The position involves overall administration and management of the planning, engineering and office activities at the international consulting firm's Louisiana location.

Matherne comes to Bovay Engineers, Inc. from Rust Engineering Co., where he has served as project manager in its Baton Rouge office since 1973. Prior to that, he had held several engineering management positions in Louisiana. He brings to his new position 20 years of experience in the engineering of industrial plants, energy and petrochemical facilities.

He received his BS degree in mechanical engineering from Tulane University in 1957 and is a Louisiana registered Professional Engineer.

Lafayette Engineer Named AIChE Fellow

Tom Brooks Metcalfe, head of the department of chemical engineering at the University of Southwestern Louisiana, Lafayette, LA, has been named a Fellow of the American Institute of Chemical Engineers (AIChE).

He was elected by his fellow members in recognition of his contributions to the field of chemical engineering education and professional development. He holds a PhD in chemical engineering from Georgia Institute of Technology.

Metcalfe, a member of the Southwest Louisiana section, has served on several national AIChE committees. He helped form the Academic Department Heads Forum to increase communication between heads of chemical engineering departments. His fields of technical expertise include petroleum and petrochemical processing and refining techniques.

Metcalfe has been a member of the Louisiana Engineering Society since 1964. He was chairman of the LES Professional Engineers in Education practice division in 1975-76.

ASCE President Will Take Stand On Public Issues

"Resolved: That the American Society of Civil Engineers will further by all legitimate means the adoption of the metric standard. . . ."

Something new? Not at all. The words are taken from a resolution of the American Society of Civil Engineers (ASCE) written in 1867.

The society's new president, Walter E. Blessey, head of the civil engineering department at Tulane University, uses the resolution as an example of the organization's resolve to speak out on public issues.

"We must be there at the beginning of an issue, not after the legislation is passed or the decision made," Blessey says.

"Unless civil engineers start communicating more they will become technologists instead of professionals," he observes. "We will be told what to do instead of making the decisions.

"Everything we civils do adds up to most of what we see all around us . . . bridges, water works, dams, highways, buildings, dock structures, offshore drilling platforms, sewage treatment plants, airports, city streets, flood control projects and many more," explains Blessey. "Therefore the civil engineer can help inform and educate the public about almost every topic that affects the nation."

Blessey and other civil engineers made themselves heard last year in a published report advocating balanced land use in Alaska as an alternative to proposed legislation which would have permanently ruled out development of more than 100 million acres.

And he says that civils from across the country are now working on an energy study which will be made public early next year.

Other issues civil engineers have taken stands on in recent times include civil service reform, dam safety, bridge safety and the Environmental Protection Agency's proposed drinking water regulations.

Blessey, a nationally recognized expert on bridges, zeroes in on bridge safety.

"Bridges in the United States desperately need better systems of maintenance if we are to continue to utilize them in safety," he states, estimating that of the nation's 235,000 bridges in the federal aid system, 27,000 are obsolete and another 7,000 structurally deficient.

In addition, he feels that many other bridges are in need of extensive repair due to normal deterioration.

"You don't just build a bridge or a dam and leave it there forever and expect to never have to check on it again. Preventive maintenance is the key, whether you're building bridges, factories or homes," he concludes. There is always a certain amount of upkeep involved.

IN MEMORIAM
Thurman C. Morgan Sr.

The Louisiana Engineering Society lost a fine engineer, his family a devoted husband and father, and his friends a loyal associate with the death of Thurman C. Morgan Sr., P.E., 72, on November 10, 1978.

Mr. Morgan, a 1927 LSU graduate, was a retired civil engineer. He worked for the Louisiana Highway Commission from 1927 to 1932; the Corps of Engineers, New Orleans District, from 1932 to 1940; and the Louisiana Department of Public Works from 1941 to 1974.

After retirement, he served on the Board of Commissioners for the Fifth Louisiana Levee District as an engineering consultant. He became a member of the Louisiana Engineering Society in 1949.

The Louisiana Engineering Society extends its deepest sympathy to his wife and family.

IN MEMORIAM
Walter Howard Scales

With the death of Walter Howard Scales on November 27, 1978, the Louisiana Engineering Society lost a distinguished member, and his associates have lost a personal friend and counselor.

Mr. Scales was born in Fond du Lac, Wisconsin, in 1890 and received an architectural engineering degree from the University of Il-

linois in 1914. He was a past president of the American Society of Civil Engineers and the Roundtable Club of New Orleans. A member of the LES since 1929, he became a Life Member in 1960.

His engineering employment throughout the years has included: chief engineer, Black Hawk Construction Co., Waterloo, IA; design structural engineer, U.S. Fuel Corporation, Danville, IL; engineer with W.E. Russ and Co., Architects and Engineers, Indianapolis, IN; principal in his own firm Batchelder and Scales, Indianapolis; and for many years the Southern regional representative of the National Lumber Manufacturers Association. At the time of his death, he served as an ASCE representative to the Delta Parishes Building Code Commission.

Mr. Scales was a loved and respected member of the Louisiana Engineering Society and the construction industry.

The Society extends its deepest sympathy to his family.

IN MEMORIAM
Arthur L. Walker, P.E.

The Society was saddened to receive notification that Arthur L. Walker passed away on December 26, 1978.

Mr. Walker was born in 1883 and was graduated from Purdue University in 1907 with a BS in civil engineering. Some of his early engineering work was with the Milwaukee Railroad; Union Pacific Railroad as assistant engineer for bridges and buildings; State Engineers Office, State of Wyoming; Canal Construction of Chicago and Memphis; Sternberg Dredging Company, St. Louis; and at the age of 65, he formed the Tidewater Dredging Corp. with offices in New Orleans and Morgan City.

He was a registered professional engineer and land surveyor in Louisiana and a member of the Petroleum Club of New Orleans. He became a member of the Louisiana Engineering Society in 1943, and he reached Life Member status in 1974.

The Society has lost an outstanding member. Our deepest sympathy to his family.

Vliet's Views

Continued from page 16

category along with the majority (82%) of the jurisdictions.

This category is the least restrictive of the four categories that were selected for classification purposes. Only a few jurisdictions strictly prohibit corporations from providing professional engineering services.

Although most states have almost the same basis for the qualification of individuals to practice engineering and land surveying, it will be a long time, if ever, before the same will be true for corporations.

The regulations that were published in the *1978 YEARBOOK* have had minor amendments. Upon request, the Registration Board will be pleased to send you a copy of the latest regulations that govern either engineering or land surveying firms.

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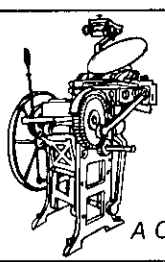

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2	Monroe	J. Robbins	21	12	57.0	6	18	85.7
3	Bayou	J. Guion	19	8	42.0	7	15	79.0
4	Lake Charles	J. Stevens	20	8	40.0	5	13	65.0
5	Alexandria	M. Flynn	12	6	50.0	1	7	58.3
6	Lafayette	K. Deal	37	14	37.8	7	21	57.0
7	New Orleans	M. Firmin	125	34	27.2	23	57	45.6
Last	Shreveport	D. Richardson	31	5	16.0	3	8	25.0
		TOTALS	327	126	38.5	78	204	62.4

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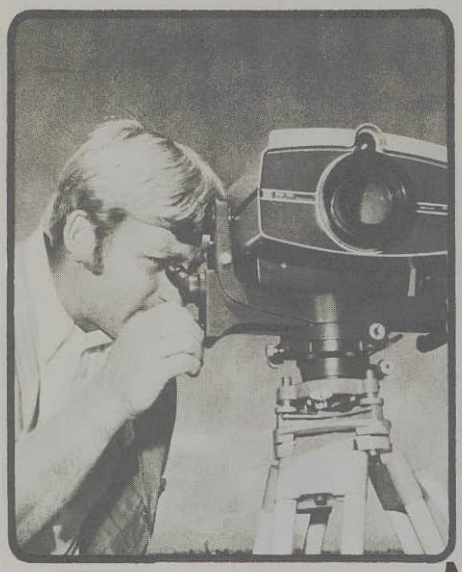

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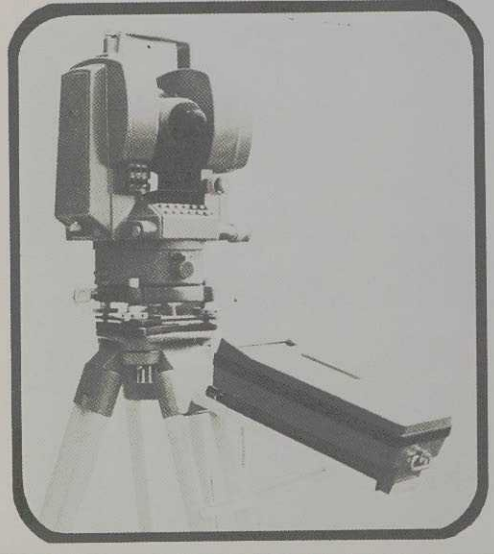
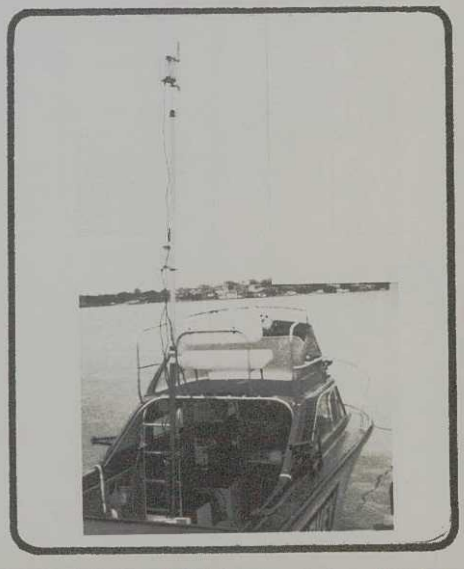
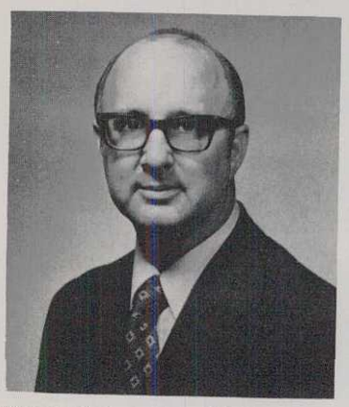




LOUISIANA ENGINEER
April, 1979

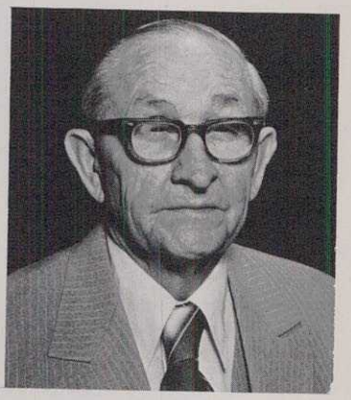
1979 LES AWARDS



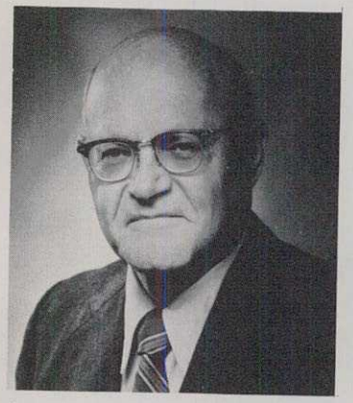
Pierre A. Lapeyre, P.E.



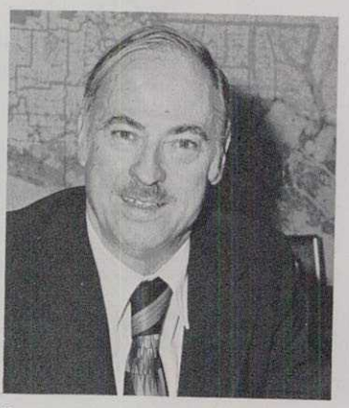
Fred C. Culpepper, P.E.



Hugh B. Balfour, P.E.



James S. Janssen, P.E.



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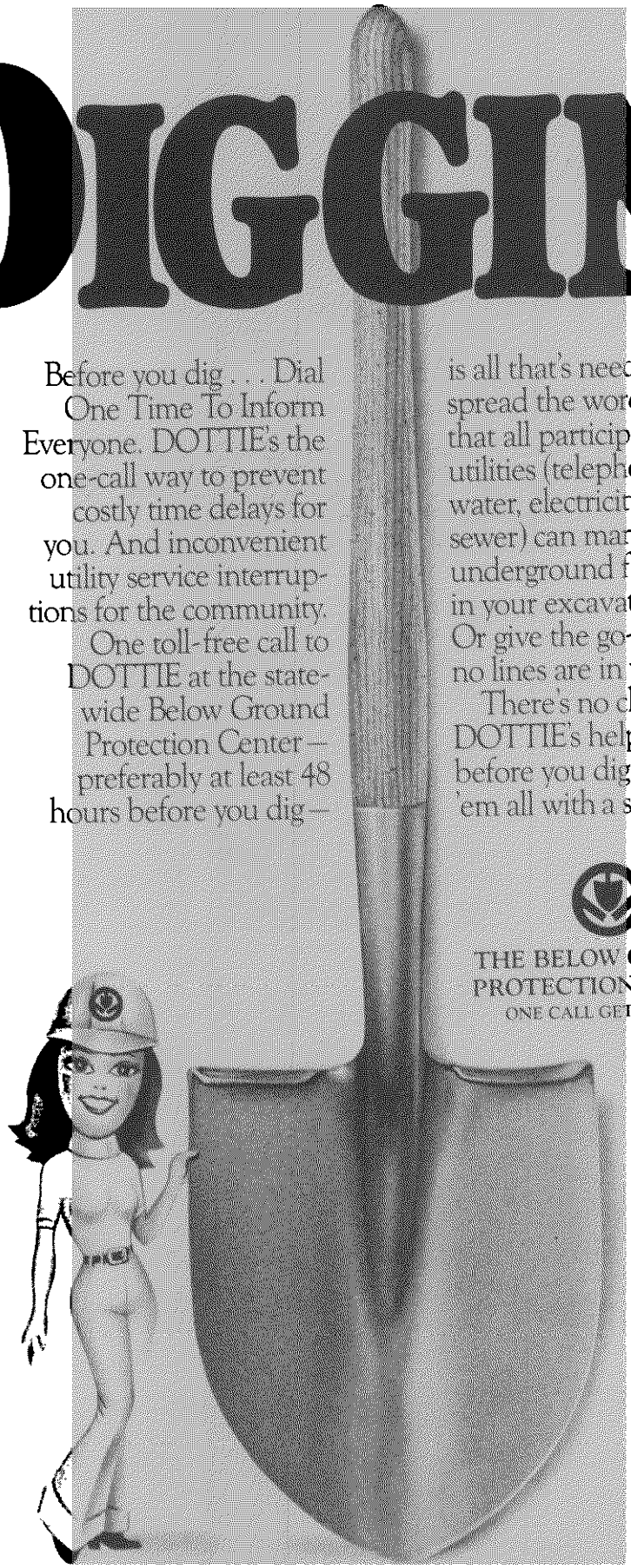

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PRESIDENTIAL PRIVILEGE

On January 23, I received a letter written as a comment on my "Presidential Privilege" message which appeared in the October '78 issue of the LOUISIANA ENGINEER. I am grateful to have received this letter for several reasons. First, it became obvious that at least one subscriber read my article. Second, he took the time to write a response to my message. Third, his letter was so well done that I asked for his permission to publish it in the LOUISIANA ENGINEER, to which his reply was that I could do just that. As a result, I am taking advantage of my privilege to publish his letter for you to read.

"I completely agree with the importance of 'engineers' keeping up with the profession. Still, there are some appropriate caveats. Many 'engineers' move to positions of management, most often connected with their basic engineering profession. In the military service, for example, it is rare for the engineer lieutenant colonel (or Navy commander) . . . to spend much time on strictly 'engineering' matters. Rather the officer must devote more and more time to management of engineers and others.

"As New Orleans district engineer, I spent most—the vast majority—of my time doing things which were certainly not strictly engineering. As a manager of engineering affairs, in or out of the military, the 'boss' must master much beyond engineering (and related construction management, architecture, and environmental) matters.

"Communication becomes vitally important . . . with employees, the public, customers, government offices, the media. Data processing, legal matters, marketing, banking, office management and real estate are all matters important in varying degrees to the engineering manager.

"So what is new? Most engineers know that either they or their bosses must deal in these non-engineering matters. Yet, for many of the more senior professionals, the need to get smarter in these non-engineering areas makes it increasingly difficult to stay current in the engineering profession. But the 'engineer/manager' (for lack of a better term) wants to—and should—stay up to some semblance of currency in the engineering profession.

"Many engineer/managers do this today by participating in engineering societies, subscribing to journals, providing leadership in engineering activities, or perhaps going to night school. As an engineer/manager in Cincinnati, with hundreds of engineers but thousands of other civilians (some members of other professions) under my direction, I worked to urge professional activity and leadership from those in engineering and other professions. And I found a response to the "carrots" and "sticks" I used. I found that the professional **wanted** to stay relatively current, and was often delighted to step forward into professional leadership positions.

"This is far more difficult in my current job as an Army engineer in Europe, with our strong orientation on military matters and with other organizations (chiefly the Corps of Engineers and the West German government) which do most of the real engineering for us. Yet we work at it in various ways. And outside my office door is a board listing each professional engineer's license. In the hallway is a framed copy of each license. We take pride in our basic grounding in the profession, call ourselves professional engineers, pay our annual renewal fees . . . and try to stay up!

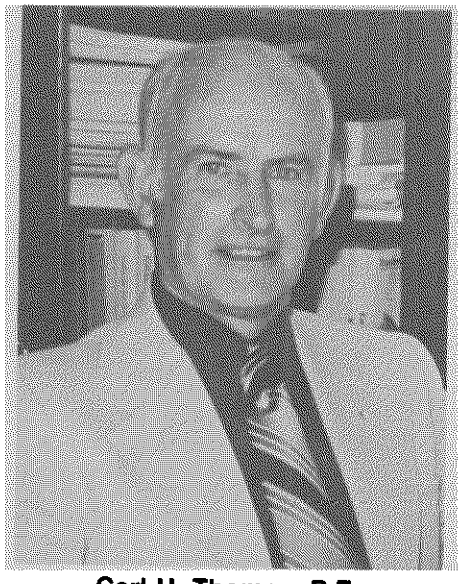
"Our profession must strive to maintain its professionalism, and keep our members up with professional developments. Yet we must be careful not to take actions that will turn off those 'engineer/managers' within our ranks. Rather, we should encourage engineers to broaden their interests and influence.

"I do not suggest we try to capture the governor's mansion (though Georgia once had as governor a sometime nuclear engineer), the U.S. Congress (as the legal profession has done), or the presidency (Was Herbert Hoover better for being an engineer?). But we need leaders in business, and on a community, state, and national level who are engineers and can apply that grounding to the myriad of baffling problems which face the nation and the globe today.

"Let's be sure we do not discourage our engineers from branching out, and thereby broadening their influence in today's world."

Elvin R. Heiberg III
Major General, U.S. Army
Deputy Chief of Staff,
Engineer, U.S. Army Europe

General Heiberg pointed out a major responsibility of the Louisiana Engineering Society, and he did it very well. Our primary reason for existence as an organized group is to promote professionalism throughout the careers of our engineers.



Carl H. Thomas, P.E.
President, LES

I want to use the above as a basis for mentioning several other responsibilities of the Louisiana Engineering Society, that is its members. In addition, there are **privileges** associated with these **responsibilities,** and it is difficult to distinguish between the two.

There are numerous responsibilities incorporated into our various standing committees and practice divisions and they are too numerous to discuss in this context. However, I do want to mention several areas in which our responsibilities are unique.

We have been responsible for drafting the laws governing professional registration in Louisiana. We have been and continue to be responsible for keeping these laws in an up-to-date and functional condition. LES is responsible for screening candidates and developing a list of nominees as replacements for any vacancies occurring on the State Board of Registration for Professional Engineers and Land Surveyors. These lists are submitted to the governor in a timely manner for his selection of the appointee. It is a privilege to be in this position to suggest potential candidates for that significant board.

LES elects two of six engineers to serve on the Engineers Selection Board. Two are elected by the Consulting Engineers Council (CEC), and two are appointed by the governor.

(continued on page 12)

April, 1979

LOUISIANA ENGINEER

The LOUISIANA ENGINEER is the official publication of the Louisiana Engineering Society and the journal of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors. The magazine is published in February, April, June, August, October and December. Subscription $1.00 per year for engineers registered in Louisiana and non-registered members of the Louisiana Engineering Society. One dollar of each LES member's annual dues is set aside for six issues of the LOUISIANA ENGINEER. Second class postage paid at Baton Rouge, La. The Louisiana Engineering Society and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors do not guarantee the accuracy of statements made or necessarily concur with opinions expressed in this publication. ISSN : 0024-6794

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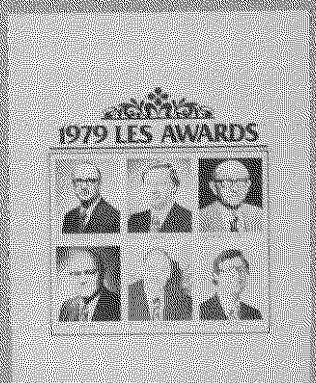

On the Cover:

Six outstanding engineers are being recognized this month for their contributions to the engineering profession. See page 5.

Coming next issue: Coverage of the 50th anniversary of the U.S. Corps of Engineers Waterways Experiment Station.

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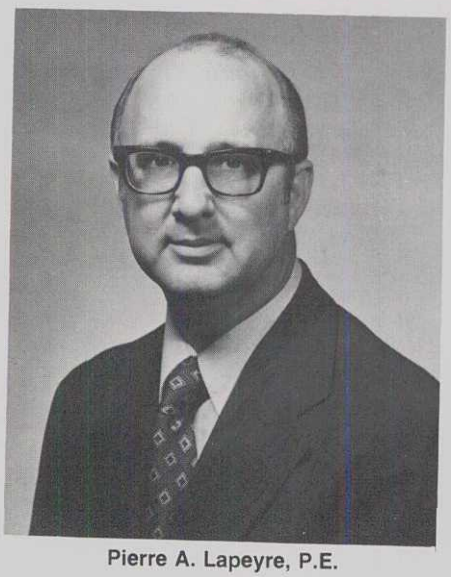
LES Recognizes Six Outstanding Engineers

The Louisiana Engineering Society is recognizing six outstanding members this month at the spring meeting in Lake Charles. Each award is named after a present or former member of the Society.

James M. Todd Technological Accomplishment Medal

The Technological Accomplishment Medal is given for distinguished services by an engineer for technological advancement or discoveries as contributions to the advancement of engineering. Todd, president of LES in 1930, was very active in the affairs of the Society. His suggestion in 1950 of an award for engineering ingenuity prompted the adoption of the Technological Accomplishment Award in 1951. His name was added to the award in 1975.



Pierre A. Lapeyre, P.E.

Pierre A. Lapeyre, P.E., is president of Euclid Engineering Co., Inc., of Houma, La. After a year at Spring Hill College, he attended Notre Dame University, graduating with a BS in mechanical engineering in 1957. Post graduate work included a pressure vessel design course at the University of Houston and a gas processing course at the University of Oklahoma.

Lapeyre's professional experience includes project engineer with Monsanto Chemical, Texas City; chief project engineer with Pona Engineers, Houston; manager of engineering, Delta Iron Works, Inc.; and from 1974 to present, president of Euclid Engineering Co. He served two years in the U.S. Army.

Lapeyre is a registered professional engineer in Louisiana and Texas and a member of the Louisiana Engineering Society, the Society of Petroleum Engineers of AIME, and the American Society of Mechanical Engineers.

He has had three patents approved, two by the United States and one by Belgium. And he has applied for a U.S. patent on the exercise monitor system and method approved by Belgium in 1978. He was granted U.S. patents for floating dry docks with buoyancy controlled air injection and venting systems and for a water transportable pump station.

The water transportable pump station is an outstanding achievement in engineering. The abstract of the U.S. patent reads: "The present disclosure is directed to a transportable pumping station which is erected on a barge which may be transported on water to a site and the barge flooded to the river or water bottom so that pump intakes are supplied with intake water free of debris by screening the water to be pumped. If it is desired to relocate the pumping station, wallcovers are applied to the water intakes in the barge end walls, and the barge is pumped dry and towed to the relocation site by tug boat and flooded down at the new site."

A native of Houma, Lapeyre is married to the former Donna Davet of Cleveland, Oh. They have four children, two sons and two daughters.

Lapeyre is a worthy recipient of the James M. Todd Technological Accomplishment Award because of the exhaustive investigation and experimentation necessary for obtaining three patents involving engineering design, as well as for organizing and managing his own firm for the purpose of furnishing design and project management services to the oil and gas processing, offshore, marine and petrochemical industries.

Leo M. Odom Award For Professional Services

The Leo M. Odom Award, named after its first recipient in 1972, is given for distinguished service to the engineering profession in Louisiana by a registered professional engineer member of the Society who, over a period of long duration, has demonstrated leadership in technical societies and other professional engineering groups.



Fred C. Culpepper Jr., P.E.

Fred C. Culpepper Jr., P.E., president and chief operating officer of Ford, Bacon & Davis, Inc., is a native of Monroe, La. He received his BS in civil engineering from Virginia Military Institute in 1940. Following graduation, he was employed by United Gas Pipeline Co. In 1941, he joined Ford, Bacon & Davis and promptly took leave to serve four years in the Army's 101st Airborne Division, attaining the rank of major.

For the next 15 years, he was assigned to various pipeline and related projects in 20 states and progressed from field engineer to project manager. He was project manager for the first coal slurry pipeline, which proved the economic and technical feasibility of moving solids by pipeline. He was instrumental in forming a department in his company to economically seal gas mains. The technique developed in this department has been employed throughout the United States and in many foreign countries.

Culpepper was elected president of Ford, Bacon & Davis in 1975 and to his present position with the parent company in 1977. He was awarded the Louisiana Engineering Society A.B. Paterson Award for his outstanding managerial accomplishments in 1972.

He is a member of the Louisiana Engineering Society, the National Society of Professional Engineers and a Fellow, American Society of Civil Engineers.

He has held the offices of secretary-treasurer, vice president and president of the Monroe chapter of LES. He was president of the Louisiana Engineering Society in 1974-75.

During his term, the Society made remarkable gains in membership and be-

came actively involved in a number of noteworthy activities: LES was recognized as a primary source of engineering expertise in Louisiana by federal, state and local agencies; Executive Order 76 setting up the Engineer Selection Board was promulgated by the governor; an engineer was invited to serve on the GSA Public Advisory Panel; LES reviewed the environmental impact statement of the change of mission of Fort Polk; and many others.

He is a registered professional engineer in 12 states, and in 1974 Gov. Edwards appointed him to serve a nine-year term on the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

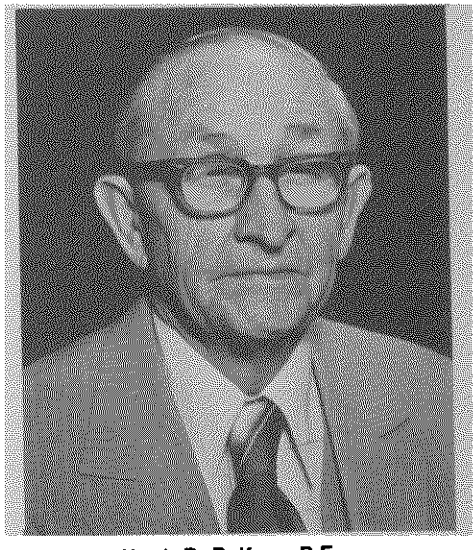
Culpepper has been very active in community affairs. He was president of the United Way in 1971. He is a sustaining member of the Boy Scouts of America, Ouachita Valley Council and a director of the Ouachita National Bank in Monroe. An elder of the First Presbyterian Church of Monroe, he served as clerk of the session and was chairman of the Building Commission.

He is married to the former Mary Francis (Boots) Moore of Monroe, and they have four children, a son and three daughters.

Culpepper has given distinguished service to the engineering profession in Louisiana as a member of LES over a period of 20 years. His involvement and service are in keeping with the ideals of the Leo M. Odom Professional Service Award.

Andrew M. Lockett Medal For Civic Activities

The Andrew M. Lockett Medal is the Society's civic activities award and was first given in 1951. It is named to honor Andrew M. Lockett, a member of LES from 1900 until his death in 1945.



Hugh B. Balfour, P.E.

Hugh B. Balfour, P.E., retired from his position as division engineer at Louisiana Power & Light Co., West Monroe, in 1977. A native of Rayville, he received a BS in electrical engineering from LSU in 1933 and an MBA from Northeast Louisiana University in 1976.

Balfour is a registered professional engineer in Louisiana and a member of the Louisiana Engineering Society. He was listed in the 1968 edition of *Outstanding Civic Leaders of America* in recognition of his outstanding accomplishments.

His memberships and offices held in civic organizations include: member, director and president of the West Monroe Kiwanis Club and lieutenant governor of division six; member, director, president and chairman of the Industrial Committee of the West Monroe Chamber of Commerce; member, director and president of the West Ouachita Industrial Development Corp.; chairman of the council of the Salvation Army; member of the board of directors of United Givers' Fund of Ouachita Parish; president and director of the Northeast Louisiana Better Business Bureau; member of the advisory council of YWCO; president of the Ouachita Parish School Board; and a member of the board of commissioners and board of trustees of Glenwood Hospital.

He has been very active in the Ridge Avenue Baptist Church of West Monroe with service as chairman of the deacons council, a member of the church council, a member of the church choir, Sunday School superintendent, training union director, chairman of the Pulpit Committee and a member of the Church Building Committee.

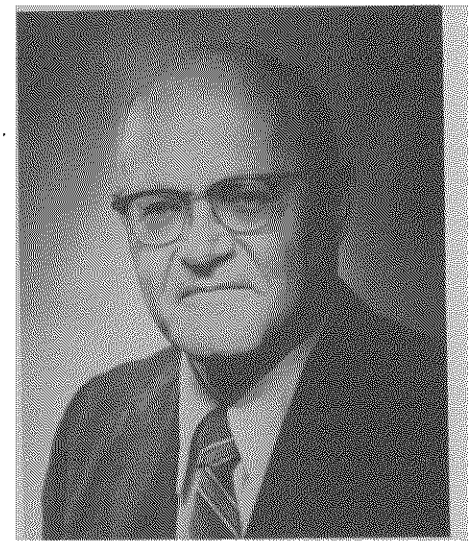
His past and present activity with many projects has resulted in the betterment of West Monroe and West Ouachita Parish. His service was instrumental in the planning, construction and expansion of Glenwood Hospital. He served with the group that planned and secured funds for the G.B. Cooley School for Retarded Children in West Monroe.

He is married to the former Myrtis Newson from Delhi, La., and they have two children. Their son, Eugene, is a geologist in Tucson, Ariz., and their daughter, Dianne, is an assistant treasurer of Morgan Guaranty Trust Co. in New York City.

Balfour's service to his community and profession has made him a worthy recipient of the Andrew M. Lockett Award. His civic involvement is an inspiration to the engineering profession. The Louisiana Engineering Society extends "well done" to this distinguished engineer.

Charles M. Kerr Public Relations Award

The Charles M. Kerr Public Relations Award is given to an engineer for distinguished service in the promotion of public relations for the engineering profession in Louisiana. It was first presented in 1965 and was named to pay tribute to Charles M. Kerr, LES president in 1954. Kerr was very active in the business world in promoting his chosen profession, engineering.



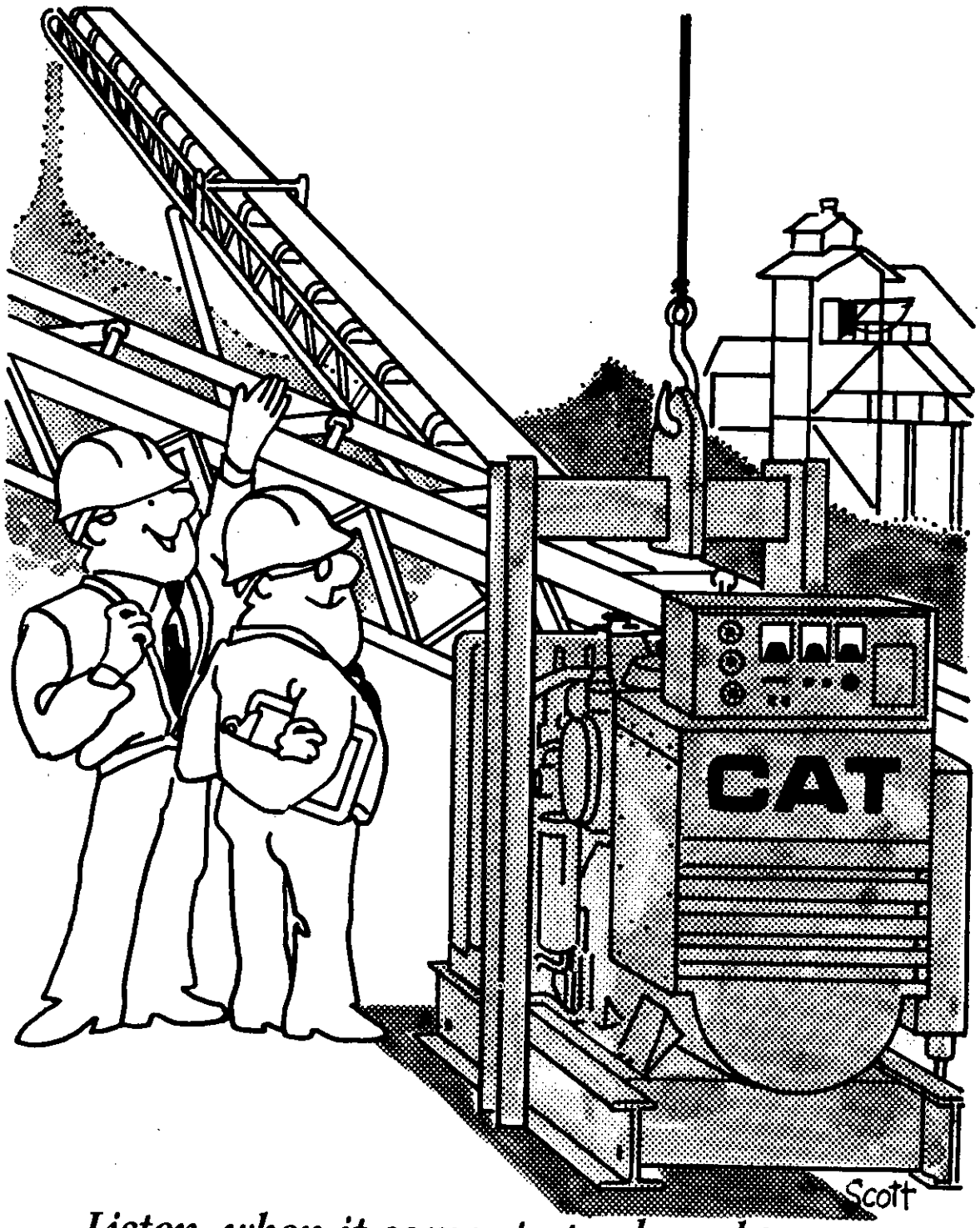
James S. Janssen, P.E.

James S. Janssen, P.E., fuels consultant for Waldemar S. Nelson and Associates, New Orleans, received his BS in civil engineering from Tulane University in 1931. His post graduate work included completion of the public utility course at Georgia Tech and the gas engineering extension course at Columbia University.

Jim Janssen had a long and illustrious career as an engineer with New Orleans Public Service Inc. before retiring in 1973 as head of its gas division, Engineering Department. He joined the Waldemar S. Nelson firm as a consultant in 1973.

He has been active in many professional and technical societies and deeply involved in civic activities. He is a past president of the Louisiana Engineering Society; past national director and southwest regional vice chairman of the National Society of Professional Engineers' Industry Practice Division; past president of the Engineers Club of New Orleans; member of the American Public Works Association, Gas Association, Southern Gas Association and Natural Gas Men of New Orleans; member of the Citizens Advisory Committee, New Orleans City Planning Commission; on the board of commissioners for the New Orleans City Park as well as president of the board; and a member of the chamber of commerce. He was the recipient of the 1972 LES Andrew M. Lockett Award for distinguished civic service.

Janssen follows a natural instinct for journalism. He is editor of the *Consultant*, a house publication of Waldemar S. Nelson and Associates with a circulation of about 900. He has prepared many articles



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for the LOUISIANA ENGINEER magazine, and his promotion of public relations throughout the Louisiana Engineering Society and the engineering profession has been outstanding.

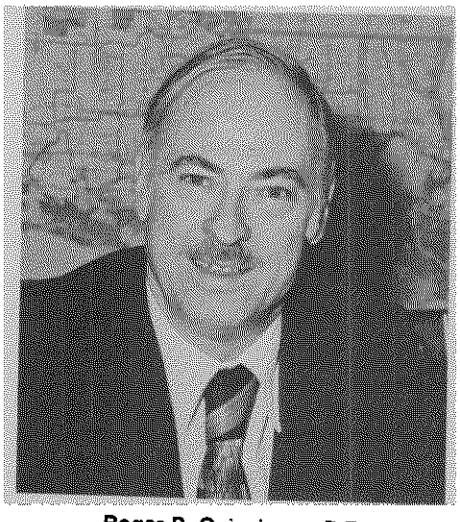
He served as a coordinator for a European tour during which U.S. engineers visited various foreign countries, meeting with engineers in those countries. He is a member of the Friends of the Cabildo and, in this capacity, occasionally conducts walking tours through the French Quarter.

He is married to the former Dorothy Grundmann from New Orleans. They have three children, two daughters and a son.

James S. Janssen is a worthy recipient of the Charles M. Kerr Public Relations Award. He has given freely of his time and resources to help improve the image of the professional engineer. His outstanding performance is in keeping with the ideals of the Charles M. Kerr Award.

A. B. Paterson Medal for An Engineer in Management

The Louisiana Engineering Society has a special award for the engineer who distinguishes himself in management. This is the A. B. Paterson Medal, which was first given in 1965. Albert B. Paterson, an active member of the Society from 1923 until his death in 1952, was an engineer, administrator, executive, banker, civic leader and humanitarian.



Roger P. Guissinger, P.E.

Roger P. Guissinger is a graduate of LSU where he received his BS and MS in civil engineering and also did graduate study in management. Upon graduation, he was employed in private practice. After service in the U.S. Army, he entered government practice in the employ of the Louisiana Department of Highways.

He progressed through various positions in the department's bridge design section, then to chief location and design engineer. He ultimately rose to the position of executive administrator. In this capacity, he was responsible for the planning and implementation of the department's consolidation of data processing facilities, its financial management program, its management systems for purchasing, right-of-way and project financing, and its accounting system.

With the reorganization and merging of the Louisiana Department of Highways with 16 other agencies, Guissinger was appointed undersecretary of the Louisiana Department of Transportation and Development, the new umbrella agency. He currently serves in this capacity and heads the department's Office of Management and Finance. He is intimately involved in the merging of the several agencies, with the goal of achieving improved efficiency and economy in state government.

Guissinger, a native of Arkansas and a long-time resident of Baton Rouge, is married to the former Gayle Sewell. He is the father of three daughters.

His patronage to his community and his faith are demonstrated by his active membership in the First United Methodist Church where he has recently chaired its administrative board, its council of ministries and serves in other church related capacities. He is a member and a past chairman of the board of FISH of Baton Rouge, a volunteer public service organization, and has served on the United Givers' Program Evaluation Committee.

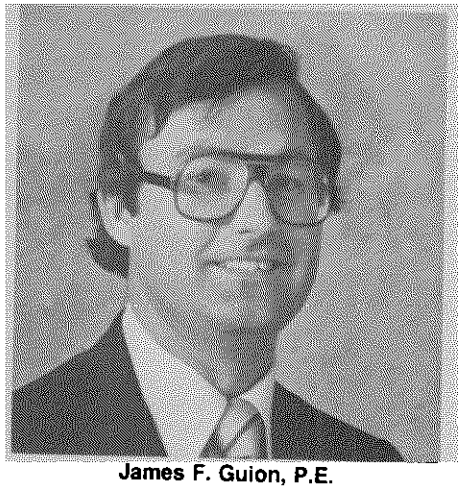
Combining his talents and interests in his profession with his concern for the welfare of others, Guissinger served as civil engineer consultant with a multi-disciplinary team on village development in India. This project, in which he is still actively involved, is sponsored by the Institute of Cultural Affairs and the government of India. Another mission took him to Israel as a consultant on bridge design and construction practices. This was a United Nations assignment.

Guissinger is a member of LES, a Fellow of ASCE and a member of the Louisiana Society of Professional Engineers in Civil Service.

The accomplishments and talents of Guissinger as a manager and professional engineer and his concern for others have served his state and represented his profession well. These credentials bear testimony to his worthiness as a recipient of the Society's A. B. Paterson Medal for an engineer in management.

F. Hugh Coughlin Young Engineer Award

This award is given to an engineer not over 35 years of age who has demonstrated to a high degree capabilities in his chosen field. Coughlin has been a member of LES since 1944. His interest in, and support of, young engineers was very instrumental in the establishing of this award. His name was added to the award in 1975.



James F. Guion, P.E.

James F. Guion, P.E., a native of Louisiana, attended Nicholls State University from 1963 to 1965 and Louisiana Tech University from 1969 to 1971 where he received a BS in mechanical engineering. He has completed 18 hours of post-graduate study toward an MBA at Nicholls State.

Guion's professional experience includes two years with Kerr McGee Corp. in Morgan City as a productive drilling engineer where he received extensive offshore experience in process and drilling.

For the past six years he has been employed by Chromalloy American Corp. as a project manager, chief project engineer and presently vice president of operation at Delta Fabrication, Chromalloy's Houma-based structural steel fabrication facility. The firm specializes in the fabrication and construction of production equipment packages and offshore structures.

He served four years in the U.S. Air Force from 1965 to 1969 with overseas duty in Viet Nam and the Philippines.

Guion has been active in engineering society and community affairs. He was president of the LES Bayou chapter in 1977-78 and is a past chairman of the Engineers Week and Membership Committees of the Bayou chapter. It is interesting to note that during the three-year period (1975-1978) that Jim Guion was a chapter officer, the Bayou chapter won the LES membership contest each year.

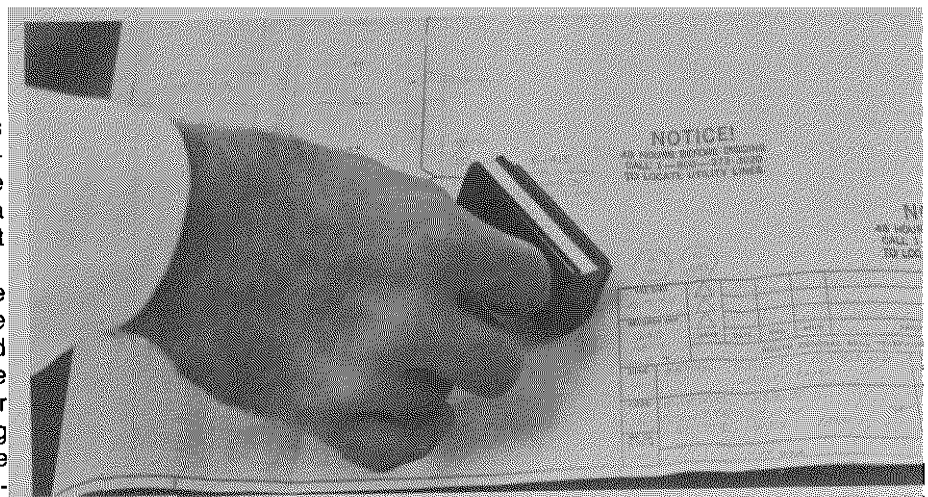
He is registered as a mechanical engineer in Louisiana and is a member of the Louisiana Engineering Society, National Society of Professional Engineers and the American Society of Mechanical Engineers. For two years he was a member of the St. Francis de Sales School Board.

He is married to the former Paulette Michel of Houma, and they have three children, two sons and a daughter.

Guion has demonstrated exceptional capabilities in his chosen field of engineering and has generated an enthusiastic approach toward professional achievement. His success can only serve to inspire and encourage other young engineers.

Call DOTTIE Before You Dig

By Debi Akchin,
South Central Bell



South Central Bell offers to send this notification stamp to any engineers who will put it to use on the maps they send to contractors.

If you work with a company in Jennings or Many, La., chances are that New Orleans seems like the other end of the world to you. But now excavators have a common link tying New Orleans to the rest of the state. That link is DOTTIE.

DOTTIE is an acronym for Dial One Time To Inform Everyone, a toll-free phone network to assist engineers and contractors in notifying utility and pipeline companies of their plans to dig. In other words, DOTTIE allows anyone intending to excavate, drill or blast to make one toll-free call to notify everyone of their digging activities rather than calling each company individually.

The DOTTIE System, first established by South Central Bell, began its operation in Louisiana in an eight-parish area surrounding Baton Rouge. The system was well received by engineers and contractors in the field and was rapidly expanded to serve all but six parishes surrounding New Orleans. On January 1, 1979, these final six parishes were cut over, resulting in a statewide operation now serving 30 participating utilities, pipeline companies and municipalities.

DOTTIE presently serves 30 participants, and it is anticipated that participation will increase with the recent addition of the New Orleans area. To encourage engineers to utilize the toll-free service, the DOTTIE Center supplies engineering firms with notification stamps for use on all prints to be issued to contractors.

There are presently over 100 one-call systems throughout the United States; however, not all of these systems serve an entire state. Studies conducted in those states which have a statewide system, reflect a 25% to 40% reduction in damages to underground facilities within the first year of operation; and DOTTIE's reduction figures exceed that range.

For instance, the Central Louisiana Electric Co-op reduced its damages by 44% from 1977 to 1978; and Gulf States Utilities reduced its damages by 56%. These reductions save utilities the expense of replacing ruptured lines and cut cables and save utility customers the inconvenience of having their service interrupted.

The DOTTIE Center is averaging 3,500 calls per month, according to Harold Burke, operations manager. "With the addition of the New Orleans area and our extensive advertising campaign, we expect to double our call volume by summer," reports Burke. "Four clerks have been added to the DOTTIE staff in anticipation of this increase, resulting in a total of 10 clerks who handle calls. During July, however, the system will change over to computer, allowing four clerks to handle as many as 8,000 calls each month."

All calls are recorded on a Dictaphone 4000 recorder, with the date and time each call was received magnetically imprinted on the tape. These tapes, along with each location request form, are filed and kept for three years as reference guides. This allows the DOTTIE Center to verify information received. The tapes also serve as documentation should litigation arise as a result of a cut facility.

It took two years to set up the system before operation began. One-and-one-half years of map work insures that every street and highway in Louisiana is included in DOTTIE's street index files.

Copies of quadrangle maps from the U.S. Geological Survey are supplied by DOTTIE to each prospective participating company for verification of pipeline and utility line locations. Based on information received from these companies regarding the location of their lines, cross-reference files have been set up covering all areas of the state.

When a contractor calls DOTTIE initiating a location request, the street location is cross referenced to determine which participating companies and municipalities are affected. Each company is notified of the excavator's plans to dig, and it is their responsibility to act individually. Cable locators are sent to the job sites, and the facilities are marked with color-coded markers.

Blue	— Water
Red	— Electric
Yellow	— Gas
Orange	— Communications
Green	— Sewer

DOTTIE supervisor Martha Nelson encourages diggers to be prepared before calling the center. According to Nelson, the DOTTIE clerks often receive calls from office personnel who only know the highway number where digging is planned.

"We need to know specific locations. We need the nearest intersecting street names as well as the nearest town or city and the parish," Nelson points out.

She adds that it is for the protection of the contractor or engineer that they call DOTTIE, and whenever possible, give the center 48 hours advance notice. Proper notice allows participating companies to mark their facilities before actual work begins.

It was in 1976 when the National Transportation Safety Board (NTSB) wrote to Gov. Edwards recommending that a one-call system be established in Louisiana. NTSB records show that there were 32 liquid pipeline accidents in Louisiana between 1968 and 1972.

"Those aren't the kind of accidents that just interrupt utility customers' service," Burke explains. "Those accidents take lives! And there is no way for the man operating a backhoe to know what's in front of him unless the lines are actually marked. He has no way of knowing if there is a high-pressured gas pipeline in his way which could kill him or a utility line which could inconvenience utility customers. Either way, his best protection is an advance call to DOTTIE," Burke says.

The DOTTIE staff is always available for presentations to any group. Nelson and Burke travel throughout the state presenting a film and an informative slide program promoting the nonprofit one-call system to all interested groups. Anyone needing further information regarding DOTTIE's services should contact the center by calling 1-800-272-3020 toll-free.

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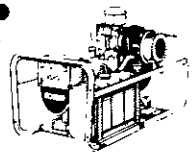
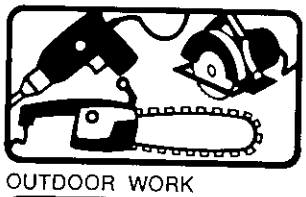
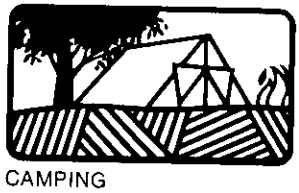




HOME STANDBY



OUTDOOR WORK



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LES Board of Directors Meeting Minutes

The following is a summary of the minutes of the March 9, 1979, meeting of the Board of Direction in Lafayette.

1. Seventeen members of the Board and three visitors were present.

2. The next meeting of the Board of Direction will be April 21 at the Sheraton Chateau Charles Motor Inn, to be held in conjunction with the spring meeting.

3. Carl Thomas, president, reported the membership status for the membership chairman. All chapters have moved forward. With 67% of the year completed, we have reached 63.3% of the quota. The Baton Rouge chapter is leading and was congratulated for reaching 98.4% of LES member quota and showing 165% in the overall contest.

4. The financial report through January was reported in order by John E. Ritter, secretary-treasurer. The only account not properly budgeted is the legislative account.

5. Chapter reports were given by the chapter presidents present. Each reported on "Engineers Week" activities, membership involvement and meeting schedules.

6. A California petition to allow the category NSPE Senior Associate Member to remain after 1980, and to approve putting the issue on the NSPE ballot was discussed and voted on. The Senior Associate Member is an engineering graduate but not registered. NSPE authorized this membership category in 1970 for 10 years with a cancellation date of January 1, 1980, in its constitution. California wants to continue the category and petitions all states for approval of placing the issue on a ballot for the NSPE membership to decide. The rules were suspended and LES voted 9 to 6 with one abstention to support the California petition.

7. The NSPE President's Conference will be held March 29-30, 1979, at Ohio State University, Columbus. Francis Roy, P.E., president-elect, was approved to attend.

8. A lengthy discussion was held on the Engineers Selection Board procedures. The selection board minutes reflect that the user agency member recommends the firm to the board for assignment of a project. It was moved and passed that the LES president appoint a committee to find out what would be the appropriate procedure to change this situation. The committee will present its recommendations at the next Board meeting.

9. The case West Baton Rouge Parish School Board vs T.R. Ray, Inc. was heard by the Louisiana Supreme Court. LES filed an "amicus curiae" brief on the case. The Supreme Court ruled unanimously in favor of the West Baton Rouge Parish School Board. It was felt by some members of the Board that the decision could be trouble for corporations offering engineering services. The matter should be investigated to clarify the issue. It was moved and passed that the Supreme Court decision be referred to the State Board of Registration legal staff for comments and opinions regarding the impact of the decision on the engineering profession in the business form of corporations.

10. The Board was advised that H. L. Henry's term on the Louisiana State Board of Registration would expire on July 31, 1979, and that the Liaison Committee is working on procedures to recommend nominees for this position.

11. Carl Thomas reports that LES individuals and firms have graciously sent contributions to support a social at the ASEE meeting to be held June 24-28, 1979, on the LSU campus.

12. Jackie Robbins, P.E., reported on the scholarship activities that are presently conducted by the LES vocational guidance subcommittee. He recommends that the Scholarship Committee be made a permanent standing committee of LES for improved performance. The Constitution and Bylaws Committee was directed to study the issue and report back at the next Board meeting with a recommendation.

13. Jim Porter, chairman of LES-PEG, reported his difficulty in getting nominations for the two positions on the Engineers Selection Board. The deadline for submitting nominees was March 1.

14. The LES president received a request from NSPE that $160 be contributed toward purchase of a painting entitled "Winter Quarters." It depicts Washington and Duportail discussing the future need for engineers. The painting was commissioned for the celebration of Washington's call for engineering education. It was unveiled at Brandywine Art Museum in 1978. Some NSPE members suggested that it be purchased and permanently displayed in the NSPE headquarters. The price is $8,000, and each NSPE state society was requested to contribute $160. The Board moved to table the motion for an indefinite period.

15. The Board authorized the formation of an Alpha student chapter, LSU, Baton Rouge.

16. Clarence Hall, LES Education Committee chairman, presented a questionnaire on engineering education relevancy. A tentative survey of 100 random members of LES was authorized. Later, it is planned to publish the survey in the LOUISIANA ENGINEER to obtain pertinent information from all members on the relevancy of engineering education.

17. A petition was presented to the Board regarding establishment of a student chapter at Tulane University. This will be acted upon at the April Board meeting.

18. The NSPE Southwest Regional meeting will be held in New Orleans on October 10-11-12, 1979, at the Monteleone Hotel. Jerrel Freeman, P.E., LES vice president, will be convention chairman for this meeting.

19. A delicious crawfish, red beans and rice luncheon prepared by Richard and Martha Dupuis was enjoyed by the Board at the meeting.

20. A Board meeting will be held June 1 at Louisiana Tech's lodge on Lake D'Arbonne, subject to Shreveport's concurrence in the change of meeting site.

Presidential Privilege

(continued from page 3)

A council of Academic Engineering Deans was formed by the LES, and this continues to be a viable organization where the administrators of our various engineering colleges in Louisiana can gather to study, evaluate, and make recommendations for improvements in our engineering education programs.

As you must have seen, the LES formalized a committee of prestigious and concerned engineers for the purpose of developing an Engineering Center through the Louisiana Engineering Foundation (LEF). This organization is off and running and should be highly successful. You will hear more of this effort and will be given the opportunity to offer your support.

LES maintains an active liaison with the State Board of Regents as we are very much interested in the educational programs in Louisiana.

This list could go on and on, but I wanted to mention a few of the responsibilities and privileges that we have as LES members and with which you might not be familiar. Add these to the standing activities such as legislation, ethics, education, professional practices, relations with other engineering societies, scholarships for engineering students, honors and awards, and it is very difficult for me to understand why there are so many engineers in Louisiana who will not join the Louisiana Engineering Society.

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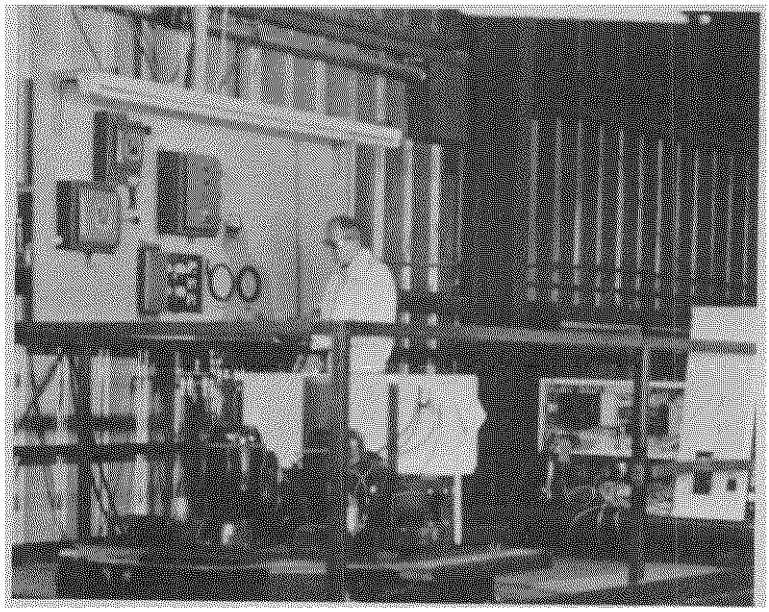

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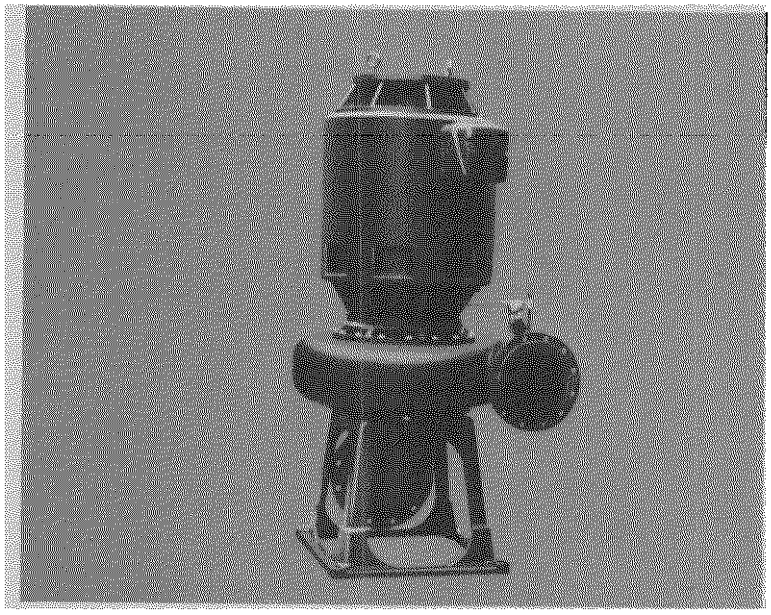

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LEF Support the La. Engineering Foundation

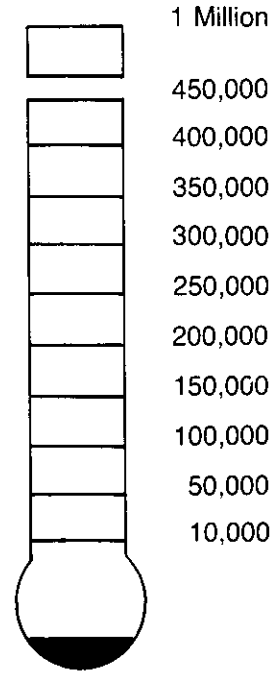
Thus far the mercury in the thermometer for the LEF building fund has barely covered the bottom. At present, there is a total of $2550 in the fund. We have one company on the Honor Roll for a contribution of $500 or more. We have 20 Founders who have contributed $100 or more, one Patron for a contribution of $50 to $100, and five Sponsors who have contributed up to $50.

The fund is growing, but we have a very long way to go. The Engineering Center will be a visible reminder of engineering to the people of Louisiana and the profession.

For those of you who have contributed, we are grateful. For those of you who have not, it is our hope that a check will be in the mail shortly. Use the coupon below.

One goal of the Louisiana Engineering Foundation is to develop a permanent Louisiana Engineers Center and to construct an Engineers Center Building in Baton Rouge.

It is proposed that this center will serve as the permanent headquarters for professional and technical societies and other engineering organizations. The funding for this venture will be through contributions from individual engineers, firms and companies which employ engineers.



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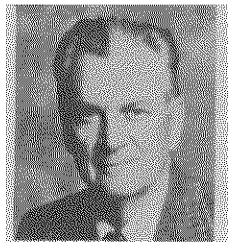


Potpourri

R. C. "Doc" Spears
LES Executive Secretary

MAJORITY OPPOSES LAY MEMBERS ON STATE REGISTRATION BOARD

The response to the article, "Should Lay Members Be On Licensing Boards?" which appeared in the February LOUISIANA ENGINEER with pro and con explanations and a coupon for members to voice their opinions shows the following:

Support lay members on the Board: 7 responses received. Comments were: engineer should be channeled into laymen's reasoning—thinking of lay members should help; board represents selfish interest of profession; inject fresh thought into profession; a small number of lay members would give credence to our profession.

Opposition to lay members on the Board: 62 responses received. Comments included: qualified professional engineers know needs and issues; laymen have no expertise in engineering; are lay members on medical and legal boards?; engineers by education, training and expertise are best qualified; present method works well; engineers are members of public and diverse enough to cover all angles of public interest; lay members are political appointees and as such advance themselves; just look what laymen have done to nuclear power options.

This sampling is not sufficient for a definite statement, but it is representative. It reveals that about 80% of engineers oppose lay members on the Louisiana State Board of Registration.

NSPE CREATES MASTER PLAN OF GOALS AND OBJECTIVES

The National Society of Professional Engineers, during its recent winter professional meeting in Oklahoma City, produced a literal road map for the Society's future. Significantly, the document titled **"Action 80,"** is the first codification, or master plan, produced by and for NSPE, which details goals, objectives and actions the Society intends to strive for and undertake in the years ahead.

In outlining its purpose, NSPE stressed that it is dedicated to serving the public, the profession and its own membership and will strive to insure application of engineering knowledge and skills in the public interest as well as foster public understanding of the role of engineering in society.

Among several defined goals, NSPE pledged: Incorporation of technical and professional engineering considerations in the enactment of public policy, laws and regulations at the national, state and local levels; Professionwide leadership on selected professional issues of importance to all segments of engineering; Wide public understanding and acceptance of the roles of engineers and engineering in our society; A high level of professionalism and technical competence in the practice of engineering with special emphasis on *public health and safety;* Cooperation and constructive action among engineering societies and among the professions.

LES SUCCESSFUL IN FILING BRIEF IN LEGAL CASE

The case **West Baton Rouge Parish School Board vs. T.R. Ray, Inc.,** in which CEC/L and LES filed an "amicus curiae" brief (covered in the February issue of LOUISIANA ENGINEER), has been decided. The Louisiana Supreme Court ruled the decision of the court of appeals is reversed, and the judgment of the district court is reinstated. The contract was declared null and void.

It was not the purpose of the brief filed to advocate generally the appellant's position or to otherwise seek judgment in favor of the West Baton Rouge Parish School Board. Rather, it was to show that the public cannot be protected if people who are not licensed to perform engineering services are allowed to contract for those services.

The Supreme Court's ruling is a landmark decision in Louisiana. It may have some rather far reaching consequences for the way engineers conduct their business.

The LES Board is concerned about this decision regarding the impact on engineering corporations. The Supreme Court decision has been sent to the State Board of Registration legal staff requesting comments and interpretations.

LES SUMMER MEETING TO BE HELD IN BILOXI

The Louisiana Engineering Society will hold its annual meeting on Monday, Tuesday and Wednesday, July 30, 31, and August 1, 1979, at the Broadwater Beach Hotel, Biloxi, Miss.

Sammie Lee, P.E., president of NSPE, will attend the meeting. He will conduct a program on the NSPE "Action 80" on Tuesday morning and install the 1979-80 LES officers that evening at the installation banquet.

Mark the dates July 30, 31 and August 1, 1979, in Biloxi as the place to go with your family. This will be LES's first time to meet on Monday, Tuesday and Wednesday instead of the routine Thursday, Friday and Saturday.

NSPE, AVIS HAVE NEW RENTAL CAR AGREEMENT

NSPE has recently concluded a very attractive agreement with AVIS for rental car service discounts. Members will be able to obtain a 25% discount on regular rentals and mileage rates plus a 15% discount on a few miscellaneous special plans.

Just present your NSPE membership card with the AVIS ID number A/A622400 written along the bottom of the card.

BATON ROUGE CHAPTER BRIEFED ABOUT LEF

Over 135 engineers and guests attended the Baton Rouge chapter crawfish and shrimp boil on March 14 at the LSU Nelson Center. **Vince Forte, P.E., Leo M. Odom, P.E., Roger Richardson, P.E., and R.C. Spears** briefed the attendees about the Louisiana Engineering Foundation.

The briefing was successful because **Harold Williamson, P.E.,** president of the Baton Rouge chapter, had his name pulled from a hat by **Bonnie Gautreau** for a $71 door prize. He added $29 to the prize and became a Founder of the LEF.

CENTER FOR ENGINEERING AND BUSINESS ADMINISTRATION (CEBA)

The extensive $16.5 million facility, **CEBA,** was dedicated on Tuesday, March 13, 1979.

In 1966, it became apparent to **Roger Richardson, P.E.,** LSU dean of engineering, and **William D. Ross Jr.,** dean of business administration, that there was an industrial need for employees who understand both the sophisticated technology and the demanding economics of our modern industrial society, employees who could become managers of industrial enterprises; who could speak and understand the language of the banker, the lawyer, the statistician and computer expert; and who could make sound decisions based on the complex information that modern technology and management science could provide.

The CEBA building was occupied in late 1978. It is now an active and vital part of a thriving University community. It stands as a monument to the efforts and dedication of many individual contributors and to the generosity of industries and businesses in the region.

Members of the LES should be especially proud of this project because the Society gave it full support and made a generous financial contribution.

ENERGY-SOURCES TECHNOLOGY CONFERENCE AND EXHIBITION

The annual Energy-Sources Technology Conference and Exhibition will be held February 3-7, 1980, at the Rivergate Convention Center in New Orleans. This broadly based international conclave will feature related and overlapping technologies in a comprehensive program of technical sessions and an exhibition of equipment and services representing leading suppliers to the energy sources industries.

The 1980 conference and exhibition will be sponsored by the American Society of Mechanical Engineers. Several other professional engineering groups are expected to participate in the technical program.

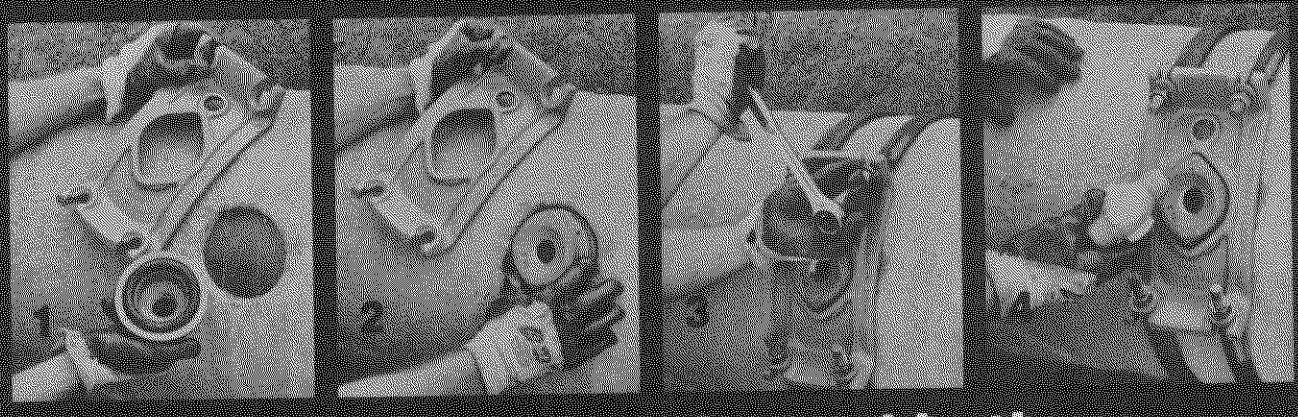
NATURAL BRIDGES MONUMENT IS SITE OF NEW POWER SYSTEM

The Natural Bridges National Monument in southeastern Utah will be the site of the largest photovoltaic power system ever constructed. The system is expected to be in operation by the beginning of 1980.

MIT/Lincoln Laboratory, under the sponsorship of the U.S. Department of Energy and in collaboration with the National Park Service, is managing the design, fabrication, installation and testing of the 100-kilowatt peak photovoltaic (PV) power system at the park.

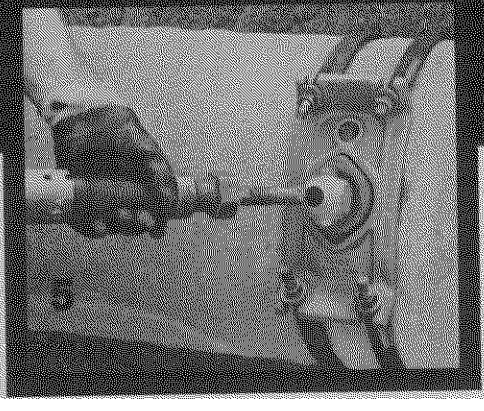
Ford, Bacon & Davis, an international engineering and construction firm, will be responsible for performing system design and analysis for MIT/LL, as well as detail design of certain items in the course of completing the total design. In addition, FB&D will handle the construction and maintenance of the system as well as the training of personnel for MIT/LL and the National Park Service.

There's no blow-out gamble when Concrete Pressure Pipe is tapped



because...the safe-seal is there...

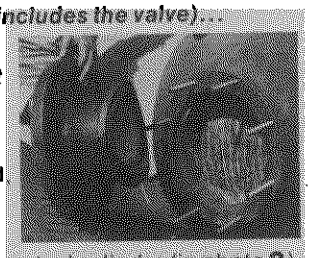
before the hole!



One of the many advantages of Gifford-Hill-American Concrete Pressure Pipe is that it can be tapped under pressure . . . **easily and economically** . . . using standard tapping equipment and established tapping methods.

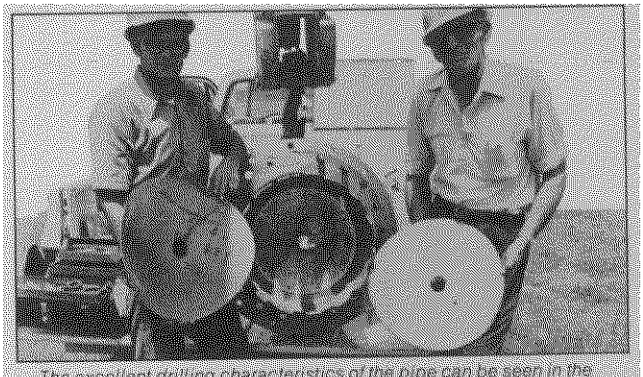
Tapping procedures are simple on any tap – whether ¾" or 42", threaded or flanged, 50 or 350 psi – for this same safer sequencing technique is used on all of them.

The tap's safe-seal (which includes the valve)... is finalized... and tested... before the tapping hole is cut into the pipe. (photos **1** to **5**).



The key to this safe-seal is in the tapping assembly gland with its o-ring rubber gasket (shown at right and photo **1**), which is positioned against the steel cylinder (in photo **2**), and compressed (in photo **3**) for a watertight, safe seal.

The precision, factory-cut threads in the gland provide a perfect connection for the corporation stop (photo **4**).



The excellent drilling characteristics of the pipe can be seen in the near perfect condition of the removed steel and concrete cores.

G-H-A is equipped to make pressure taps from 3/4" through 42".

A complete stock of tapping assemblies is maintained for immediate shipment to those desiring to make their own taps.

Let G-H-A give you "peace of mind" with Concrete Pressure Pipe – manufactured in **diameters from 10"-through-144"** – for pressures through 350 psi – all of which is easily and economically tapped under pressure... ***without introducing a gamble.***

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Board of Registration's Annual Report

Regular meetings of the Board were held in February, March, May, July, September and November.

The tabulation that follows indicates actions taken by the Board on applications for the registration of Professional Engineers and Land Surveyors and for the certification of Engineers-In-Training and Land Surveyors-In-Training.

Professional Engineers

Applications approved on the basis of	
Graduation Plus Experience	400
Experience Plus Examination	53
Long Established Practice	7
Reciprocity	200
Applications disapproved	36
Applications withdrawn	42

Land Surveyors

Applications approved	22
Applications disapproved	7

Engineers-in-Training

Applications approved for certification	437
Applications disapproved	212

Land Surveyors-in-Training

Applications approved for certification	11
Applications disapproved	12

The following is a tabulation of the total number of Professional Engineers, Land Surveyors and Professional Engineers (Public Employees), Engineers-in-Training and Land Surveyors-in-Training holding registration and certification as of December 31, 1978:

Professional Engineers	12,801
Land Surveyors	3,219
Engineers-in-Training	2,133
Public Employees	44
Land Surveyors-in-Training	21

Below is a tabulation of the number of Professional Engineers registered in the various branches as of December 31, 1978. Some persons are registered in more than one branch:

Agricultural	151
Chemical	1,140
Civil	4,880
Civil/Industrial	2
Electrical	2,139
Industrial	111
Mechanical	3,521
Mechanical/Industrial	51
Metallurgical	33
Mining	34
Petroleum	1,144
Petroleum/Industrial	1

A total of 784 persons took examinations in fundamental engineering subjects during 1978. These examinations were given on April 15 and November 4 in Baton Rouge, Lafayette, New Orleans and Ruston. Other examinations were given in New Orleans on the same dates. Of these, 80 applicants took examinations in principles and practice of engineering, 9 in the fundamentals of land surveying, 12 in the principles and practice of land surveying, and 8 in the laws and procedures of land surveying in Louisiana.

The regulations that govern corporations and other firms that provide or offer to provide either engineering or land surveying services were revised in 1977 to require annual renewal of qualification each year. A total of 585 firms have qualified under the provisions of the new regulations. Most of these have been issued certificates of qualification. Renewal notices will be sent to these firms in May 1979.



Seated, from left, are: Fred C. Culpepper, P.E., James W. Reeves, P.E., secretary, James L. Meyer, P.E., chairman and Chris Demopulos, P.E., vice-chairman. Standing, from left, are: H. L. Henry, P.E., Andrew M. Moore, P.E., Larkin B. Agnew, P.E., Arthur R. Theis, P.E., A. J. Brouillette, L.S. and Daniel H. Vliet, P.E.

During the year Gov. Edwards appointed three members to the Board. H. L. Henry Jr., associate dean of engineering at Louisiana Tech, was appointed to fill the unexpired term of Ben T. Bogard, who died February 19, 1978. Edward J. McNamara, vice president of Freeport Sulphur Company, was appointed to replace Roy T. Sessums, whose term of office expired. Arthur R. Theis, chief engineer, Louisiana Office of Public Works, was appointed to fill the unexpired term of Sidney L. Poleynard, who resigned in September.

In August Roy T. Sessums received the highest award of the National Council of Engineering Examiners, a Distinguished Service Certificate with Special Commendation. Sessums, past president of the council, is the fourth person from Louisiana to receive this honor. Only 11 persons in the United States have received this award.

Section 3 of the Registration Law, Act 73 of 1950 as amended, specifies practice areas that must be filled by members of the Board. With references to the above section of the Registration Law and in accordance with the Bylaws of the Board, the following list was approved for publication in this report:

Private Practice of Engineering:
Chris Demopulos, James L. Meyer and Fred C. Culpepper

Engineers in Government Employment:
Larkin B. Agnew and Arthur R. Theis

Engineers Employed in Industry:
Edward J. McNamara and Andrew M. Moore

Engineers Employed in Education:
H. L. Henry and James W. Reeves

Professional Engineer and Land Surveyor Engaged in Land Surveying:
Chris Demopulos

Professional Land Surveyor:
A. J. Brouillette

The requirements for the registration of Professional Engineers on the basis of Graduation Plus Experience were changed effective July 1, 1978. Now, in addition to the written examination in fundamentals, applicants must pass eight-hour written examinations in the branches of engineering in which they seek registration. Those registered under the new requirements would be able to qualify for registration as Professional Engineers on the basis of reciprocity anywhere in the United States without further examination.

In 1978 the Board held three hearings involving possible violations of Section 20 of the Registration Law. As a result of those hearings the certificates of registration of four persons were revoked. Two persons had their certificates of registration suspended for periods of six months. Based on the results of a hearing in late 1977, the firm ECA Engineers and Contractors was found guilty of misrepresentation, gross negligence, gross incompetency and violation of contract, and its authority to provide or to offer to provide engineering services in Louisiana was revoked.

LES MEMBERSHIP CONTEST STANDING AS OF MARCH 5, 1979

Percent of Year: 67%

Position	Chapter	Chapter Chairman	Quota	Applications	% Quota	NSPE	NET	Contest
1	Baton Rouge	G. Morris	62	61	98.4	41	102	164.5
2	Bayou	J. Guion	19	14	73.7	10	24	126.3
3	Lake Charles	J. Stevens	20	15	75	9	24	120
4	Monroe	J. Robbins	21	16	76.2	9	25	119.1
5	Shreveport	D. Richardson	31	20	64.5	14	34	109.7
6	Alexandria	M. Flynn	12	8	66.7	3	11	91.7
7	Lafayette	K. Deal	37	19	51.4	9	28	75.7
Last	New Orleans	M. Firmin	125	54	43.2	38	92	73.6
		TOTALS	327	207	63.3	124	340	104

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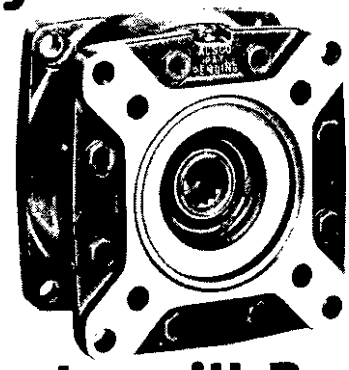

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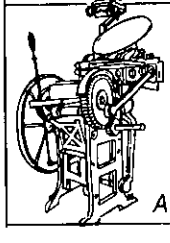

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EngiNEWS

Bovay Announces Some Organizational Changes

The Baton Rouge office of Bovay Engineers, Inc., has made several management organizational changes aimed at directing the office's projected future growth.

Wayland P. Marcombe, P.E., will assume the position of manager of the new Electrical Department at Bovay. Besides providing the electrical design requirements on all projects, this department will also assume responsibilities for instrumentation design requirements.

Wayland is a 1962 graduate of LSU with a BS in electrical engineering. He is a member of LES, IEEE, NSPE and ISA and is registered in Louisiana. Wayland joined Bovay as a principal engineer in April 1978 and brings to this position almost 17 years of engineering experience; seven years in the aerospace industry and nine with Ormet Corp.

Robert P. Blanche, P.E., will take on the job of manager of the Project and Resident Engineering Division. This division will also assume the additional duties of technical sales assistance in providing the necessary technical input and support to the Business Development Department.

The new function of engineering scheduling will also be included within Blanche's area of responsibility. It is anticipated that under his direction Bovay can establish a stronger project oriented organization.

With the pending start of construction work on the Cajun No. 3 Power Plant for Cajun Electric Power Cooperative next spring, the need for developing a second resident staff will be forthcoming.

Blanche is a 1961 LSU graduate with a BS in mechanical engineering. A member of LES, ASME, ASHRAE and NSPE, he is registered in Louisiana and Mississippi. Blanche brings to this position almost 18 years of engineering experience; two years in the aerospace industry, two years of equipment sales and applications and seven years as a principal with Denson Engineers, Inc., of New Orleans. He is an associate of Bovay, having joined the firm five years ago.

David M. Kernion, P.E., will become the manager of the Design Division at Bovay. He is a 1968 graduate of USL with a BS in civil engineering. He is registered in Louisiana, South Carolina, Maine and Alabama.

Kernion joined Bovay in December 1978 as a principal engineer, bringing almost 11 years of engineering experience—two years with Avondale Shipyards, four years with Brown & Root and five years with The Rust Engineering Co.

He has experience as a design engineer, lead engineer, project engineer and Structural Department manager.

Culp Joins FB&D As Senior Engineer

Harold L. Culp has joined Ford, Bacon & Davis Construction Corp. in Monroe, La., as a senior staff engineer with the engineering and power section.

Culp has 17 years of operational experience with International Paper Co., and prior to joining Ford, Bacon & Davis he was primary manufacturing superintendent for the company's Bastrop, La., plant. In that capacity he was responsible for the operation and cost of the pulp mill, power plant and woodyard departments.

He is a 1962 graduate of the University of Arkansas where he earned a BS in mechanical engineering. Culp is a member of the American Society of Mechanical Engineers and a registered professional engineer in the state of Arkansas.

IN MEMORIAM
John J. Malarkey, P.E.

A loyal member of the engineering profession and the Louisiana Engineering Society, John J. Malarkey passed away on Feb. 10, 1979, at the age of 60.

Mr. Malarkey was a native of Frackville, Penn. He had lived in Lake Charles for 37 years and worked for the Olin Corp. for the past 32 years as a cost engineer. He was a U.S. Air Force veteran serving in WW II, and he retired from the service as a lieutenant colonel.

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He joined LES in 1952 as an affiliate, becoming a member in 1977 when he became a registered professional engineer in Louisiana. He was a member of the National Society of Professional Engineers, American Association of Cost Engineers, Industrial Management Club and the American Legion.

The Society extends its deepest sympathy to his wife, Mrs. June Malarkey, and his four daughters and son.

IN MEMORIAM
Lew J. Bremenstul, P.E.

The sudden and tragic death of Mr. Bremenstul in New Orleans on Feb. 22 came as a grievous shock to his co-workers at Waldemar S. Nelson and Co. He had been with the company since 1959.

Born in New York City in 1918, he came south as a young man. In 1942 his engineering studies at the University of Texas were interrupted because of World War II. From 1942 to 1946 he served in the Corps of Engineers of the U.S. Army, during which time he achieved the rank of major.

After leaving the corps, he resumed his studies at Tulane, graduating in civil engineering in 1953. His broad career included field engineering and surveying and design and construction of airfields and ports as an operations officer in the U.S. Engineer Corps. He employed the knowledge acquired in these fields in conducting courses in construction methods and contracts and specifications at Tulane.

Lew was a family man, devoted to his wife Dorothy, his two daughters Gail and Minia, his two sons Lew Jr. and Brian, and his five grandchildren. He was attentive and loving to his mother, Mrs. Minia Bremenstul of New Jersey, and to his sister, Mrs. John Dolecki, also of New Jersey.

His professional activity was equally widespread and included registration as a civil engineer in Louisiana and membership in the Louisiana Engineering Society, the National Society of Professional Engineers, the American Welding Society, the Society of American Military Engineers and the American Public Works Association.

The Louisiana Engineering Society extends its deepest sympathy to his family.

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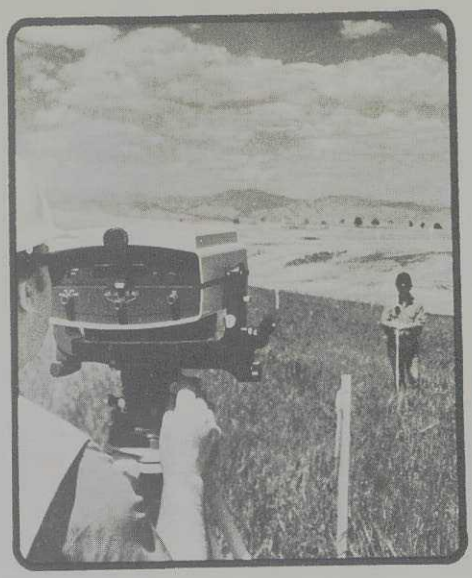

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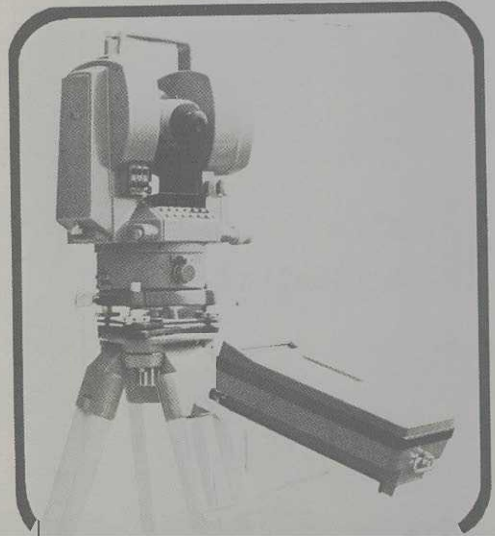

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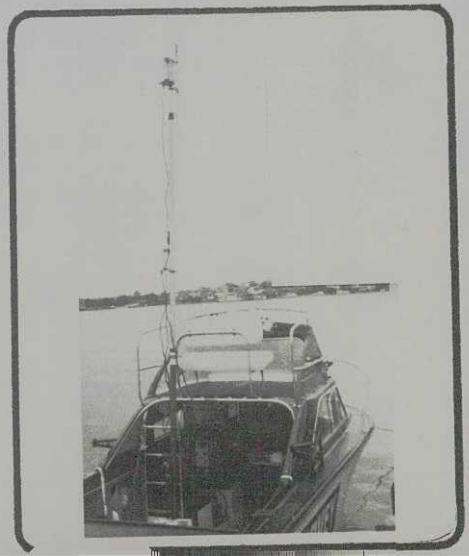
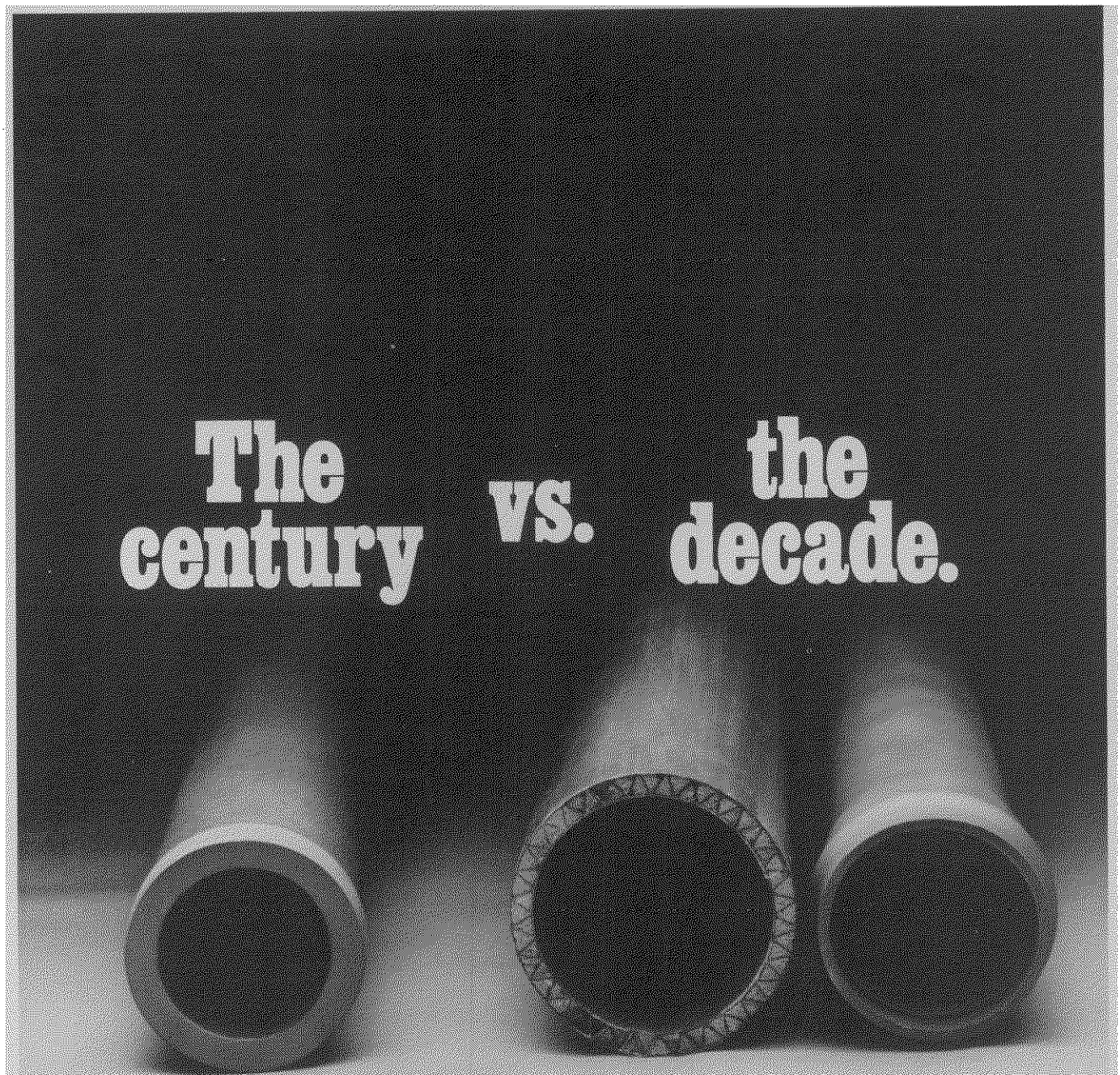


LOUISIANA ENGINEER
June, 1979



Congratulations to Corps of Engineers' Waterways Experiment Station on Its 50th Anniversary.



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About the Cover:

This fixed-bed model of Alexandria Reach, Red River, LA, was built to help determine the effectiveness of remedial work—channel alignment and dike design — to improve navigational conditions through a system of five bridges. Notice the radio-controlled towboat being maneuvered under a bridge.

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Army Corps of Engineers' Waterways Experiment Station Is Unique Reseach Center

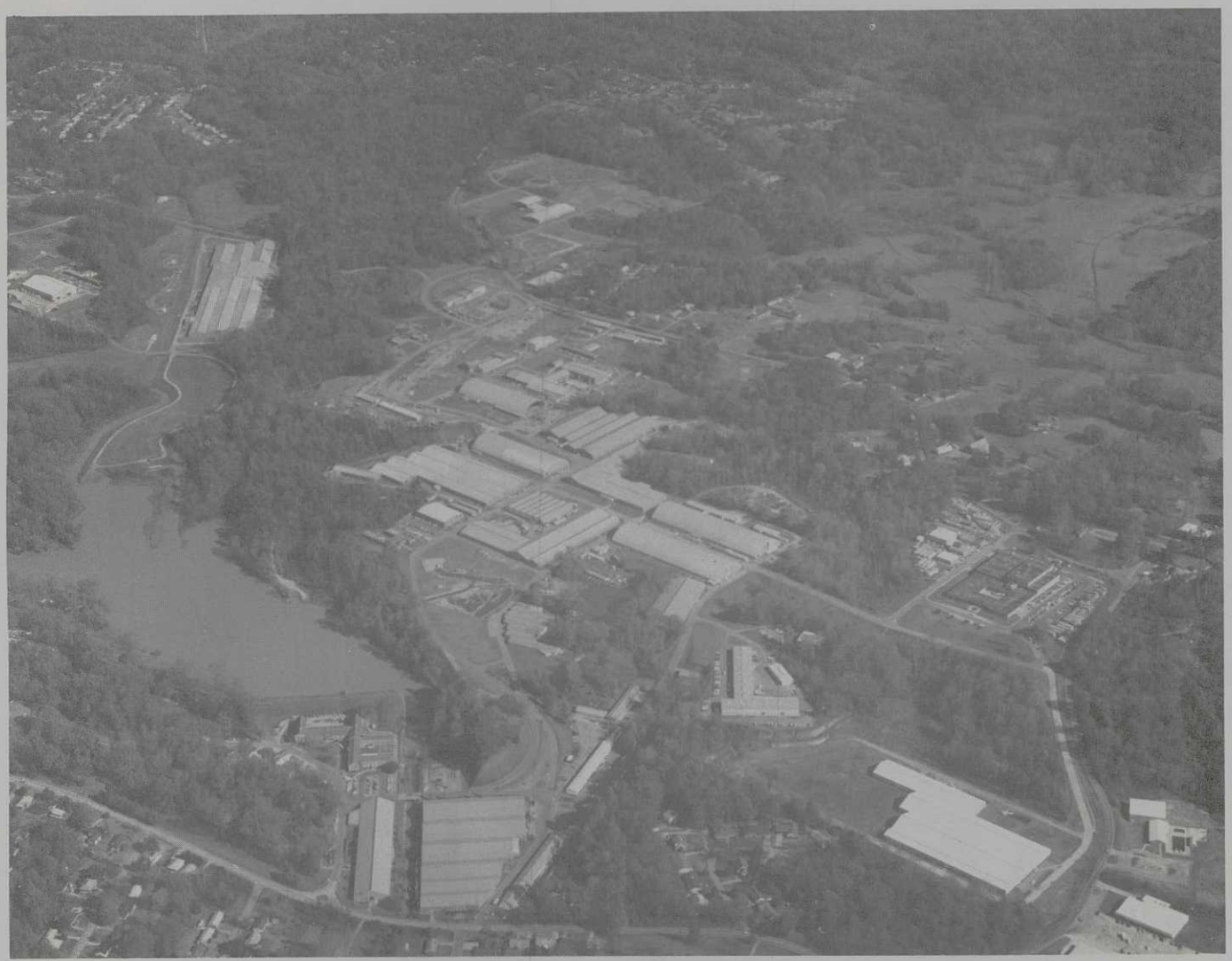
Fifty years ago just south of Vicksburg, MS, a surveying team began to lay the boundaries for a small government testing facility. No one realized at the time that this was the birth of a unique research center which would bring revolutionary changes to the science of engineering.

Indeed, the establishment of the U.S. Army Engineer Waterways Experiment Station (WES) was modest. When 1st Lt. Herbert D. Vogel and his staff of 12 civilians began their studies, hydraulic model testing in America was in its infancy. Many engineers were skeptical, although scale models had been used for years in other countries to solve hydraulic problems.

WES proved its worth with the very first model test. Engineers had carved a scale version of the Illinois River into the ground with grapefruit knives to determine the limit of Mississippi backwater. Congress used the results of the WES test to establish the limit as Mile 120. With this official endorsement, WES was off to an encouraging start.

In the years since, WES has built a reputation for engineering excellence in ever-broadening fields of research. The original mission, conceived in the aftermath of the 1927 flood, was to assist the Mississippi River Commission in developing a comprehensive flood control plan for the river. Expansion of research facilities began almost immediately, when engineers recognized a need for soils testing to aid in designing the levee system and to ensure the adequacy of foundations.

WES has continued to add and develop research facilities, becoming the largest and most diverse research and testing laboratory of the U.S. Army Corps of Engineers, supporting both civil and military missions of the corps. Today, the reservation covers nearly



The U.S. Army Corps of Engineers' Waterways Experiment Station located on 685 acres southeast of Vicksburg, MS. The headquarters building is located between the road and the lake on the left; other buildings house the administration units of the four technical laboratories, hydraulic models and other test facilities.

700 acres and employs about 1400 civilian and 35 military workers. Over half of these are professionals, representing almost every discipline of science and engineering.

Research is conducted within a four-laboratory organizational structure. The Hydraulics Laboratory is the world's largest, using basic and applied research to develop environmentally sound, economical solutions to water related problems.

The principal tool of the laboratory is the scale model; however, an equally strong computer-based capability for solving certain problems has also been developed.

Investigations by the Hydraulics Laboratory fall into four basic areas: inland waterways, estuaries, wave action and structures. Models take various forms as prescribed by the nature of the problem.

Inland waterways problems studied to develop flood control plans often require model reproduction of several miles of streams and backwater areas. These investigations use fixed-bed models which are molded in concrete. They are built to scale, usually with a much larger vertical than horizontal scale. This distortion reduces the area required for the model study while maintaining a measurable depth. Information derived from these studies primarily includes flood heights and total discharge.

WES pioneered in movable-bed modeling, using a granular material to give the model an erodible bed. This type of model, is used to develop and test river regulation plans. In addition to physical models, computerized simulation models are also used in planning and for operation studies of inland navigation.

Estuary studies usually call for fixed-bed models. However, to reproduce predominating forces of nature, the model may include granular material to represent shoaling or beach sand, salt water to simulate the ocean, tide generators and wave machines. One model even required rotary fans to simulate ocean breezes.

Problems created in nature by waves are solved by studying waves in miniature on scale models. Engineers can simulate the size, frequency and direction of small, average and storm waves to develop an adequate design for harbors or beach protection, or modifications to existing structures.

Geotechnical Laboratory

The Geotechnical Laboratory was formed about two years after WES was established to provide capabilities in testing soils for design and construction of flood control methods. Initial tests were mechanical analyses of samples of bed load and sediment from the Mississippi River.

Testing was soon expanded to include sieve analyses, hydrometer analyses, Atterberg limits tests, consolidation tests, direct shear tests, water analyses and simple chemical tests. At the time, WES had the only soils testing laboratory in the Corps of Engineers with these capabilities.

World War II, the Korean War and the Vietnam War brought significant changes to the work of the laboratory. Activities now include: research, investigation and testing services in soil mechanics; structural foundation design; embankment design and slope stability; also, seepage analysis, airfield pavement design, engineering geology, rock mechanics, expedient surfacing, surface preparation, earthquake engineering, mobility, and trafficability.

WES has been, for many years, the principal developer and tester of landing mats for expedient surfacings for Army and Air Force aircraft. This research and development has brought about a reduction in cost as well as weight per square foot.

Another area of concern is the effects of earthquakes on earth dams or other structures, and the design of structures where safety of operations might be in question. WES is conducting geological and seismological tests for the Susitna project in Alaska, involving proposed dams 700 and 800 feet high.

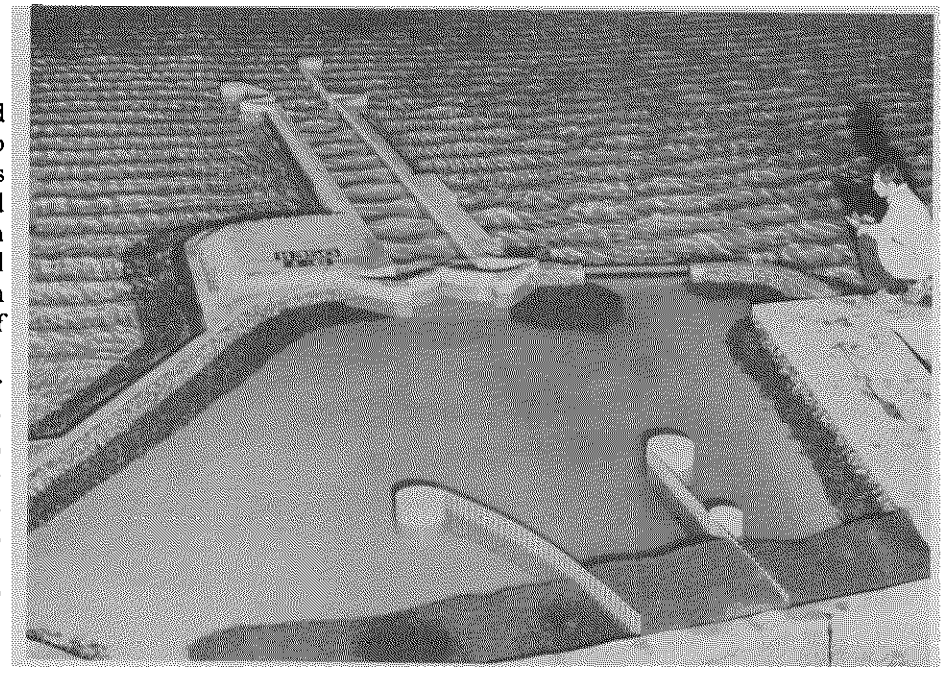
Structural Systems

The Structures Laboratory conducts research to determine the effects of nuclear and non-nuclear explosions and the response of surface and subsurface structures to natural and explosive disturbances.

The laboratory also determines the effectiveness of various design concepts in withstanding such disturbances, evaluates the behavior of soils under dynamic conditions and develops information on construction materials and structural systems.

WES structures research began when the Corps of Engineers' concrete testing capabilities were consolidated at WES in 1946. This research includes developing specifications for mixes with reduced cement-to-aggregate ratios and substituting less costly materials for the most expensive ingre-

Continued on page 8



This model study of the proposed Seabrook Lock is part of a hurricane flood protection project on Lake Pontchartrain near New Orleans. High wave conditions (up to 5') in the vicinity of the lock site could make navigation in the lock entrance hazardous. A breakwater has been proposed to provide wave protection at the lock entrance, but a large hole (up to -62') just lakeward of the lock site — the result of dredging operations to get material for the New Orleans Lakefront Airport — may necessitate the building of a floating structure, though a fixed structure, or a combination of the two, is still under consideration. To be acceptable, the improvement plan must reduce wave heights to 2' at the lock entrance.

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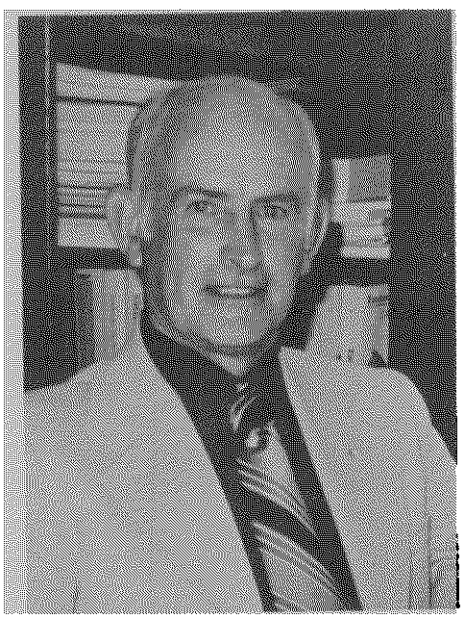


Carl H. Thomas, P.E.
LES President

As my term as president of the Louisiana Engineering Society draws to a close, I must reflect briefly on some of the things that have happened as well as some activities that didn't take place. Many routine LES functions went on as usual, while others experienced some bumps.

The frustrations associated with a professional society appear to be centered around self-sufficiency instead of a real concern for the public. This is nothing new and it probably won't change within any recognizable future.

The forever struggle for survival won't permit us to stray too far from our own self-pity. What a glorious feeling it must be to be able to put others before ourselves! What does it take to wake us up to the fact that our personal concerns and interests should not always be visible?

We have had a year of inactivity in several areas. This is normal, but it is also exasperating for our chairmen of the various committees and practice divisions. It should be recognized, however, that inactivity is not all bad because conflicts encourage activity. When things are going well, our activities are lulled to a slow pace.

On the positive side, I thank so many individuals who have made this a great year for me. All of our committee and practice division chairmen performed a task for our society. And I sincerely appreciate the sincerity and concern that you chairmen have for people. You did not turn your backs on problems but faced them with the best you had to offer. You experienced frustrations and sometimes felt that everyone let you down, but you didn't give up. Thank you so much for your efforts.

I must thank the LES office staff. Not **once** did I make a request that was not fulfilled. The members of LES cannot possibly realize the total efforts of this staff and its ability to schedule and anticipate actions that make such an organization function.

The heart of this society is the chapter officers and their boards of direction. Let me commend the members for their selection of chapter leaders. I hope and feel confident that incoming President Francis Roy will have such a fine group to work with next year.

Our representation on regional and national bases with the National Society of Professional Engineers has been phenomenal. This is evidenced by the large number of LES members who have attended and participated in so many NSPE activities.

Our vice-president for the southwest region of NSPE, Waldemar Nelson, has performed with distinction and deserves national support to become the 1981 president. LES is fortunate to have had so many fine engineers who have worked so closely with and have had such significant influence on the functions of NSPE.

I want to congratulate the newly elected state and chapter officers of the LES. Our confidence and trust rest with you to lead our organization for 1979-80. I hope the members will offer their support, advice and commendations for our leaders, will serve when called upon, and will refrain from unjust criticisms when things aren't being done as they think they should.

Several significant accomplishments affecting engineers were realized during the past year. To mention a few of them, the Louisiana Engineering Foundation was chartered and is picking up steam. This organization should involve all engineers in Louisiana as well as those out of state. I urge your support of this foundation.

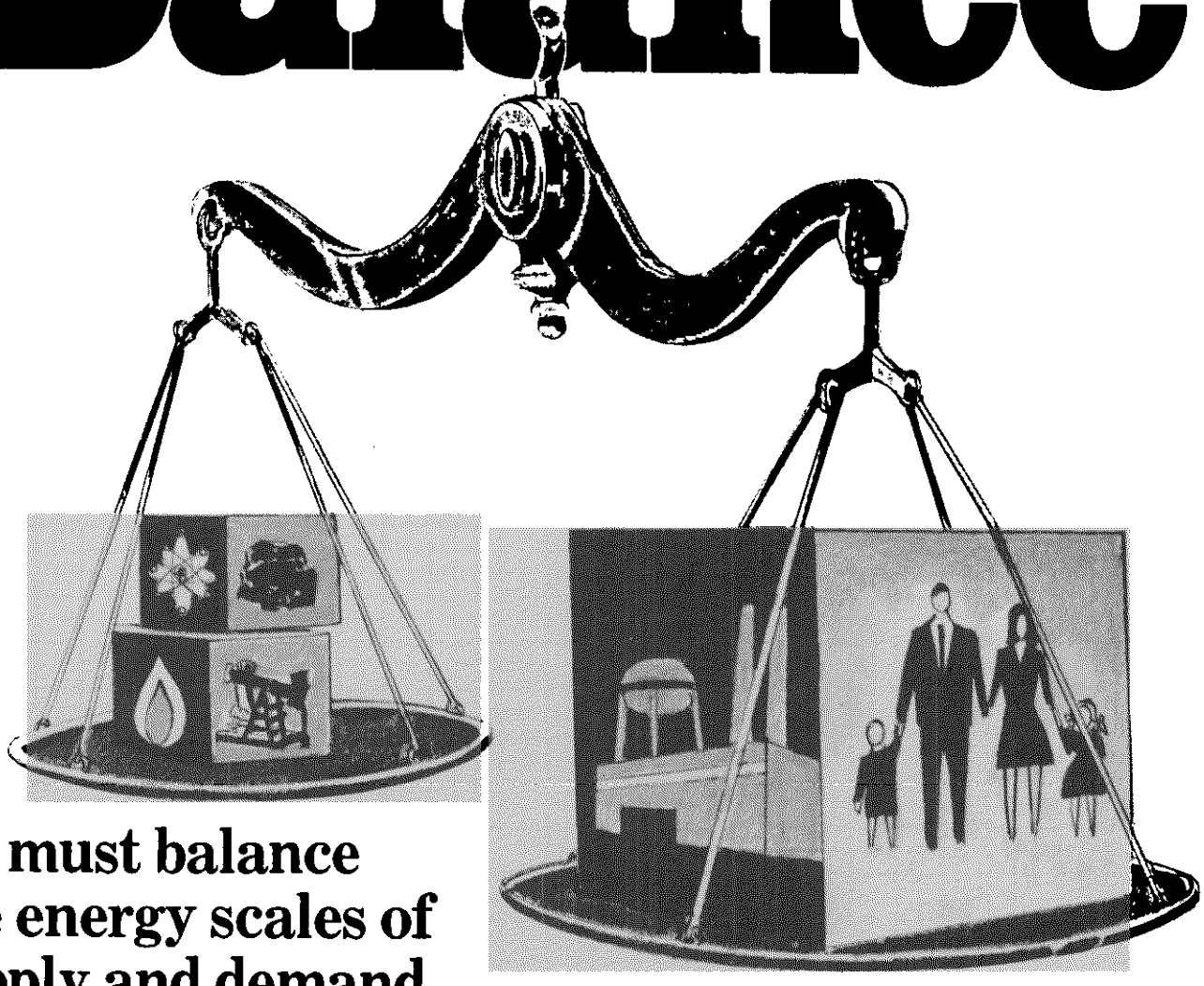
The new Center for Engineering and Business Administration at LSU was dedicated. This facility is a major accomplishment for all those people involved in its planning, for which LSU-BR can be proud.

Six of our outstanding engineers received the prestigious awards given by the LES. They are Pierre Lapeyre, P. E.; Fred Culpepper, P. E.; Hugh Balfour, P. E.; James Janssen, P. E.; Roger Guissinger, P.E.; and James Guion, P.E.

More engineers were registered during the past year than any year since the initiation of the registration law. This resulted in approximately 100 new members of LES through our new introductory membership program following registration.

I'd have to sum it up as a pretty good year for LES. It was a fabulous year for me. May the next year be the best ever.

Balance



We must balance the energy scales of supply and demand.

The shortage of conventional fuels such as natural gas and oil, and the growth in population and industry in our area, have increased the need to find new sources of energy and improved ways of using old sources.

Energy sources such as fusion, solar, wind and geothermal could offer some help in the years to come. But for the immediate future, competent studies show that these sources cannot make significant contributions to our energy supply. We must rely increasingly on the use of nuclear power and coal for generating electricity. Coal is America's most abundant natural fuel resource and geologists estimate that at the present rate of comsumption, there is enough coal to last our country for several hundred years.

As for nuclear power, it has been endorsed by an overwhelming majority of scientists in this country and throughout the world. The records show that nuclear power is safe, and environmentally acceptable.

The law of supply and demand. It applies to electric energy just as it does to any other product. And nuclear power and coal can help balance the scales.

Energy Producers Who Believe In America's Future

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Central Louisiana Electric Company.. Gulf States Utilities Company...Louisiana Power & Light Company...New Orleans Public Service Inc....Southwestern Electric Power Company

EXPERIMENTAL STATION
Continued from page 5

dient, portland cement; also, reduction in the amount of portland cement through the use of fly ash or other pozzolans.

WES studies have demonstrated that concrete for massive dams can be made with as little as one bag of cement to a cubic yard of concrete, using about twice that much fly ash filling with gravel, cobblestones and water.

The laboratory has also experimented with reinforced concrete, employing unusual materials instead of steel rods and bars. Some of the experiments have included fiberglass-reinforced plastic rods, which are stronger and noncorrosive, and split stalks of bamboo.

The concrete testing facility consists of over 90,000 square feet of working space. The laboratory also maintains an exposure station at Treat Island, ME, where specimens can be subjected to alternating cycles of freezing and thawing or wetting and drying.

Explosives testing became a WES capability in 1961 when the station was asked to study underwater explosions and their effects for the Office, Chief of Engineers. Since then, the laboratory has developed theoretical, analytical and experimental methods for providing planning data for offensive and defensive operations. Investigations are concerned chiefly with the design of protective structures to resist blasts, and with the study of underwater and underground shock effects.

The laboratory operates a number of special testing and blast simulation facilities, including the large blast load generator. This is used for simulating the pressure-time histories of blast loadings from kiloton and megaton weapons and to investigate phenomenology and evaluate the response of underground protective structures.

Dynamic pressure up to 500 pounds per square inch, with minimum rise time of two to four milliseconds and durations up to approximately two seconds, can be produced in a chamber 23 feet in diameter and 10 feet deep.

The Big Black River test site for underwater explosions occupies 40 acres about 10 miles southeast of Vicksburg.

Environmental Studies

The Environmental Laboratory was formed as a result of the National Environmental Policy Act of 1969. The basic missions of this laboratory are to predict the effect of man's activities on the environment and to develop methods to minimize or mitigate these effects when necessary; particular emphasis is placed on biological and chemical effects.

Research is supported by some of the most innovative and complete environmental laboratory facilities in the world for analytical chemistry and ecosystem modeling. The facilities include equipment capable of detecting contaminants in parts-per-billion concentrations; laboratories for microbiological, chemical and radioisotopic tracer studies; climate controlled greenhouses; and environmental chambers.

The laboratory has recently completed a five-year study to determine the environmental impact of dredged material disposal and to develop alternative methods of disposal.

A six-year program of Environmental Water Quality Operational Studies was initiated in 1977. The study will provide new or improved technology to solve certain environmental quality problems associated with civil works activities of the Corps of Engineers.

The laboratory also develops, evaluates and applies state-of-the-art mathematical modeling techniques for predicting water quality and ecological effects of engineering activities.

Other studies are concerned with developing pollution control technology, particularly in the following areas: wastewater treatment in recreation areas and roadside facilities, solid and hazardous waste management and urban and regional wastewater management. Investigations are performed to quantify pollutants, identify sources of pollution and improve pollution abatement techniques.

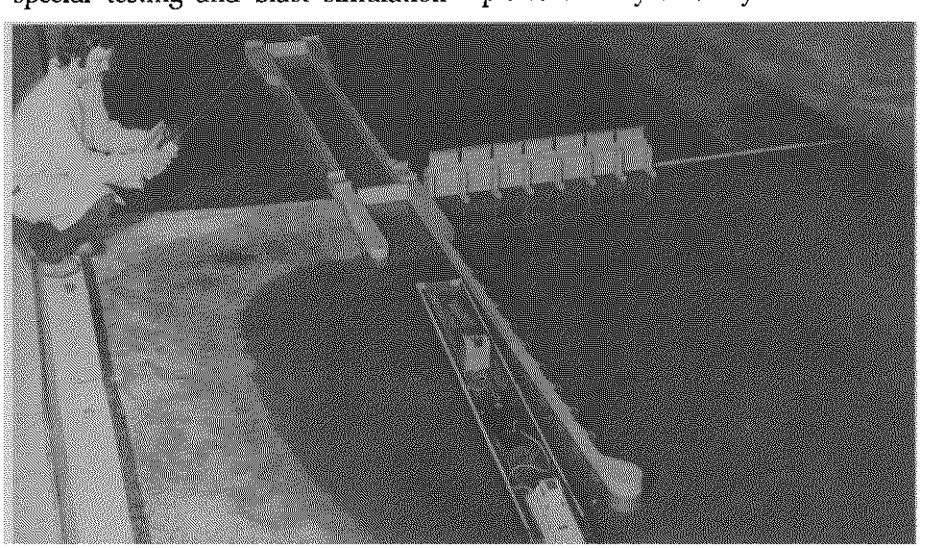
WES also conducts programs to determine how wetland areas affected by construction activities can be developed as wildlife habitats.

A different aspect of environmental study is the interaction between military and civil activities and material and the environments in which they operate. These investigations include fixed-installation camouflage, military hydrology, environmental constraints on surveillance equipment, natural resources management, river basin simulation studies and terrain data management. Military camouflage work is directed toward advanced sensors for surveillance, target acquisition and terminal homing systems.

In 50 years, WES has made major contributions to the nation's growth and development in its role as the principal research, testing and development facility for the U.S. Army Corps of Engineers.

Many WES projects have worldwide significance, while others have smaller scope; but each is a response to the special needs of the American people.

Over 1200 projects are under way at WES. Many are featured on free guided tours, each weekday except national holidays, at 10 a.m. and 2 p.m. For more information, write the WES Public Affairs Office at P.O. Box 631, Vicksburg, MS 39180, or call (601) 636-3111, extension 2502. LE



Lock and Dam No. 2, Red River, LA. In the development of the Red River for navigation through Louisiana to Shreveport and eventually into northeast Texas, several model studies are being conducted by WES for channel realignment and bank stabilization. Lock and Dam No. 2 will be constructed south of Alexandria. Notice a remote-control towboat moving into the lock chamber.

Georgia is one state that hasn't let severe winter weather and heavy traffic get the best of its highway systems. Under the ambitious program headed by State Transportation Commissioner Thomas D. Moreland, Georgia has constantly upgraded and improved its interstate network with asphalt to meet ever-increasing traffic flows.

One example of the State's program is the upgrading of Interstate 285 around Atlanta. One lane is being added in each direction by narrowing the median and erecting a Jersey barrier.

Typical new lanes are of Full-Depth asphalt concrete placed in three lifts and compacted to a thickness of 14½ inches (37cm). Asphaltic membrane strips are placed over joints and badly cracked sections of existing portland cement lanes to minimize future water infiltration and reflective cracking. These lanes are then widened and overlaid with up to 8 inches (20cm) of hot-mix asphalt over a leveling course.

One of the advantages of Georgia's upgrading with asphalt is that heavy traffic flows are never interrupted. At all times, at least two lanes remain open in each direction.

For complete information about upgrading with asphalt, contact your nearest Asphalt Institute engineer or write The Asphalt Institute, College Park, Maryland 20740.

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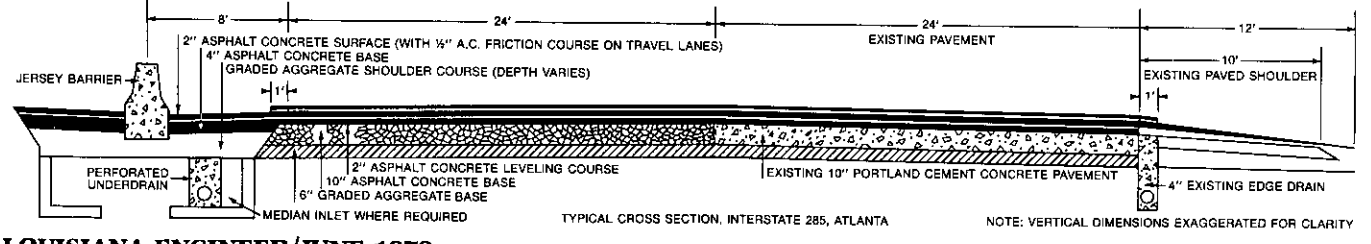


TYPICAL CROSS SECTION, INTERSTATE 285, ATLANTA

NOTE: VERTICAL DIMENSIONS EXAGGERATED FOR CLARITY

Support the La. Engineering Foundation

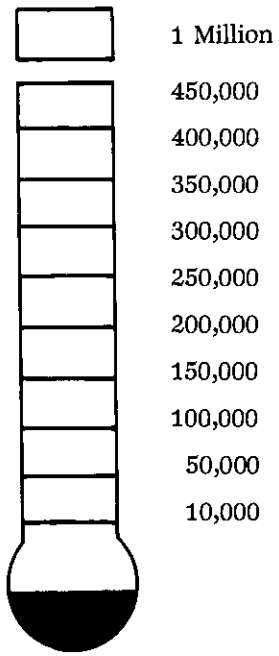
The mercury in the thermometer for the LEF building fund is moving up. At present, there is a total of $4,730 in the fund. We have three companies on the Honor Roll for contributions of $500 or more. We have 32 Founders who have contributed $100 or more, one Patron for a contribution of $50 to $100, and 11 Sponsors who have contributed up to $50.

The fund is growing, but we have a very long way to go. The Engineering Center will be a visible reminder of engineering to the people of Louisiana and the profession.

For those of you who have contributed, we are grateful. For those of you who have not, it is our hope that a check will be in the mail shortly. Use the coupon below.

One goal of the Louisiana Engineering Foundation is to develop a permanent Louisiana Engineers Center and to construct an Engineers Center Building in Baton Rouge.

It is proposed that this center will serve as the permanent headquarters for professional and technical societies and other engineering organizations. The funding for this venture will be through contributions from individual engineers, firms and companies which employ engineers.



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Pledge payments may be made over a period of three years; no time limits on other pledges. This pledge shall be terminable at any time in the event of the death of the pledger.

I would like ☐ not like ☐ an official receipt from the Louisiana Engineering Foundation.
Contributions are deductible for federal income tax purposes.
Make checks payable to Louisiana Engineering Foundation.

Report of Disciplinary Action By the Registration Board



Case No. 79-11

COMPLAINT

It was brought to the Board's attention that the firm Albert Switzer & Associates, Inc., had been convicted of a felony in the United States District Court for the Eastern District of Louisiana concerning work done for Jefferson Parish, LA. The Board noticed a hearing concerning these allegations.

INVESTIGATION

Counsel for Albert Switzer & Associates, Inc., prior to the hearing in the matter, furnished the Board with a Stipulated Statement of Facts with respect to a Superseding Bill of Information in the Criminal Docket No. 78-252, Section A of the United States District Court for the Eastern District of Louisiana, in proceedings captioned *United States of America v. Albert Switzer & Associates, Inc.* The Stipulated Statement of Facts provided as follows:

"During the calendar year 1971, Frederick J. Hoth Sr. was employed by and served as liaison with Jefferson Parish for the defendant Albert Switzer & Associates, Inc. During that same period of time, Ray L. Condon Jr. was the director of the Department of Drainage and Sewerage for the Parish of Jefferson.

"In March of 1971, employees of Jefferson Parish Department of Drainage and Sewerage, under the supervision of Condon and Frey, did design work and plans for the Wall Boulevard Sewer Extension Project. Frederick J. Hoth Sr. took these plans to Baton Rouge, secured the engineering stamp of Albert Switzer & Associates, Inc., on the plans and returned them to the Jefferson Parish Department of Drainage and Sewerage.

"On July 8, 1971, Albert Switzer & Associates, Inc., submitted a request for payment to the Department of Drainage and Sewerage for the Wall Boulevard project, and on July 13, 1971, Jefferson Parish paid that request in the amount of $2,000.

"In June of 1971, Albert Switzer & Associates, Inc., forwarded the Wall Boulevard plans to Construction Industry Associates of New Orleans by mail. Those same plans were returned to Albert Switzer & Associates, Inc., on June 25, 1971, by mail. In a similar fashion in September of 1971, employees of the Jefferson Parish Department of Drainage and Sewerage, under the supervision of Condon and Frey, did design and plan work for the Commerce Street Extension Sewer Project.

"Again, Hoth took these plans to Baton Rouge, LA, where they were stamped by Albert Switzer & Associates, Inc., and submitted to Jefferson Parish Department of Drainage and Sewerage as work performed by Albert Switzer & Associates, Inc.

"On Oct. 7, 1971, Frederick Hoth submitted a request for payment of the entire fee for the Commerce Street Project to the Department of Drainage and Sewerage on behalf of Albert Switzer and Associates, Inc., which included the work done by the parish employees. On or about Oct. 8, 1971, Jefferson Parish issued its check in the amount of $8,000 as payment for the Commerce Street project to Albert Switzer & Associates, Inc.

"On Nov. 22, 1971, Hoth, on behalf of Albert Switzer & Associates, Inc., submitted a voucher to the Jefferson Parish Department of Drainage and Sewerage for services purportedly rendered by Albert Switzer & Associates, Inc., on a survey in the Estelle-Crown Point area when no such survey had in fact been made by Albert Switzer & Associates, Inc., employees.

"On Nov. 22, 1971, Jefferson Parish issued its check in the amount of $3,650 to Albert Switzer & Associates, Inc., as payment for the survey work in the Estelle-Crown Point area."

At the hearing in the matter, Albert Switzer, president of Albert Switzer & Associates, Inc., appeared and gave testimony. Switzer testified that during the applicable periods of time Albert Switzer & Associates, Inc., employed one Frederick J. Hoth Sr. as its liaison officer with Jefferson Parish. The Switzer organization had contractual relationships with Jefferson Parish for a period of approximately nine years prior to the subject conduct.

The conduct relating to the conviction occurred in relation to drawings for plans for the Wall Boulevard and Commerce Street Sewer Extension projects. The Switzer organization was to design the sewer extension.

In connection with accomplishing that work, aerial photographs of the areas involved were furnished to Hoth, Switzer's representative in Jefferson Parish, for the purpose of his tracing from those photographs the streets in question, then going out on the streets and locating on the tracings the existing utility connections, together with placing thereon the proposed sewer extensions.

Hoth and Walter Frey, an employee of Jefferson Parish, who was in responsible charge of the extension work on both Wall Boulevard and Commerce Street for the Parish, had a separate business together that was not in any way connected with Switzer & Associates. Frey, at that point in time, desired to have Hoth attend to some of the separate business, and he, therefore, got an employee of Jefferson Parish, one Paul Wetzell, whose immediate supervisor was Walter Frey, to make the tracings from the aerial photographs, thereby freeing Hoth to attend to their private business.

Wetzell made the tracings from the aerial photographs then gave them to Hoth, who drew on the tracings of the streets the existing utilities and proposed extensions. Hoth never informed anyone at Albert Switzer & Associates, Inc., that the tracings from the aerial photographs had, in fact, been done by Paul Wetzell, an employee of Jefferson Parish.

The value of the services represented by making those tracings was estimated to be between $400-$800. Consequently, the Parish, when it paid the bills submitted for those services by Albert Switzer & Associates, Inc., actually paid a bill for which its employee, Paul Wetzell, had done approximately $400-$800 of the work. At the hearing, Albert Switzer, on behalf of the corporation, testified that that was the reason the corporation had pled guilty in Federal Court, and, therefore, it was in fact guilty.

ACTION BY THE BOARD

The Board, after hearing all available evidence, could reach no conclusion other than that Albert Switzer & Associates, Inc., had in fact been convicted of a felony. The Board, however, could find no evidence that any of the officers or stockholders of the firm had knowledge of the fact that the Jefferson Parish employee had contributed approximately $400-$800 in services for which the Parish was billed, and, therefore, is of the opinion that there was no intent to defraud, or any other culpable conduct resulting from this incident.

Continued on page 18

Gasohol from Sugarcane

By Shepard F. Perrin Jr., P. E.

A representative group of Louisianians visited Latin America during March, under the auspices of the Cordell Hull Foundation, and sponsored by Gov. Edwin Edwards, to investigate the proposed or actual use of ethyl alcohol in gasoline (gasohol) to replace imported oil.

The purpose of the visit was to obtain basic data in preparation for the First Inter-American Conference on Renewable Sources of Energy to be held in New Orleans, Aug. 22 through Aug. 25, 1979, at the Hyatt Regency Hotel.

The Central American Institute for Technological Investigation (ICAITI), which is headquartered in Guatemala City and is an independent research institution, was contacted to determine what work was being done on alcohol as fuel. This research institute represents the combined efforts of the Central American countries, excluding Panama and Mexico.

ICAITI has been actively investigating the production of ethanol from sugarcane in the institute's laboratory. One of the more promising and innovative approaches is the use of a special grinding machine which grinds the "insides" of the sugarcane stalk into fine particles. This method bypasses the normal grinding of the complete cane stalk to extract cane juice. The sugarcane particles are then fermented to make alcohol, and the by-products can be made into materials such as paper. This has been done in laboratory scale equipment.

An objective of these countries (Guatemala, Honduras, San Salvador, Nicaragua and Costa Rica) is to manufacture alcohol from sugarcane to reduce their dependency on imported oil by blending the alcohol with gasoline in an optimum ratio. The only Central American commerical "alcohol from cane" plant has been built in Costa Rica, but it is not in full production.

The group visited Brazil's sugar producing areas outside Sao Paulo and Piracicaba and inspected a major sugar factory with the capacity to crush 20,000 tons of sugarcane per day (Companhia Industrial E. Agricola Sao Joao). This plant was originally built to grind cane and process that sugarcane juice into refined sugar.

Recently an alcohol plant was built in close proximity to the mill. A certain percentage of the sugarcane juice is now diverted to the alcohol plant where seven alcohol distillation units have been installed along with fermentation tanks.

The Codistil factory (owned by Dedini), which manufactures alcohol fractionation towers, was inspected. This plant can manufacture five alcohol units per month, each having a daily capacity of 60,000 litres of dehydrated alcohol (96%). About 170 new alcohol distilleries will be built in Brazil. Approximately 4 billion litres of alcohol will be made and added to gasoline in 1979.

Brazil is dedicated to replacing imported crude oil/petroleum fuel on as rapid a time schedule as possible. At present, Brazil is using the 20% alcohol blend with gasoline in metropolitan areas, but the objective is to have a significant percentage of all cars running on absolute alcohol (96%) within eight years. Many additional sugar mills, as well as alcohol plants, will be built, probably with financial assistance from the government.



The alcohol plant at the extreme left stands next to a sugar factory in Brazil.

The automobiles in Brazil, mainly small cars, run very well on the 20/80 mix. Special engines will be required for the absolute alcohol fuel (containing no gasoline), which is being emphasized by the government.

The compression ratio of the automobile engines must be increased from the current 8 to 1 to 12/14 to 1, and a more concentrated air to fuel ratio carburetor must be installed.

Some of these engines are available now, but within two years they will be readily available for all cars made in Brazil. However, the present car population will be served with the 20/80 mixture until the cars become obsolete.

Government control of the program was quite noticeable. The Brazilian government sets production rates as well as sugar, alcohol and gasoline prices. This means that the use of alcohol in gasoline, or as a substitute, can be determined by the government and is not necessarily a response to a free market profit motivation.

Brazil has a tremendous potential to produce sugarcane, and it is also investigating other sources of alcohol to reach the objective of using all alcohol as fuel within eight years. It will probably be necessary to produce that fuel from other feed stocks such as manioc, sweet sorghum and eucalyptus plants. Several research institutes in Brazil are working to develop these sources, particularly the Aerospace Technical Centre in Sao Jose Dos Campos.

Ethanol as a motor fuel is a practical blending agent in gasoline. In the United States, current economic factors are not favorable toward it, but ever increasing crude oil import prices and the threat of reduced supplies warrant further investigation by interested government agencies, and particularly by private enterprise.

Alcohol from cane is of interest to Louisiana, but other processes can be utilized elsewhere in the United States as the economics change. They could use corn, sorghum and other agricultural products as feed stocks. Corn is now being used in Nebraska and Iowa as feed stock for ethyl alcohol on an experimental basis. **LE**

LES Spring Meeting in Lake Charles

The LES spring meeting held April 19, 20 and 21 at the Sheraton Chateau Charles in Lake Charles was not as well attended as some previous meetings, but the bad weather was a factor. Overall, it was a productive meeting.

The early-bird cocktail hour, hosted by the hotel on Thursday evening, was enjoyed by more than 80 people. Most of the group journeyed over to Pat's of Henderson in Lake Charles for a Dutch-treat dinner.

The LES awards banquet was attended by 125 people. Sandra Thompson, former secretary of the Department of Culture, Recreation and Tourism, and presently a candidate for secretary of state, explained the duties and involvements of that office and presented her qualifications for the job. Thompson, an attractive and poised woman, gave an address that was well received by the banquet audience.

James L. Meyer, P. E., chairman of the Honors and Awards Committee, presided during the awards presentations. Six engineers were honored for their outstanding service to the society and the profession.

Engineering students from Louisiana Tech, Tulane, LSU, the University of New Orleans, the University of Southwestern Louisiana and Southern University presented well-prepared papers. Francis Roy, P. E., first vice president of LES, moderated the session.

Thirty-six ladies braved the wet weather for a bus tour and a luncheon at Chez Oca on Friday.

The joint breakfast Saturday morning was attended by 64 men and women. Vince Forte, P. E., president of the Louisiana Engineering Foundation (LEF), discussed the foundation and presented an Honor Roll certificate to Hubert Sneed, P. E., representing the Louisiana Land and Exploration Co. Companies and individuals who contribute more than $500 are placed on the Honor Roll of LEF.

The Society thanks Curtis Dyle, P. E., general chairman, and Mrs. Nancy See, chairperson for Ladies Activities, for helping to make the meeting successful and enjoyable. **LE**



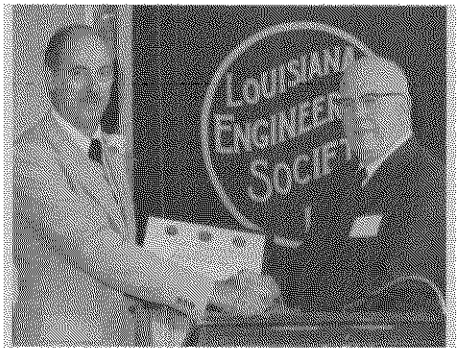
Carl H. Thomas, P.E., LES president, Sandra Thompson and R.C. "Doc" Spears, executive secretary, LES.



Leo M. Odom, P.E., left, and J.J. Thigpen, P.E., right, present the Leo M. Odom award plaque to Fred C. Culpepper, P.E.



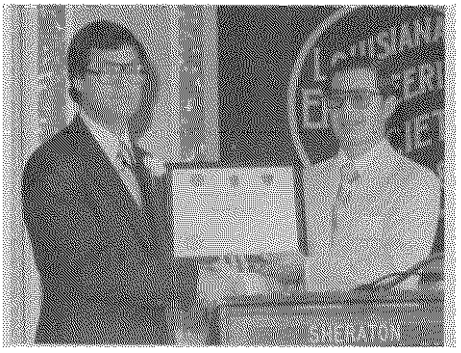
James S. Janssen, P.E., left, receives the Charles M. Kerr Public Relations plaque from Waldemar S. Nelson, P.E.



Roger P. Guissinger, P.E., left, receives the A.B. Paterson certificate from Edward J. McNamara, P.E.



Pierre A. Lapeyre, P.E., left, receives the James M. Todd Technological Accomplishment certificate from Louis J. Capozzoli, P.E.



James F. Guion, P.E., left, receives the F. Hugh Coughlin Young Engineer certificate from John J. Bergeron, P.E.



Hugh B. Balfour, P.E., left, receives the Andrew M. Lockett certificate from Thomas.



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VLIET'S VIEWS

Daniel H. Vliet, P.E., Executive Secretary
Louisiana State Board of Registration for Professional Engineers & Land Surveyors



Do corporations have the legal right to provide or to offer to provide engineering or land surveying services in the state of Louisiana? This was one of the interesting questions raised recently as a result of a decision of the Supreme Court of Louisiana in a case captioned *West Baton Rouge Parish School Board v. T. R. Ray, Inc.*

T. R. Ray, Inc., an engineering corporation, had a contract with the West Baton Rouge Parish School Board to provide architectural services. After the registered architect employed to perform these services left the employ of T. R. Ray, Inc., the school board sought to terminate the contract. This was the basis for the original suit.

The Supreme Court ruled in favor of the school board stating in its decision:

"It is undisputed that the corporation did not secure from the Board of Architectural Examiners a certificate of registration and license. Indeed, it was legally impossible for it to have done so because a licensee must pass an examination and possess certain moral, legal and educational qualifications . . . ."

Nowhere in the statutes controlling the operation of either the Board of Architectural Examiners or the Board of Registration for Professional Engineers and Land Surveyors are there specific provisions to provide for professional practice by corporations. Nevertheless, both boards have the power to make rules. The Board of Registration for Professional Engineers and Land Surveyors has adopted a whole series of rules setting forth specific qualifications that must be met by corporations and other firms that provide or offer to provide engineering or land surveying services.

No such rules have been adopted by the Board of Architectural Examiners. This, the board's attorney believes, is the factual distinction between the T. R. Ray, Inc., case and any hypothetical engineering corporation case as well as the reason the decisions of the court in that case will have no effect on the practice of engineering and land surveying in Louisiana.

Only corporations that have qualified with the Board of Registration for Professional Engineers and Land Surveyors have a legal right to provide or to offer to provide engineering or land surveying services. These corporations make application, pay fees and receive certificates in a manner similar to those established for the registration of individuals. Corporations that provide both engineering and land surveying services are required to qualify for practice in both professional areas.

* * *

The months of May and June each year have been designated as the renewal period for engineering and land surveying firms. Renewal notices were mailed in May to all qualifed firms of record. **LE**

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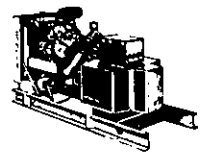

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Executive Secretary
Louisiana Engineering Society



Two Candidates Running for LES Second Vice President

A petition signed by 28 voting members was received on May 6, 1979, to place **John E. Ritter, P. E.,** Baton Rouge, on the LES officers ballot for the position of second vice president 1979-80. **Art DeFraites Jr., P. E.,** Houma, is the Board of Direction's candidate for second vice president.

The ballots were mailed to all voting members of LES on May 30, 1979, with a return date of June 26, 1979. Please vote for the candidates of your choice and return your ballots by the deadline.

LES Annual Meeting to be Held in Biloxi

The LES annual meeting will be held July 30-31-August 1, 1979, at the Broadwater Beach Hotel, Biloxi, MS. Please note that the meeting will be held Monday, Tuesday, and Wednesday this year instead of our normal Thursday, Friday and Saturday.

The Board has selected these days on a trial basis for the Biloxi meeting. We hope a large number of engineers and their families will attend the festivities.

The following tentative program is shaping up:

- Golf and tennis tournaments Monday afternoon.
- A program on the NSPE ACTION 80 will be conducted by **Sammie Lee, P. E.,** NSPE president, and **Waldemar S. Nelson, P. E.,** on Tuesday morning.
- The Louisiana Engineering Foundation (LEF) Board of Directors and the Council of Deans will meet Tuesday morning.
- Practice division and committee meetings will be held Tuesday afternoon.
- The installation banquet will be held Tuesday evening with Sammie Lee, P. E., president of NSPE, installing the 1979-80 LES officers.
- The LES general meeting and the Board of Direction meeting will be held Wednesday morning.

The program, with forms for hotel reservations and registration for events, will be forwarded to all members early in July.

LES Involved In Legislative Activity

House Bill (HB) 457 to amend the selection boards law was approved by the House Commerce Committee on May 14. This bill reduces the ineligibility of selection board members to receive agency contracts from three years to two years. LES supported the bill.

LES is following HB 628 and Senate Bills (SB) 279 and 282, all identical bills. They involve the reduction of fine fees for overweight vehicles on Louisiana highways. A letter has been forwarded to the head of the Department of Transportation and Development requesting clarification and justification for such legislation. Senate Bills 279 and 282 were heard in the Senate Transportation, Highway and Public Works Committee on May 23 and passed. LES and CEC/L testified against the bills.

SB 589 proposes to change the composition of professional and occupational boards with additional members. In this bill, two additional members will be appointed from the general public to the State Board of Registration for Professional Engineers and Land Surveyors. A survey conducted in the LOUISIANA ENGINEER received too few responses for a definite statement, but over 80% of the sampling opposed lay members on the State Board of Registration. LES will lobby against this bill.

HB 967 proposed increases in fees charged by the state fire marshall for approving plans from $2 a page and a maximum of $10 to $5 a page with a maximum of $25. Representatives of LES, CEC/L and LAA attended the Commerce Committee hearing on May 17. The committee disapproved the bill by a vote of 11 to 1.

LES is following HB 777, which adds two new sections to the law relative to building energy conservation, standards, appointment of a Building Energy Conservation Advisory Board, certification of companies and certified energy analysts' procedures. LES supports the bill in principle.

Members to be Briefed on NSPE's Action 80 in Biloxi

ACTION 80, NSPE's "Concept for the Future" is a plan with which all members of LES and NSPE should be familiar. And we should do our best to help it succeed. It is the first codification, or master plan, by NSPE which sets up objectives and actions for the next several years.

The ACTION 80 plan will zero in on promoting a wider public understanding of engineers and engineering in our society, incorporation of technical and professional engineering concepts in public policy, laws and regulations and strong involvement in legislative and governmental affairs at all levels.

There are 10 significant goals in this plan, which was introduced by NSPE Executive Director **Don Weinert** at the NSPE winter meeting. **Sammie Lee, P. E.,** NSPE president, and **Waldemar S. Nelson, P. E.,** will give LES members a briefing on ACTION 80 at the July meeting in Biloxi.

Plan to Attend These Upcoming Meetings

July 8-14, 1979
NSPE Annual Convention, Hyatt Regency Knoxville, TN.
July 30-31-Aug. 1
LES Annual Meeting, Installation of Officers
Broadwater Beach, Biloxi, MS.
Sept. 13-15, 1979
LES Training Conference, Sheraton Inn, Alexandria, LA.
Oct. 11-12, 1979
NSPE Southwestern Regional Meeting, Monteleone Hotel, New Orleans, LA.

NSPE To Consider Senior Associate Status

The California resolution to delete the last sentence of Article V, Section 3(b) of the NSPE Constitution which reads: "No person shall be accepted as a Senior Associate Member under the provisions of paragraph 3(b) after Jan. 1, 1980" will be considered at the NSPE meeting in July. Two more elements of the resolution are:

1. The amendment be submitted to the membership so votes can be received and counted prior to Jan. 1, 1980;
2. The NSPE membership and public relations committees develop a marketing plan to actively solicit members in the Senior Associate grade.

In the event that this resolution fails, on Jan. 1, 1980, NSPE will accept only members who are registered professional engineers.

The background information for this resolution includes the following data describing the U. S. engineering profession:

- There are more than 1,200,000 practicing engineers;

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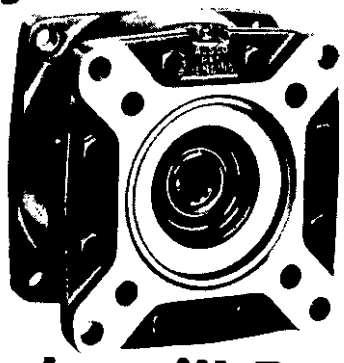

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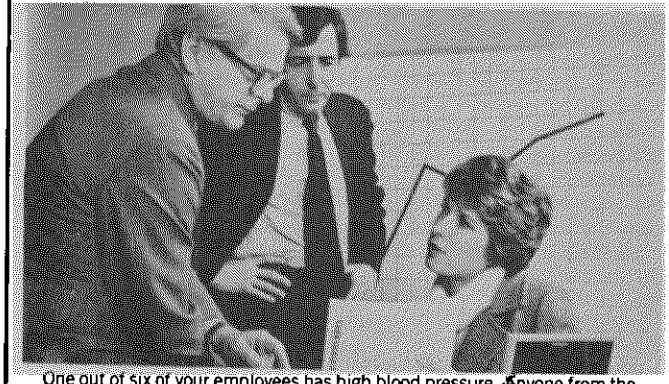
YOUR BEST EMPLOYEE COULD BE DYING OF A MISCONCEPTION



One out of six of your employees has high blood pressure. Anyone from the mail boy on up to the chairman. Some of them might even realize it. But might not realize that high blood pressure can only be normalized if they stay on daily medication.

They might even be under the dangerous misconception that hypertension (the fancy name for high blood pressure) only occurs under stress situations. It doesn't.

For literature about these and other high blood pressure misconceptions, how to set up a company work session, or obtain a speaker, write to Jerry Wilson, The High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, MD 20014.

It's in your company's interest to do so. Because some of your best employees may have hypertension. And they can't give you their best for long, if they're laboring under a dangerous misconception.

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- There are more than 800,000 engineers who have achieved four years of engineering education;
- There are about 275,000 registered engineers of all categories;
- There are about 125,000 registered engineers who became licensed through formal written examinations;
- Over 90% of engineering service (dollar wise) is exempted (industry, public utilities and federal government) from the various registration acts.

ASEE Conference Set this Month At LSU

The 87th annual conference of the American Society for Engineering Education will be held June 25-28, 1979, on the LSU campus, Baton Rouge.

All conference participants are invited to attend a wine and cheese party on Wednesday evening from 7 to 8:00 p.m. at the Assembly Center. This event is compliments of Allied Chemical, Celanese, DuPont, Monsanto, Stauffer Chemical, Union Carbide and LES.

Overweight Trucks Contributing to Bridge, Road Surface Deterioration

Potholes and bridge corrosion was a topic of an NSPE statement presented to the House Science and Technology Committee, Subcommittee on Transportation, Aviation and Weather. The statement noted that of 235,000 inventoried bridges in the Federal Aid System, 7,000 were found to be structurally deficient and almost 27,000 were found to be obsolete.

A major reason for the deterioration, NSPE reminded the committee, is the use of the highways by overweight trucks. There should be stronger enforcement of highway size and weight laws, and no federal aid interstate funds should be apportioned to a state which allows overweight and oversized vehicles to use the interstate system. Additionally, NSPE feels that states should be given federal funds to purchase or rent weight-enforcement equipment.

NSPE Supports Gasohol Fuels

In light of the ever-growing gasoline crisis, Congress is quickly turning its attention to the increased production and use of gasohol fuels. In statements to the House Science and Technology Subcommittee on Energy Development and Application and to three subcommittees of the House of Agriculture Committee, NSPE called for an all-out effort to utilize gasohol fuels.

"Engineers," read the statement, "are vitally concerned with the creation of 'new' fuels for the American automobile to fill the gap increasingly left by gasoline. Alternative fuels have been used in other countries for as long as 30 years. What are needed are effective incentives for engineers and others to perfect the technologies necessary for the transformation to gasohol."

"In Memory Of" Contributions May Be Made to LEF

Special contributions may be made "In Memory Of" a deceased friend or relative to the Louisiana Engineering Foundation either at the time of death or any later date.

An acknowledgement letter will be sent to the family of the deceased or any other person designated. Please advise as to the name and address of the person to whom the letter should be sent.

In addition, an acknowledgement letter indicating the amount will be sent to the donor. Make checks payable to LEF. All contributions are tax deductible.

The Louisiana Engineering Foundation was incorporated as a nonprofit organization in Louisiana on Nov. 22, 1978, to promote the profession of engineering through education and research.

All contributions, large or small, will be gratefully received and appreciated.

"Lives of great men all remind us
We should make our lives sublime,
And, departing, leave behind us
Foot-prints in the sands of time."

AAEE Certification Still Available to Members

Members of LES and NSPE can still apply for specialty certification without examination by the **American Academy of Environmental Engineers (AAEE)**. This is possible through a "grandfather clause" in AAEE Bylaws. Applicants must demonstrate at least 15 years of engineering experience acceptable to the Academy's board in one or more specialty fields and meet other established criteria.

Basic requirements include: an engineering degree; engineering license; eight years of environmental engineering experience following graduation; a written exam; and an oral test.

The deadline for applications under the "grandfather clause" is July 1, 1979.

For information on specialty certification under the "grandfather clause," contact: Executive Director, American Academy of Environmental Engineers, P. O. Box 1278, Rockville, MD 20850, telephone (310) 762-7797.

Two Seminars Scheduled This Month at UNO

"Techniques of Credit Management," a two-day seminar conducted by the University of New Orleans, will be held June 25 and 26 at the Fountain Bay Club Hotel in New Orleans.

The purpose of the seminar is to help participants better evaluate the credit capacity of customers, determine the amount of credit that should be extended, finance credit, use the computer as an early warning system, stay within legal boundaries and improve credit collection procedures.

A two-day seminar on how to establish an effective maintenance planning, scheduling and control system will be presented by the University of New Orleans, June 28 and 29 at the Fountain Bay Club Hotel, New Orleans.

Seminar topics will include how to improve labor costs more precisely, plan maintenance work more accurately and reduce emergencies.

For further information on either of these seminars, call the Executive Development Programs, UNO, College of Business Administration, telephone (504) 283-0248.

"Hold It! There's Your Trouble"

Don't you engineers get upset about the following because it is from a scientific journal. It is the story of a priest, a lawyer and an engineer put on trial during the French Revolution.

The priest testified he had ministered to the poor, brought food to the hungry and tended the sick. His argument was to no avail. He was found guilty of being an enemy of the revolution and sentenced to the guillotine.

In those days, when a person was sentenced to the guillotine he was allowed to protest by lying face up rather than face down. The priest made this gesture. When the rope was tripped, the blade whipped downward — and stopped six inches from his neck. According to the rules of the time, a stopped blade meant the intended victim went free.

Next was the lawyer. He reminded the court of how many innocent people he had defended and how he had served the poor without fee. He too was found guilty. And he too chose to lie faceup in the guillotine. And he too was saved when the blade stopped six inches from his neck.

Next came the engineer. He pointed out all the things he had built which aided the people; that he had never engaged in politics; that he had not become rich. Found guilty, he also decided to lie faceup.

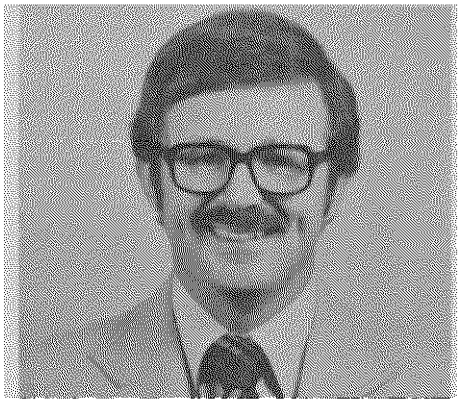
As he lay there waiting, he suddenly shouted: "Hold it! There's your trouble. The rope has slipped off the pulley. No wonder this thing doesn't work."

Reprinted from the Kentucky Engineer Magazine, April 1979. **LE**

DISCIPLINARY ACTION
Continued from page 11

The Board ordered that the firm Albert Switzer & Associates, Inc., be found guilty of being convicted of a felony and pursuant to Louisiana Revised Statutes 37:700 (B) be reproved publicly by publication of a disciplinary action report in the LOUISIANA ENGINEER. **LE**

EngiNEWS

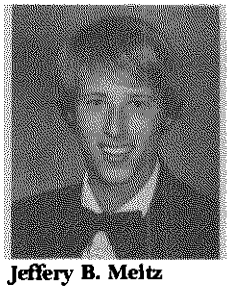


Jesse A. Grantham

Grantham Named AWS Chapter President

Jesse A. Grantham, president of Grantham Engineering Services, Inc., New Iberia, LA, is the new president of the Acadiana Chapter of the American Welding Society. Grantham is a member of LES.

Future activities of the AWS chapter include two certification preparatory schools, each lasting one week in June, to familiarize candidates with certification tests to be scheduled in Lafayette in July.



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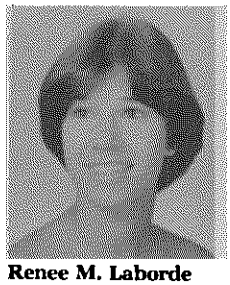


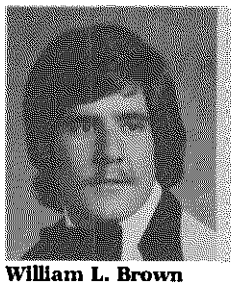
Renee M. Laborde

LES Announces Four Scholarship Winners

Jeffery Meitz, New Orleans, winner of the NSPE-University of Texas Austin scholarship, was born in Casper, WY. His father is a geophysicist for Shell Oil Co. and his mother is a registered nurse presently working at Jo Ellen Smith Memorial Hospital. Jeffery attended Benjamin Franklin High School in New Orleans, and his hobbies are writing and playing music. He was a letterman in football and track.

Renee M. Laborde, Arabi, winner of the LES $1,000 scholarship, has registered to attend LSU, Baton Rouge, where she plans to study chemical engineering. Her father, Maurice J. Laborde, is a mechanical engineer and her mother is a chemistry and biology teacher. Laborde maintained a 4.0 grade point average throughout high school. She has been very active in extracurricular activites and has excelled in track, baseball and volleyball.

William L. Brown, Pineville, winner of an LES $500 scholarship, plans to enter LSU, Baton Rouge, and study petroleum engineering. He attended Tioga High School and has been active in football and track. He maintained a 4.0 grade point average in high school and earned 19 credit hours at LSU during spring testing. William's parents are Mr. and Mrs. Clarence L. Brown of Pineville.



William L. Brown



Ronald H. Thompson

Ronald H. "Bart" Thompson, winner of an LES $500 scholarship, plans to enter Louisiana Tech and study biomedical engineering. He attended Ruston High School and was fourth in his class in scholastic standings. He plays the viola, sings and is a motorcycle enthusiast. He is the recipient of the Edison Foundation Centennial of Light Scholarship, and Gov. Edwards has appointed Bart as one of two representatives to the National Youth Science Camp to be held in Green Park, WV. Bart's parents, Ron and Peggy Thompson, live in Ruston.

Congratulations to each of these outstanding students. The four scholarships were made possible by the $1 contribution requested and received each year from members of NSPE and LES. **LE**

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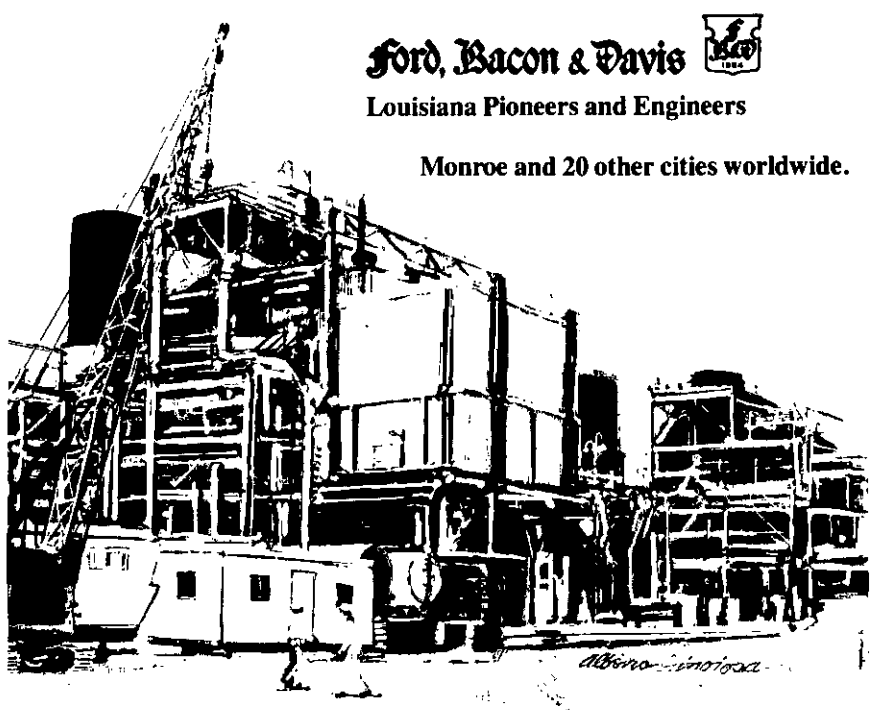

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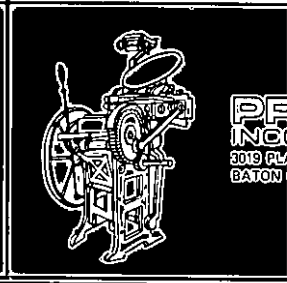

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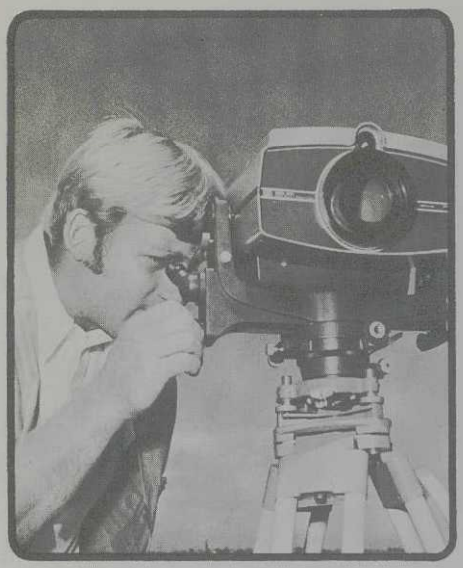

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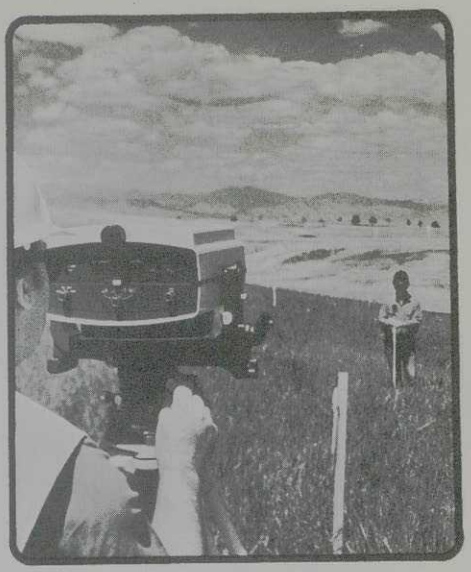

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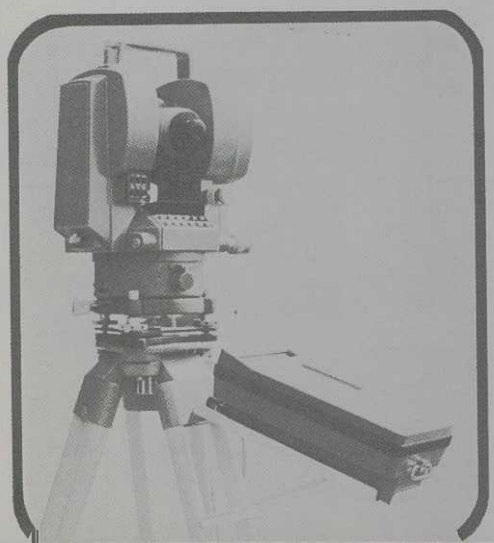

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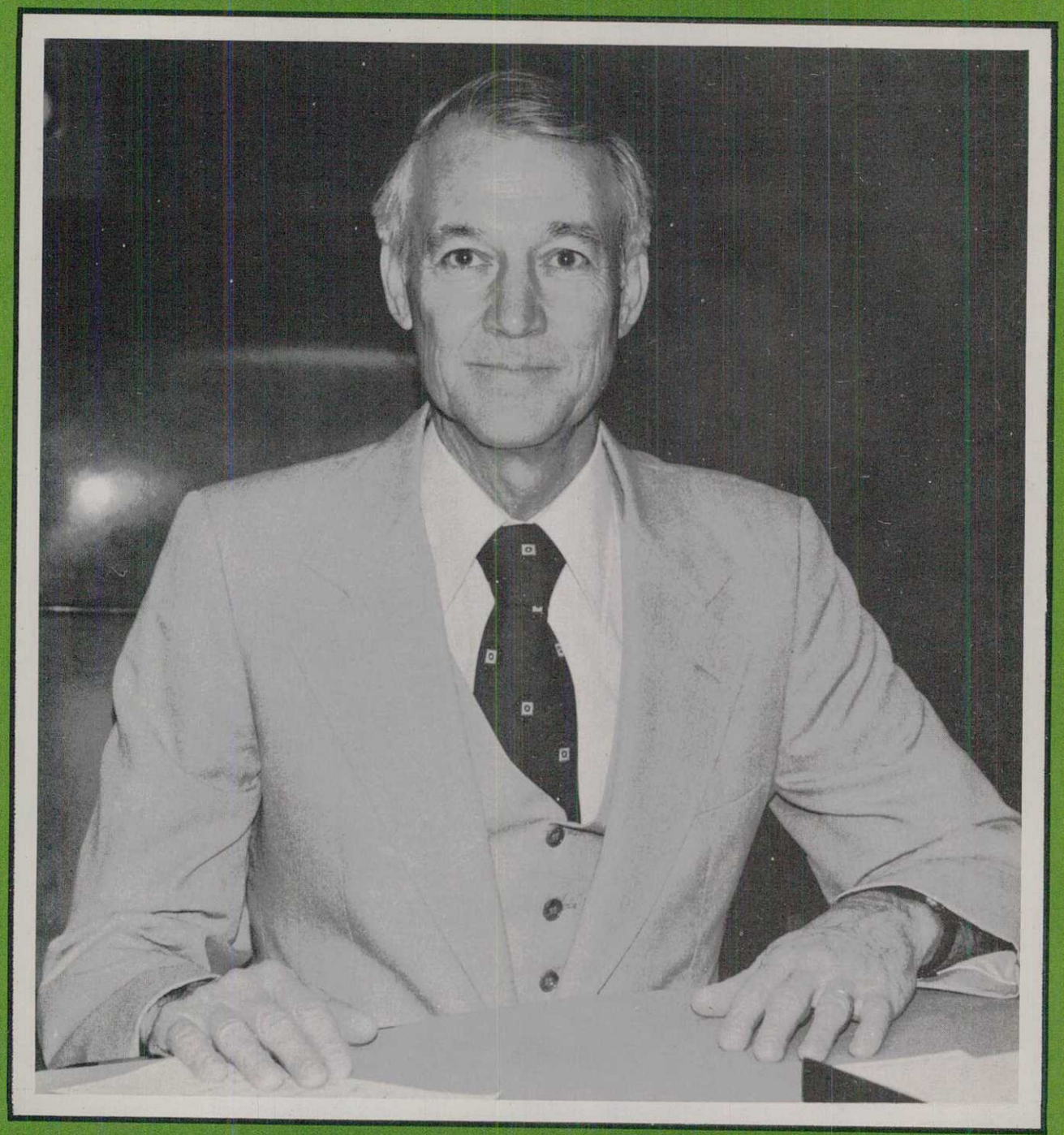
August, 1979



Francis C. Roy, P.E.

1979-1980 LES President

LOUISIANA ENGINEERING SOCIETY

23rd Annual Chapter Officers' Training and State Planning Conferences, September 13, 14, 15, 1979 Sheraton Inn, Alexandria

This meeting is a must for chapter officers and committee and practice division members. Use the hotel and registration coupons provided.

PROGRAM

Thursday, September 13

1:00-5:00 p.m. - Registration
6:30 p.m. - Early Bird Cocktails and Dinner, Tunk's Cypress Inn (map available at registration)

Friday, September 14

8:00 a.m. - noon - Registration

CHAPTER OFFICERS' TRAINING CONFERENCE

8:30 a.m. - Opening Remarks, Francis Roy, P.E.
8:45 a.m. - State Office, R. C. Spears
9:00 a.m. - Inter-Society Relations, John J. Bergeron, P.E.
9:15 a.m. - State Board of Registration, Dan Vliet, P.E.
9:30 a.m. - Membership Development, Carroll Fuselier, P.E.
9:45 a.m. - Legislative, Lamon Moody, P.E.
10:00 a.m. - Meetings & Programs, James W. Reeves, P.E.
10:15 a.m. - Young Engineers, Charles Eustis, P.E.
10:30 a.m. - Engineering Education, Larry Lafleur, P.E.
10:45 a.m. - Ethics & Professional Conduct, Al McKee, P.E.
11:00 a.m. - Public Relations, James W. Stevens, P.E.
11:15 a.m. - Practice Divisions-Purpose, Robert Blanche, P.E.
11:30 a.m. - Questions & Answers
12:00 noon - Luncheon, Ladies & Men
Speaker: E. L. "Bubba" Henry

COUNCIL OF DEANS

11:00 a.m. - Meeting
12:00 noon - Luncheon with above
1:15 p.m. - Meeting

STATE PLANNING CONFERENCE

1:30 - 3:00 p.m. - **Practice Division Meetings**
PEPP - Robert Blanche, P.E.
PEI - Al Adoue, P.E.
PEG - John H. Stinson, P.E.
PEE - Daniel Reneau, P.E.
PEC - Wendell Shiflett, P.E.

3:15 - 4:45 p.m. - **COMMITTEE MEETINGS**

Ethics & Professional Conduct, Al McKee, P.E.
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Engineering Education, Larry Lafleur, P.E.
Inter-Society Relations, John Bergeron, P.E.
Public Relations, James Stevens, P.E.
Honors & Awards, E. E. "Buddy" Moncla, P.E.
Constitution & Bylaws, Carl H. Thomas, P.E.
Scholarship Paul Hale P.E.

5:00 - 6:00 p.m. - Chapter Presidents Conference with Francis Roy, P.E.
6:30 p.m. - Cocktails & Dinner Civic Center (Refreshments hosted by Louisiana Industries, Inc.)

Saturday, September 15

8:00 - 9:00 a.m. - Breakfast, Ladies & Men
9:15 a.m. - LES General Meeting
LES Board of Direction Meeting will convene immediately after LES General Meeting.

LADIES' PROGRAM

Thursday, September 13

6:30 p.m. - Early Bird Cocktails & Dinner Tunks Cypress Inn, No Host

Friday, September 14

8:00 a.m. - Hospitality Room Open, Pool Side.
9:15 a.m. - Tour of Camp Beauregard; Coffee, Stafford House
12:00 noon - Luncheon, Ladies & Men
6:30 p.m. - Cocktails & Dinner, Civic Center

Saturday, September 15

8:00 - 9:00 a.m. - Breakfast, Ladies & Men

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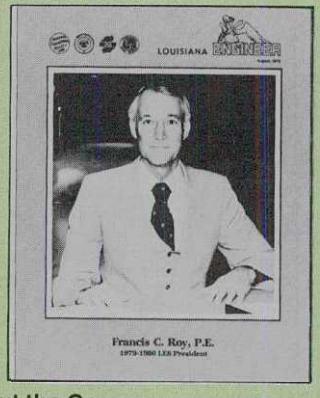

About the Cover:

This month Francis C. Roy, P.E., starts his term as President of LES. All new LES officers are pictured on pages 8 and 9.

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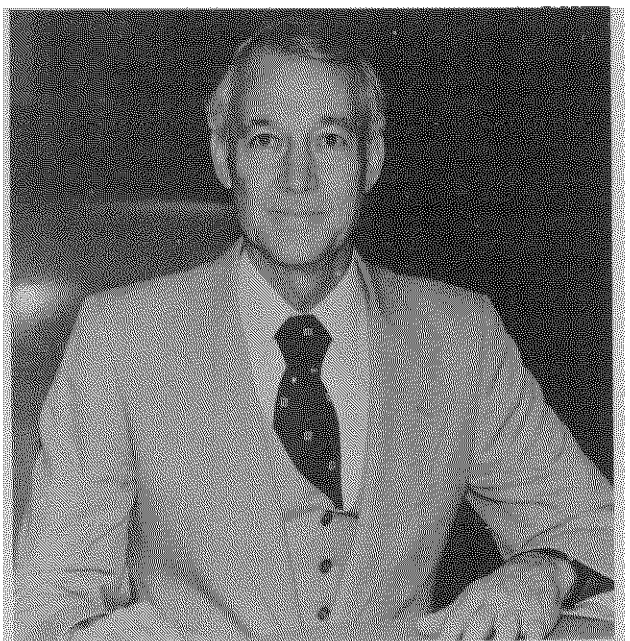

Francis C. Roy, P.E.
LES President

When I was a youngster, we didn't watch much television. In fact, we didn't watch any. But we did revel in the marvels of the "modern" motion picture. A particularly memorable "flick" was *Quo Vadis?* The story derived its title from the climactic scene involving Peter, apostle of Jesus. Jesus had been crucified, raised from the dead and had ascended to heaven. Now Peter's loving but human spirit was waning. Persecution of the brothers and sisters was intensifying, and so poor old Peter decided to run — get away from it all. At this point, most of you "old-timers" remember that he heard the voice of the Master while hurrying down the road. Jesus asked him "Where are you going?" *("Quo Vadis?")* — and gently persuaded him to return to Rome.

Let us ask ourselves, "Where are we going?" Unlike Peter, we perhaps cannot give a direct answer — but like him, we may wish to give it thought, to ponder alternatives. To say that our country and the world are facing problems is putting it mildly. Many of these trouble areas will require our contribution in some form — as part of the family unit, the civic groups, church, etc.

Perhaps none of us has the time or talent to be significantly contributory in all these areas, but we can make some contribution. As professional engineers, I sincerely believe we can, every one of us, make meaningful contributions to the solution of problems which will have vast implications upon the future of mankind.

Look around with me, and take note — almost nothing of our material necessities or luxuries is produced and transported to us without expending energy. In fact, we can probably expect no argument with the statement that energy is the key to material plenty. Having been trained in logic — and daily dealing with energy on a scientific, quantitative and qualitative basis — we as individual professional engineers are best suited to focus on the problem from the proper perspective.

But, I feel you will agree, our individual analysis, although perhaps resulting in an exact statement of the problem, and a logical plan to eliminate or at least alleviate it, often falls upon deaf ears. I sometimes believe that the primary reason for such passive reaction is that logic is foreign to most folks outside of engineering. They seem to depend more upon emotion, "luck," aggression, case histories and legal and political maneuvers. So perhaps the time has come when we as professional engineers should extrapolate our logic to recognize this, and incorporate such parameters into our overall analysis of both problem and solution.

If we are in agreement that our individual efforts often fall short, then maybe we should try at least one more bit of logic before yielding completely to frustration. Let us combine our ideas and analyses into a mutually agreeable plan, the logic of which recognizes the real world which is sometimes quite illogical by our measure.

Let us make a hypothetical case — we decide that our material future is tied to energy, and agree that our supply is diminishing rapidly. Facts and figures lead us to this conclusion: the United States needs a program designed to attract the most able scientific and engineering minds into a team charged with one goal — find an abundant new source (or sources) of energy.

We will be ready to point out to the non-engineering community that in the 50s and 60s we had a superb Air Force, Army, Navy and Marine Corps. We had great universities equipped with materials and minds capable of research on a basis to match any in the world. We had industries exporting technology. But, we agree, we would still be strug-

gling to put a man on the moon, if the NASA had not been organized and funded. So the crux of our argument is that all of our talents are going off on tangents concerning our energy crunch.

We say, therefore, gather all this talent into one logical leadership, and get the job done! If the group fails, we have lost nothing. We will be bankrupt and walking anyway. Now comes the $64,000 question. We have this (hypothetical) agreement about what should be done, but how do we go about convincing the politicos?

Once again, let us hypothesize and consider two possible alternatives.

1. We approach our solons and administrators with the pure logic of the situation, and pridefully announce that we represent almost 25% of the professional engineers! We'll try not to be concerned that a built-in political, flashing red light to his brain says "75%, 75% — I know this 25% has a good point — but how will I look, once I have committed myself, championed this cause right into the bright lights of TV, and find that a significant number of that 75% denounce the whole thing as idiotic — I'm no engineer, I'm a politician — my "logic" is different; it says that 25% can be dangerous. It makes my palms clammy just thinking about it."

2. We approach said folks, present our logic, and announce that we represent 90% of the professional engineers — not a union, but a voluntary group of truly concerned professionals. We note the twinkle of the eyes. All seem to shift, to sit straighter and no longer look distractedly past us. The chairman has stopped watching the fly buzzing near the drooping caladium. The political computer in the brain is throbbing — "I can't believe it — the most logical group, maybe the only group which really should address this problem is coming to me — 90%! To heck with that 10%, I probably wouldn't have liked 'em anyway!"

Maybe you'll agree with me that the answer to *"Quo Vadimus?"* is simple, but inconclusive. We don't know where we're going. We may want to go to a better way of life but perhaps our "transportation" for getting there at present is very limited, because we don't have the strength and unity in the profession that we require. We simply must work hard toward getting that 90%!

Let us really be honest with ourselves. Have we really tried to ask our colleagues to join LES? Do we ever really "talk LES" to them?

All of you non-LES members — we invite you to join us. We need you in LES, and sincerely feel it will be mutually beneficial and satisfying. Remember, this magazine goes to all registered Professional Engineers in Louisiana. You are not a member of LES solely by registration. Even though we are, as engineers, individualistic by nature, we are limited in some areas in what we can do as individuals.

1979-80 Officers

My congratulations to Jerrel Freeman, P.E., John Ritter, P.E., Dudley Hixson, P.E., James Porter, P.E., Curtis Dyle, P.E., and Waldemar Nelson, P.E., all recently elected to LES offices. I look with pleasure toward working with this capable and energetic group.

Education Relevancy Survey

In this issue you will find a questionnaire on the relevance of engineering education. You will also find a commentary which I hope provides information as to why your valued opinion is needed. Please give the profession a bit of your time. We are counting on having your expression on this vital issue! **LE**

Francis C. Roy . . . A Brief Biography

Francis C. Roy, P.E., Lake Charles, was installed as state president of the Louisiana Engineering Society at ceremonies in Biloxi, MS, on July 31. Roy succeeds Dr. Carl H. Thomas of LSU, and will join a prestigious group of past presidents dating back to 1898 when LES was founded.

Roy is a native of Iota, LA, the son of Gussie Matte Roy and the late Fernan A. Roy. The new president received his early education at St. Francis School in Iota, and finished high school at St. Joseph's Seminary in St. Benedict. He attended the University of Arkansas at Fayetteville, LA, LSU (BS in electrical engineering), and the University of Texas at Austin (MS in electrical engineering).

He has served in the Air Force, was an electrical engineer with Allis Chalmers in Milwaukee, WI, a science and math teacher at Jeff-Davis Vo-Tech School in Jennings, associate professor of electrical engineering at Louisiana Tech University in Ruston, and is currently vice president of Industrial Equipment and Engineering, Inc., in Lake Charles.

Roy is married to the former Pauline Dischler of Rayne. They have three children, Mary Monica Roy of New Orleans, Dr. Michael A. Roy of San Francisco, CA, and Richard R. Roy, deceased.

Roy is respected in Louisiana and neighboring states as a Professional Engineer, and has appeared on numerous occasions before a variety of audiences as an interesting and thought provoking speaker. On the lighter side, he is much sought after as a "Cajun" humorist.

He is active in his church, Immaculate Conception in Lake Charles, as a lector, member of the Parish Council, and teacher in the high school religious instruction program. Included in his activities are service on the Economic Development Committee for Louisiana Priorities and the Steering Committee of the Education Council for the Louisiana Association of Business and Industry (LABI). His hobbies are bicycling and reading, and he is an avid sports fan.

In addition to membership in LES and NSPE, Roy is a registered Professional Engineer in Louisiana, a senior member of the Institute of Electrical and Electronics Engineers (IEEE), a member of Eta Kappa Nu and Tau Beta Pi honorary professional engineering fraternities, and in 1965 received the Tau Beta Pi Outstanding Engineering Teacher award. He is listed in *Who's Who in the South and Southwest*, and in the *Dictionary of International Biography*.

Before being honored through election to the highest office of the LES, Roy served, in turn, as secretary-treasurer, vice president and president of the Lake Charles Chapter. He was then elected, in turn, to the state offices of LES director, secretary-treasurer, second vice president and first vice president/president-elect.

The incoming president has set as a major goal the education of the LES membership in the scope, organization and activities of the Society, and an increase in individual participation. **LE**

Technological Illiteracy and American Public Life

By S. Frederick Starr

The following is from a speech delivered during the May commencement ceremony at Tulane University's School of Engineering. Starr is the director of the Kennan Institute for Advanced Russian Studies, The Wilson Center, Smithsonian Institution, and vice president for academic affairs-designate, Tulane University.

This is not the best of all possible years in which to be graduating. The delayed results of the baby boom of the 1950s and of the enormous expansion of higher education in the 1960s are now placing more BAs in the job market than that market can readily absorb — especially with the national economy in such a state of apparent disarray. For graduates in many fields, the most practical course to have taken would be on the art of survival, but engineers, as everyone knows, are different.

Of what other field can it be said that its graduates have had no problems finding jobs over the past decade? This is just what the Engineering Manpower Commission reports about young engineers. And the commission is right. The level of unemployment among engineers nationally is 3%. Granted, this is an average figure and the situation is worse in such cities as Los Angeles and Chicago. But it is salaries. Starting salaries for those with an undergraduate degree in engineering have more than kept pace with inflation and now stand at approximately $17,000 nationally.

Now, having to worry about survival is in its way convenient. It provides a mighty handy excuse for not worrying about many other pressing issues. It provides a rationale for escaping into one's private inner world in search of the security that eludes one in the outer world. This is one luxury new engineers do not have, especially since they did not create the favorable circumstances from which they are about to benefit. This was done for them by our nation as a whole, and not least of all by their predecessors in engineering, whose efforts have placed the United States at the very forefront of activity in practically every field.

To a far greater extent than at any time in our nation's history, or in the history of the world, for that matter, we are beset by problems that cannot be solved without the active involvement of persons with technical training — without engineers. Not engineers in isolation, of course, or engineers whose view of the world is not informed by the deepest humanistic learning, that is, by an ability to worry through the great questions that philosophers and moral thinkers have always pondered.

But engineers must certainly participate centrally in the effort to resolve many of our most pressing problems; engineers in the field of energy, in metallurgy, in the nuclear field, in mechanics, in civil engineering and many other areas. Such people are needed for domestic policy. They are also needed in every aspect of American foreign policy today, as is evident from even a cursory glance at the three-volume congressional study on *Science, Technology* and *American Diplomacy.* Never has there been a more urgent need for a partnership between engineering talent and society as a whole.

Is such a partnership being formed? Much to its credit, the School of Engineering at Tulane has done as much as any school in the country to encourage such a development, through such efforts as the program on engineering and law and the energy program. But beyond such exceptional programs as Tulane's and those of a few other universities, the partnership of which I speak is scarcely evident.

In fact, I would like to suggest that the likelihood of a partnership being formed between engineering and society at large is not increasing but actually decreasing. Indeed, to an extent that perhaps the engineering profession has itself not fully appreciated, the technologically literate are becoming isolated within a society of technological illiterates or, at best, semi-literates.

Consider these statistics. As you know, during the past two decades the numbers of college graduates in the United States has soared. But the proportion of that group trained as engineers has actually declined. And in absolute terms, had it not been for the entry of women into engineering programs, the number of graduating BAs would have remained level over the past decade. Even with women, the number of new PhDs in engineering has been declining steadily since 1975.

Added to this is the fact that large numbers of engineers trained during and immediately after World War II are now reaching retirement age, which further depletes the ranks of your profession. As a result of all this, persons like yourselves, who are technologically literate, constitute a declining percentage of our college-educated population, i.e., of the elite group from which leaders in practically every sphere of our national life are drawn. Stated differently, the statistical likelihood of a board, council, legislature or committee having a qualified engineer among its members is declining.

Engineers and Public Service

It has often been said that engineers should take a more active role in our public discourse. Such an attitude seems to have gotten into the bloodstream here. Numerous Tulane alumni have distinguished themselves by combining great proficiency in their field with a deep spirit of public service. I have in mind such men as Jack St. Clair, class of 1940, the executive vice president of Shell Oil; or George Bywater, class of 1950, head of American Cyanamid's activities in the Far East; or Thomas Feehan, class of 1944, chief executive officer of Brown & Root; or Griff Lee, class of 1948, vice president of J. Ray McDermott. The type of public careers that such persons have led should, it seems to me, serve as models to others if the issues before us are to be addressed effectively.

But even this will not solve the problem of the deepening technological illiteracy of American public life. There are simply too many vital areas where the voices of broadly gauged engineers are not to be heard. Not one engineer sits in the legislature of the state of Louisiana, though Louisiana is literally being transformed by developments in which engineering plays a central part. The same is true for the Texas Legislature in Austin. And while several trained engineers are to be found in the U.S. Congress, they are still a minute fraction of the whole and are not increasing in number.

Nor can one take too much solace in the fact that our President is no stranger to the world of technology. By comparison, practically all the members of the Politburo of the USSR are engineers by profession, not to mention all the prin-

Continued on page 18



IS 150 INCHES OF SNOW TOO MUCH?

NOT FOR RECYCLED COLD-MIX ASPHALT.

Road maintenance in Binghamton, New York, is no picnic.

In an average winter, the city's 533 streets are assaulted by up to 150 inches of snow, frosts that go five feet deep and countless freeze-thaw cycles. To compound matters, many older streets, never built for today's traffic, still consist of oil and stone or native soil topped with a thin wearing surface.

So year after year, Binghamton has been faced with an awesome task. To upgrade and maintain its streets with a limited budget under formidable weather conditions.

But fortunately, the city found an answer to its road problems in 1975 with introduction of the technique of stabilizing soils with emulsified asphalt. The method involves recycling old base materials in-place, adding asphalt emulsion in the process. The recycled base is then overlaid with fresh asphalt hot-mix.

The low cost of this process has allowed the city to stretch its street reconstruction funds at least thirty-five percent. Proper visible curb heights and grade lines can be restored because inferior in-place materials are removed.

Recycling is done with a minimum of inconvenience. The process takes at most three working days, and at the end of each day the street is recompacted so residents can get in and out of their driveways.

Of course, the real test of cold-mix asphalt recycling is its durability. Asphalt emulsion added to the old base materials holds them together and keeps out water. Binghamton's new pavement can freeze, thaw, and still carry traffic without distress.

Because of the long-term serviceability of asphalt-treated bases, it is estimated that these roads will go ten to fifteen years before major repairs are needed—and in Binghamton's climate, that's an accomplishment.

If you'd like more information about Binghamton's cold-mix asphalt recycling, contact your nearest Asphalt Institute engineer, or write The Asphalt Institute, College Park, Maryland 20740.

The Asphalt Institute
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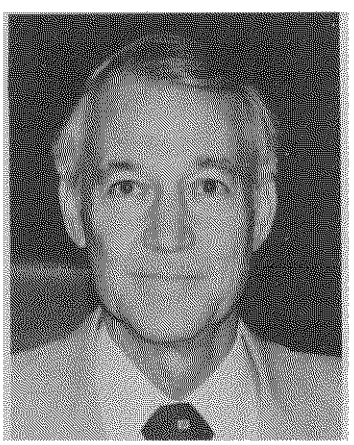
Introducing LES's 1979-80 Board of Direction





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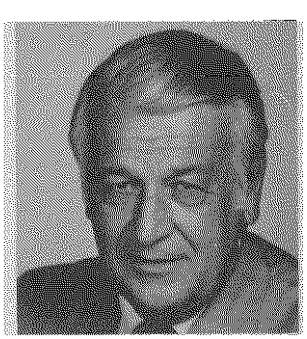

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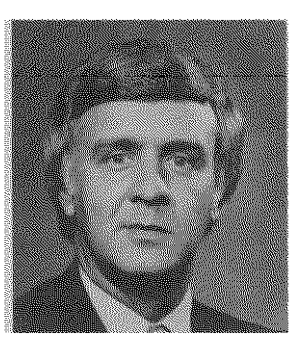

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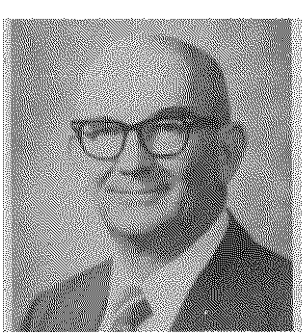

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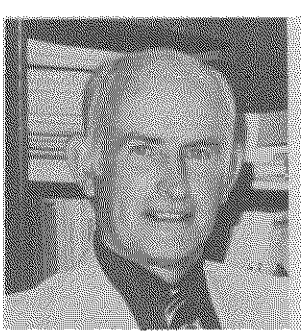

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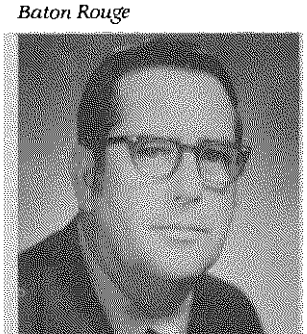

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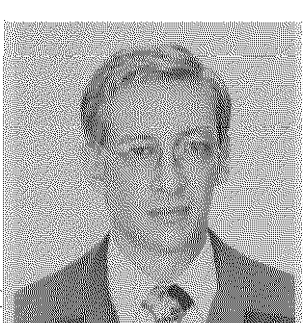

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New Chapter Presidents and Practice Division Chairmen

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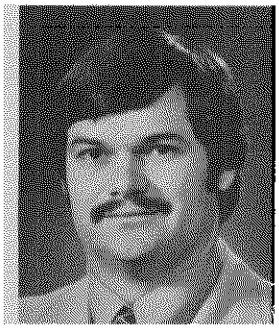

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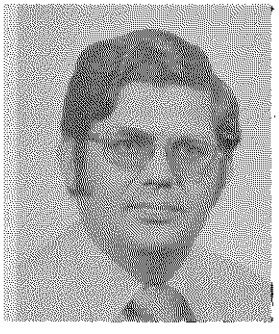

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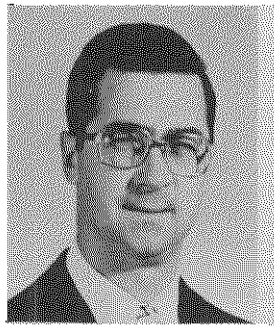

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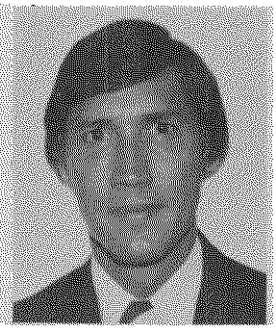

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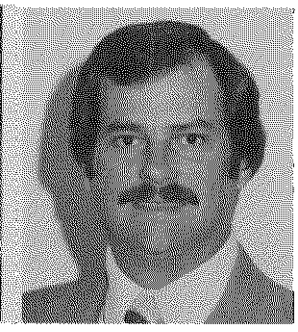

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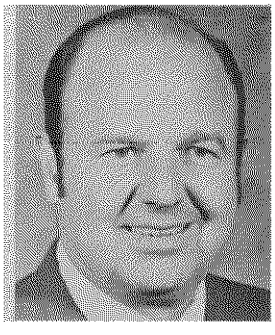

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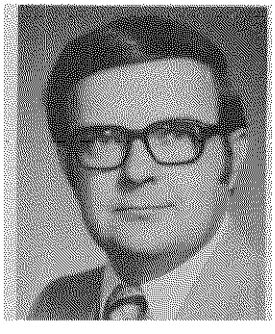

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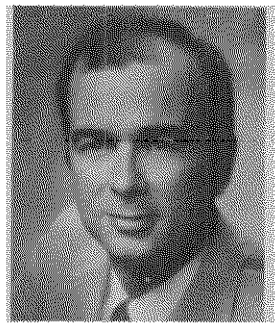

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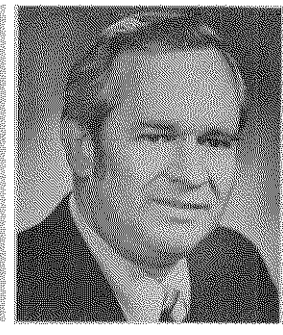

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Baptist Conference Center / Retreat Planned for Alexandria Area

In the not too distant future, Baptists in Louisiana will be able to drive for a couple of hours and enjoy a conference/retreat experience so far unknown in the state of Louisiana.

At the annual meeting of the Louisiana Baptist Convention (LBC) in Baton Rouge last November, a master plan for a proposed conference facility seven miles west of Alexandria was adopted. The plan was the culmination of an 18-month study performed by Meyer, Meyer, LaCroix & Hixson, Inc., of Alexandria.

Unlike many plans routinely prepared by engineers, this one involved more than the normally required attention to environmental conditions. The unique site demanded innovative solutions and methods. The challenge was to effect a final product which would enhance the site.

Located at the rise from the alluvial plain into the western hills of Louisiana, the site consists of approximately two-thirds backwater swamp area. Slope and soil conditions of land suitable for development indicated significant potential for hazardous erosion which could have adverse effects on delicate life balances within the swamp area.

These conditions were assessed and evaluated as site values. These site values were then used as the basis of determining layout, type of structures, flow patterns and even type and manner of placement of water, sewer and electrical service lines.

The first major hurdle in developing the plan was to determine program requirements and figure out the extent of development necessary to meet those requirements.

The executive board staff of the LBC was designated to develop the programming requirements for the facility. This group was composed of people with varying personalities and opinions, but all had special knowledge as well as commitment to the needs of the LBC. In a slight deviation from the norm, the method selected to reach consensus in program development was through the use of questionnaires.

Three such questionnaires were created, and each was preceded and followed by a conference between design team members and the executive board staff. In addition to itemizing the desirable features, significant effort was directed toward assessing potential undesirable aspects of a conference center. By using this method, the design team developed a master list of not only facilities, but also functions and interrelationships. These were utilized for architectural studies and concepts by Brown, Bufkin & Associates, Architects, under contractual agreement with the engineer.



Scale model of planned Baptist Conference Center/Retreat.

The plans include determination of facility requirements, selection of suitable location and subsequent alteration or correction of environmental conditions to suit the needs of the project. Often, environmental considerations are addressed only if they are required in the process of project justification; ultimately justifying the project despite probable significant environmental impacts.

This plan differs slightly from most in that environmental conditions were the prerequisite determinants of layout. It included considerations of flood plain data, soils data, a botanical survey, a zoological survey, an archaeological survey, vegetation groupings, a land survey and contour mapping. In addition, site value analysis was performed by plotting various features which identified other aesthetic and enviromental considerations. These include:

- highway and intersite noise
- open areas of scenic and psychological value
- areas of high erosion potential
- internal soil drainage

The conclusions of the master plan were the culmination of the consideration of these physical and aesthetic factors modified by program requirements. Ever present was the incentive to compliment the natural conditions of an extremely delicate site.

The facilities will ultimately include conference capability for approximately 1,200 people with overnight accommodations for about 800. These are divided into conference/administrative areas and adult housing areas. Overnight camper capability will also be developed for conferees and denominational vacationers.

Once completed, the facility will also include adult and youth recreation areas, primitive camping and nature study areas and a youth camp. The youth camp will serve as adult housing overflow accommodations during large conferences. Residences for a manager and caretaker are also planned. **LE**

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The Relevancy of Engineering Education

By Francis C. Roy, P.E.

Through the efforts of the LES Engineering Education Committee, chaired by Dr. Clarence E. Hall, a questionnaire pertaining to the relevancy of engineering education has been included in this issue of the **LOUISIANA ENGINEER**. I sincerely hope that, realizing the importance of education in our profession, you will take a few minutes to complete and mail your response. Education is something we've all had exposure to at one time or another, and surely we all have an opinion. A survey of this kind will be only as good as the response.

There is controversy concerning engineering education. It is found here in Louisiana, and differences in philosophy are surfacing even among the engineering educators themselves.

Some contend that the elegant and lasting solutions of which only professional engineers are capable, often result from the refinement of analytical and conceptual methodologies developed through years of field experience, rather than through research. Technological advances must be evaluated and proven in the field before becoming part of our basic engineering knowledge, and more time is involved in getting this to the classroom.

Some engineering teachers have deleted what others consider essential fundamentals in favor of selected, highly specialized topics in an eagerness to minimize this time lag. While new specialty developments are essential to society, some feel that they should be reserved for graduate study, and point out that presently perhaps 20% of the engineering students enter graduate school.

There is strong feeling among some engineers that education is suffering from a preponderance of engineering scientists who have never had contact with the "real world of engineering." They are hired and advanced on the basis of their ability to acquire "outside" funds for research. Their ability or attitude as a teacher of undergraduate courses is secondary at best. The elimination of subjects such as machine shop, mechanical drawing and surveying are considered by some to be detrimental to the proper formation of a young engineer.

There is feeling that we should have a fifth year added before granting the bachelor's degree. Others feel that the BS should be given after four years, and the fifth year be required for a professional degree, plus the privilege of taking the EIT exam. Yet others contend that seven years of study be required for the professional degree.

Students have voiced the opinion that they are being cheated. Professors are too busy with, or too interested in, doing research to teach the students, so they spend little time with them, or maybe a graduate student actually teaches the course for which that professor is listed.

From the other side of the forum comes the opinion that research is an essential part of engineering education — that students profit from the program. They point out that almost all "successful" engineering schools are following this trend.

Are we headed toward greatness, mediocrity or oblivion? What is your opinion? Please let us know. We are **vitally** interested. Won't you complete the questionnaire **now**? **LE**

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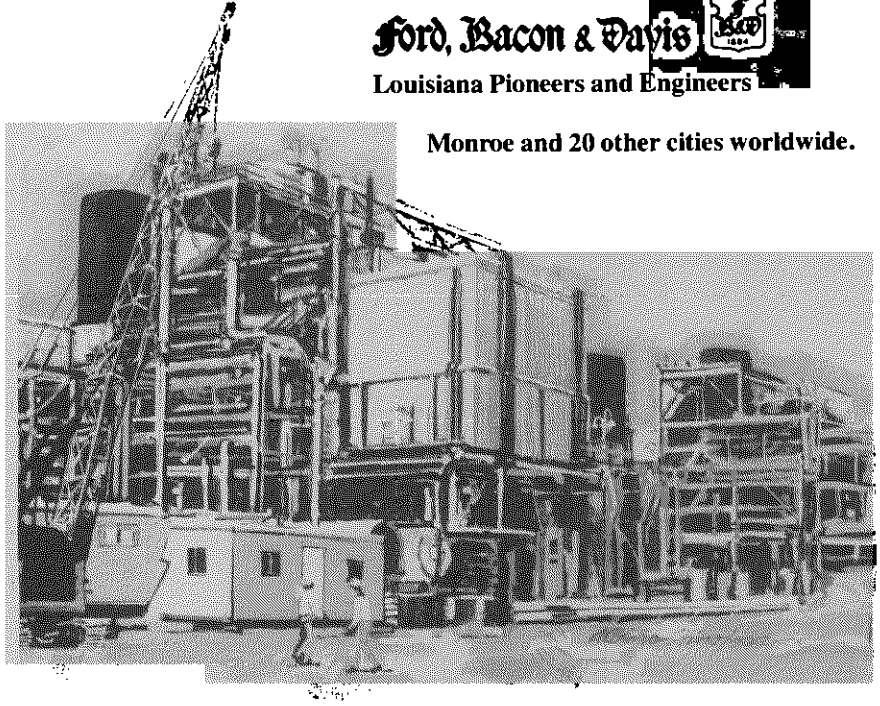


Engineering Education Relevancy Questionnaire

INSTRUCTIONS

Please fill out this questionnaire, clip out the page (front and back), fold it and mail it in to LES (address stamped on back).

PROFILE OF RESPONDENT

Year of first engineering degree ..... 19 [ ]

Years of engineering practice since graduation ..... [ ]

Engineering degrees and granting schools:

B.S. _____

M.S. _____

Ph.D. _____

Engineering discipline: _____
(civil, electrical, etc.)

Your current practice and degree of involvement:

Degree of involvement
1—light
2—medium
3—heavy

Management [ ]
Administration ..... [ ]
Systems Design [ ]
Analysis ..... [ ]
Operation and Maintenance ..... [ ]
Research and Development ..... [ ]
Instruction [ ]

_____
(Other if involvement is 2 or 3)

Member of N.S.P.E. ..... YES [ ] NO [ ]

MALE [ ] FEMALE [ ]

FUTURE NEEDS

Rate the formats of engineering schooling that, in your opinion, will satisfy best the future needs of the profession:

Rating Values
1 through 5
1—least important
5—most important

Pre-engineering experience followed by professional school ..... [ ]
Four-year curriculum (traditional B.S.) [ ]
Five-year curriculum (M.S.) ..... [ ]
Professional school (professional doctor's degree) [ ]
Short practical seminars ..... [ ]

The primary objective of engineering education should be to educate:

(a) Practicing engineers ..... [ ]
(b) Research and development personnel [ ]
(c) Other ..... [ ]

Rating Values
1—Poor
2—Fair
3—Good
4—Excellent

1. Rate your familiarity with the current curriculum in your discipline [ ]

2. Rate the fitness of the following educational methods to the needs of your practice

(a) Your engineering curriculum [ ]
(b) Current engineering curriculum [ ]
(c) Employer training [ ]
(d) Course work after graduation [ ]
(e) Graduate study [ ]
(f) Independent study [ ]
(g) Special seminars and short courses [ ]
(h) _____ [ ]

3. Rate the fitness of your engineering curriculum to your professional needs at consecutive 5-year periods of your practice

(a) 0 - 5	[ ]	(f) 25 - 30	[ ]
(b) 5 - 10	[ ]	(g) 30 - 35	[ ]
(c) 10 - 15	[ ]	(h) 35 - 40	[ ]
(d) 15 - 20	[ ]	(i) 40 - 45	[ ]
(e) 20 - 25	[ ]		

FOLD HERE

Return To:

Place Stamp Here

To: Louisiana Engineering Society
P.O. Box 2683
Baton Rouge, LA
70821

FOLD HERE

4. (a) Indicate courses which contributed much or little to your effectiveness as an engineer.

Courses of great value:

(b) Indicate courses that you wish had been in your curriculum.

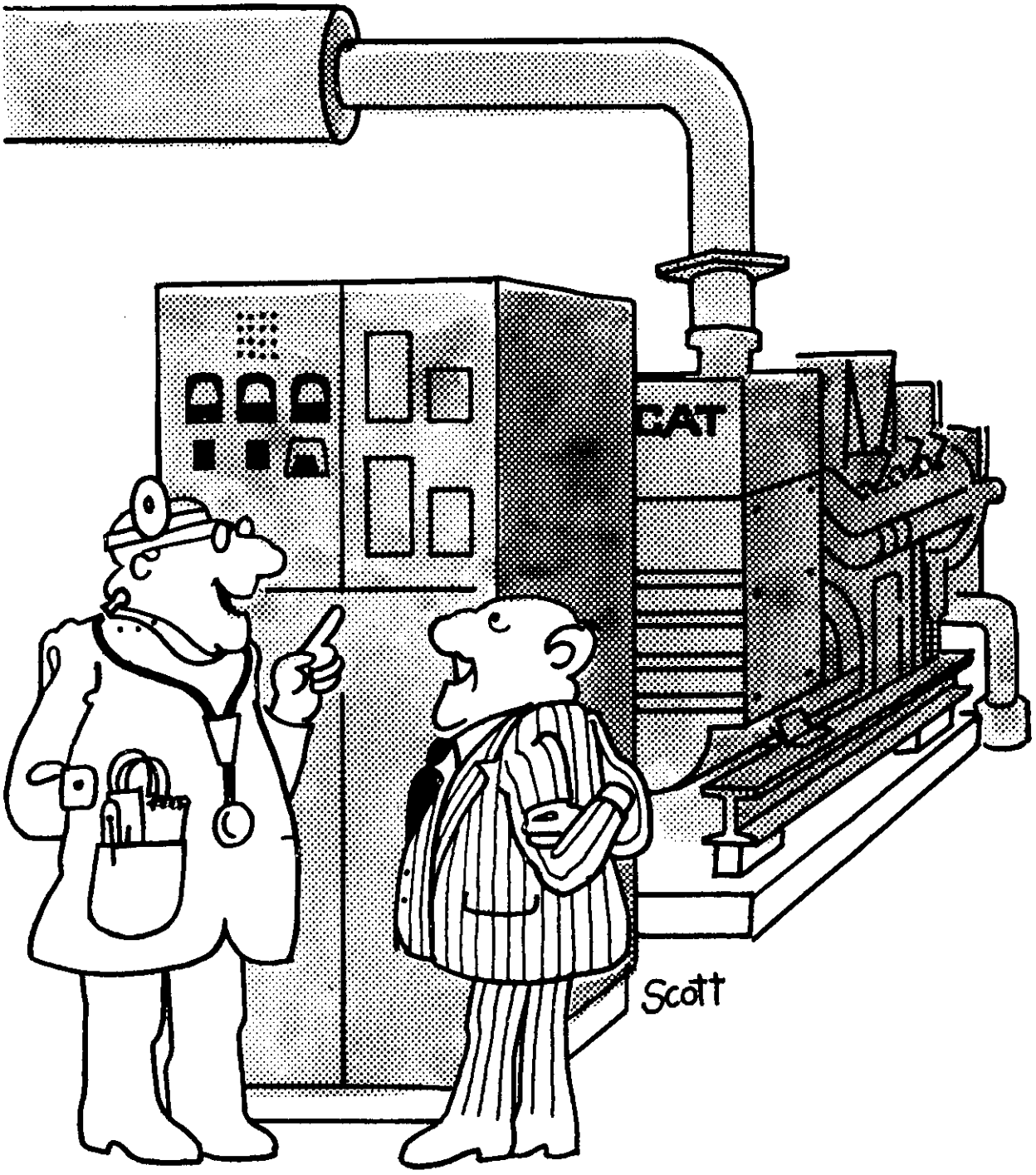
Courses of little value:

5. Engineering drawing should be a part of the B.S. engineering curriculum — YES ☐ NO ☐ OPINION ☐

If YES, indicate the optimum number of semesters of 2-credit drawing courses ☐

6. Land surveying should be a part of the B.S. civil engineering curriculum — YES ☐ NO ☐ OPINION ☐

If YES, indicate the optimum number of semesters of 3-credit surveying courses ☐



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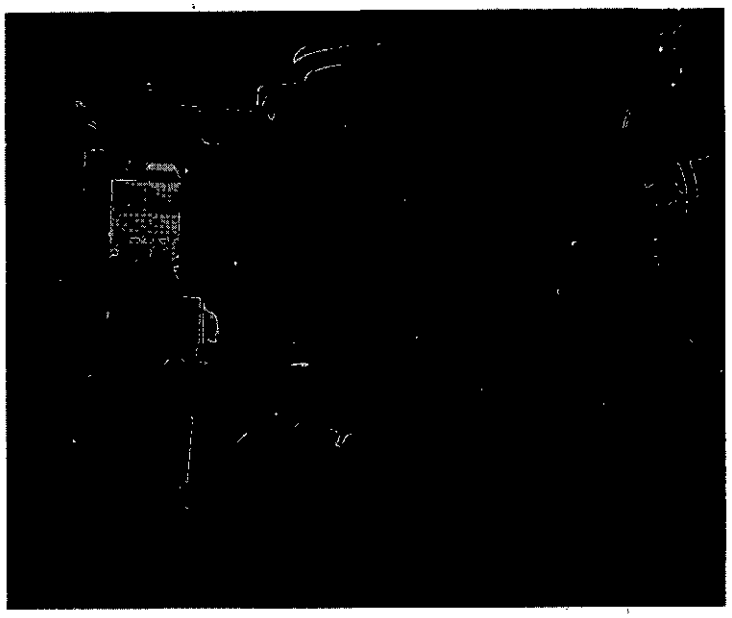

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Executive Secretary
Louisiana Engineering Society



Baton Rouge Chapter Wins 1978-79 Membership Contest

The Baton Rouge Chapter won the 1978-79 membership contest with 168% of quota and 284% of contest. In addition to new LES members compared to quota, the chapter is credited with one point for each new NSPE member. The Baton Rouge Chapter had a quota of 62 and it got 104 new members, 72 of which joined NSPE.

The Lake Charles Chapter won second place with 230% of contest, and the Monroe Chapter was a close third with 229% of contest. All eight chapters made it over the 100% mark in the contest.

A portable rostrum was presented to the Baton Rouge Chapter at the July meeting in Biloxi.

Engineers . . . Our Renewable Resource

The theme for the 1980 national Engineers Week is "Engineers . . . . . Our Renewable Resource."

Engineers Week 1980 will be celebrated Feb. 17-23. In addition to the normal fanfare, including a White House proclamation, the week provides numerous occasions for engineers to explain the "mysteries" of their profession to audiences throughout the country. It also provides a chance for high school students to learn of the opportunities awaiting them in an engineering career and for the profession itself to showcase the many engineering achievements which have made the American experience possible.

1979-80 LES Officers

Balloting for 1979-80 officers of LES was completed on June 26, and the Teller's Committee, composed of **Wiley Poole, P.E., Richard C. Robert, P.E.,** and **W. H. Carter, P.E.,** counted the responses on June 28.

All positions were unopposed except the second vice president position where **Art Defraites Jr., P.E.,** Houma, the Board of Direction nominee, was opposed by **John E. Ritter, P.E.,** Baton Rouge, by petition. It was a close contest but Ritter won with 410 votes to Defraites' 381.

The new officers elected are: President-elect, **Jerrel J. Freeman, P.E.,** New Orleans; Second Vice President, **John E. Ritter, P.E.,** Baton Rouge; Secretary-Treasurer, **T. Dudley Hixson, P.E.,** Alexandria; State Director, **James Porter, P.E.,** Baton Rouge; and State Director, **Curtis Dyle, P.E.,** Lake Charles.

Summary of 1979 Engineers Public Affairs Forum

Engineers were urged to help America and the "global community" in finding long-range solutions to worldwide problems of energy shortages, pollution and economic instability at the 1979 Engineers Public Affairs Forum held June 4-5 in Washington, D.C.

A closer working relationship between the business community and the federal government was another theme sounded at the annual conference sponsored by 20 engineering organizations.

Captain Jacques Cousteau, explorer and oceanographer, proposed a global ocean policy considering the world's seas and fresh water as one body, and cutting across national laws in an effort to halt pollution. At a luncheon, Cousteau lauded U.S. water pollution control efforts and urged formation of a World Ocean Authority which would assist nations in protecting the vitality of the ocean systems.

At a session on "Face the Engineering Profession," congressional, administrative and academic experts on technology were quizzed about the role of engineers in maintaining America's technological advantages. They called for improved product performance and productivity, an increase in exports, a search for new markets and encouragement of small firms showing ingenuity.

Regarding dwindling energy resources, **Dr. Frank Press,** director of the Office of Science and Technology Policy, called for "conservation, good sense and patriotism." Press predicted eventual viable solar power and safe nuclear energy. He also called for improved industry-government relations including joint research, and he added that government has been insensitive to the relationship of regulations to the economy.

In a session devoted to energy, **Rep. John Dingell,** chairman of the House Interstate Commerce Subcommittee, predicted that coal deposits could make the United States the OPEC of the future. Dingell challenged engineers to help the government make intelligent policies reflecting our real needs.

In three other town meetings, the following took place:

- Engineers voted by 93% to oppose the inclusion of price bidding prior to determination of qualifications in the selection of engineers and architects.
- A resolution calling upon government and the private sector to halt America's haphazard exportation of high technologies to other countries was rejected two to one.
- Engineers split almost equally over a resolution calling for replacement of current safety regulations with a national safety policy panel to study and recommend safety legislation to Congress.

NSPE Supports Engineering Unity Movement

At the Oklahoma City NSPE meeting in January, a report on the organizing efforts of the American Engineering Councils (AEC), to unify the profession was presented. Some principal NSPE concerns expressed at the time included the following.

- Unity was focused only on nontechnical matters and did not include technical affairs.
- Most of NSPE's activities, particularly in public affairs and professional affairs, were affected by the unity organization, but only a small percent of the technical societies' activities were affected.
- The role of ECPD and the handling of the accreditation function was unresolved.
- The tax status of the new organization was unclear.
- Financial structure was vague.
- NSPE's place in AEC was unclear.

These concerns were approved, along with the continued involvement of the president in the unity effort.

Since that time, NSPE has continued to participate in the unity discussions. The latest of these took place in Atlanta (June 18-20). At that meeting NSPE made further proposals to resolve some of its concerns and received information on actions that had already been taken to resolve others. As a result, the president and president-elect of NSPE have concluded that most of the substantive concerns NSPE had about the new unity organization have now been favorably resolved.

The name of the unity organization will be **"American Association of Engineering Societies."** It was recommended at the Knoxville meeting in July that NSPE's entry into the proposed unity organization be negotiated and become effective Jan. 1, 1980.

1978 Ten Outstanding Engineering Achievements

Each year, the National Society of Professional Engineers selects the 10 outstanding engineering achievements of the preceding year. The 10 for 1978 show much diversity with winning candidates spanning a wide gamut in the world of engineering.

The winners include: Performing Arts Center, Empire State Plaza, Albany, NY; Wyodak Steam Electric Power Plant, Gillette, WY; Fraser, Michigan Emergency Sewer By-Pass and Pumping Station; The Intercity Bridge, Pasco and Kennewick, WA; TVA Power Plant Waste Heat Greenhouse, Browns Ferry, AL.

Continued on page 18

VLIET'S VIEWS

Daniel H. Vliet, P.E., Executive Secretary
Louisiana State Board of Registration for Professional Engineers & Land Surveyors



The Registration Law requires that "All registrants engaged in the practice of engineering or land surveying, either in private professional practice or as an employee of a corporation, company, partnership, individual or other private employee, shall impress with his official seal all plans, specifications, plats, maps, studies, reports or other drawings or documents, which he shall prepare or which shall be prepared under his supervision." Government employees are exempt from this requirement.

The obvious intent of the above requirement is to assure that the work which resulted in the sealed drawings and documents was performed by or under the direct supervision and control of a person who is qualified to practice engineering or land surveying in Louisiana. Nevertheless, to prevent any misunderstanding with regard to the intended use of a seal by a registered Professional Engineer or Land Surveyor, the Registration Board has adopted rules which make it unlawful for a registrant to permit his seal, stamp or name to be affixed to any document which was not prepared by him or under his responsible supervision and control. Such illegal use of a registrant's seal could result in charges of fraud, deceit and misrepresentation, or of aiding an unregistered person to violate the laws of the state of Louisiana.

In the past some engineers and land surveyors may have sealed plans and surveying plats realizing that although these documents were not prepared by them or under their direct supervision and control, they were ready to take a chance and assume the professional responsibility for such work as a favor or courtesy to a friend or associate. Perhaps they believed that there was nothing legally or ethically wrong. Such improper use of the seal can have serious consequences — ethical, legal and financial liability.

Last year the registration of an engineer was revoked as a result of illegal use of his seal. **LE**



SEALS

Section 15 of Act 73 of 1950 provides that registrants engaged in the practice of engineering or land surveying either in a private professional practice or as an employee of a corporation, company, partnership, individual or other private employer shall impress with his official seal all plans, specifications, plats, maps, studies, reports or other drawings or documents prepared under his supervision.

Indicated here is the seal design authorized by the Board. Seals of two different sizes will be acceptable, a pocket seal, the size commercially designated as 1⅝ inch seal, or a desk seal, commercially designated as a 2 inch seal. Rubber stamps of the same design and size are acceptable for use.

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. . .TECHNOLOGICAL ILLITERACY

Continued from page 6

cipal Soviet negotiators of the SALT II agreement. And among the several of these men whom I have met, there are many of impressive breadth, combining their technical backgrounds with a keen interest in the world at large.

One might object that even if America's legislators themselves lack technological expertise, their staffs do not, and that the staffs, after all, do most of the work. But this is not the case either. Of the 17,000 members of the staffs of the House and Senate in Washington, only a handful are engineers, too small a number to have been taken seriously in a recent official survey.

So total was our Congress' illiteracy in technological areas that in 1974 it established the Office of Technology Assessment to overcome the problem. But far from solving the problem, this new agency merely pigeonholed it, segregating questions of technology from many of the other social and ethical issues that should properly be considered along with them.

In this context, it is worth recalling the views of Napoleon, perhaps the first man to appreciate fully the role of technology in modern society. In establishing the *Ecole Polytechnique*, Napoleon states that broadly educated *Techniciens* should henceforth take a prominent role in public life. Early graduates of the *Ecole Polytechnique* developed this idea into a comprehensive view of the marriage of technology and the humanities, according to which such *Savants* would become the chief legislators in society. Ferdinand deLesseps, the builder of the Suez Canal, held this view, as did many of America's pioneer engineers, who studied closely the Frenchmen's example. Is it not time to revive this vision? **LE**

POTPOURRI

Continued from page 17

Other winners are: **Interstate 10 Twin Bridges,** Mobile Bay, AL; **Two Harbors Taconite Terminal,** Duluth, MN; **Bethlehem Steel's Blast Furnace "L,"** Sparrow's Point, MD; **Five Megawatt Solar Thermal Test Facility,** Albuquerque, NM; and **Honeywell's W977 Load Management System.**

NSPE Presents 1979 Industrial Professional Development Award

The **Pullman Kellogg Division of Pullman, Inc.,** Houston, TX, received the National Society of Professional Engineers' 1979 Industrial Professional Development Award on July 11 during the society's annual meeting, held in Knoxville, TN. The award was accorded on the basis of Pullman Kellogg's outstanding engineering employment practices.

The national winner is selected from among nominees submitted by the 54 state and territorial engineering societies affiliated with NSPE. In addition to the national winner, the following firms were given regional awards for their contributions to professional development for their engineering employees: **Davy Powergas, Inc.,** Lakeland, FL (Southeastern Region); **Consumers Power Co.,** Jackson, MI (Central Region) and **Ralston Purina Co.,** St. Louis, MO (North Central Region). **LE**

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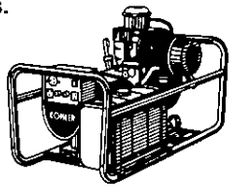

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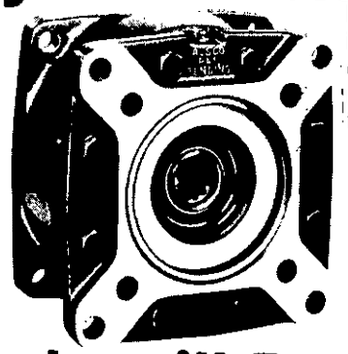

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EngiNEWS

IN MEMORIAM

Walter H. Mercier, P.E.

A long-time member of the engineering profession, Walter H. Mercier, passed away on July 1, 1979, at his residence in Baton Rouge.

Mercier, a native of New Orleans, was a retired mechanical and electrical engineer with Exxon USA. He received a BS degree in mechanical and electrical engineering from Tulane in 1921. After one year as electrical inspector for the Louisiana Board of Underwriters, he went to work in June of 1922 at the Standard Oil Company refinery in Baton Rouge.

He joined the Louisiana Engineering Society in 1946 and became a life member in 1976.

The society extends its deepest sympathy to Mrs. Agnes LaFleur Mercier, his wife, and Rodney W. Mercier, his son.

IN MEMORIAM

Charles H. Edwards Jr., P.E.

Charles H. Edwards Jr., professor of civil engineering at Louisiana Tech University, died on June 27, 1979.

Charles was a native of Vivian, LA. He received a BS degree from Louisiana Tech in 1948 and a master of science degree from the University of Texas in 1949. He joined the faculty of Louisiana Tech in 1949 as an assistant professor of civil engineering.

He was a member of the American Society of Civil Engineers, the Tau Beta Pi honor society, the First Baptist Church in Ruston and the Louisiana Engineering Society. Charles joined the Louisiana Engineering Society in 1950 and has been very active in the Monroe Chapter and the state organization. He was president of the Monroe Chapter in 1974-75.

Charles' death was a shock to all of us. He was a fine Christian man who was ready to do his share of any task.

The Society extends its deepest sympathy to his wife, Charlene, his son and daughter, and to other members of the family. **LE**

New Members of LES

NEW ORLEANS

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Gretna, LA 70053
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James A. Lawrence, P.E.
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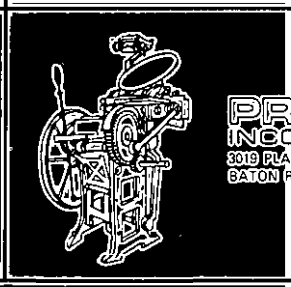

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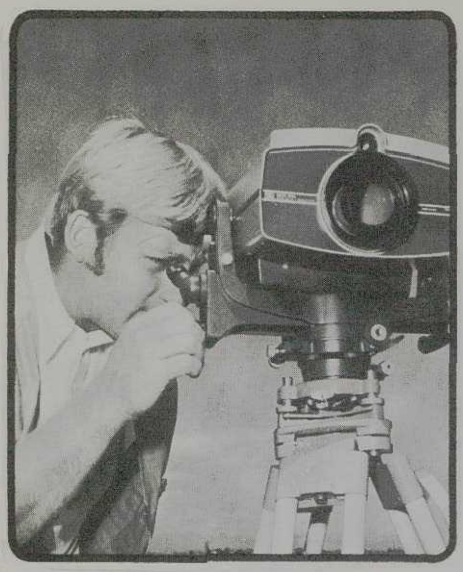

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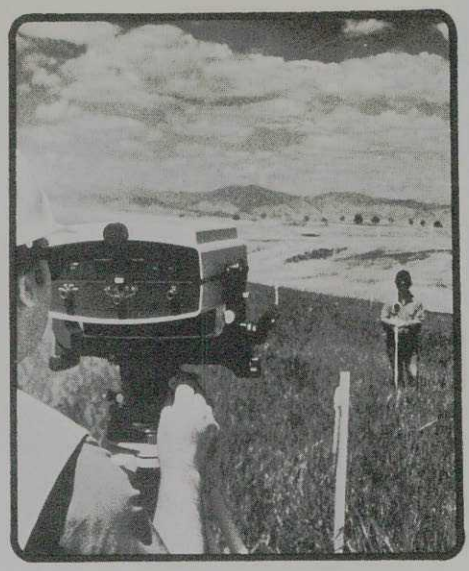

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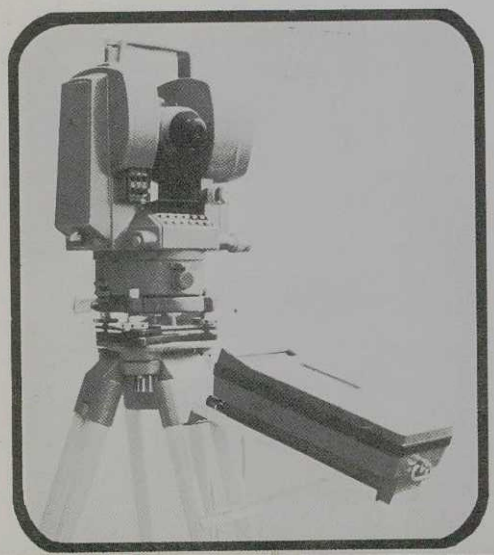

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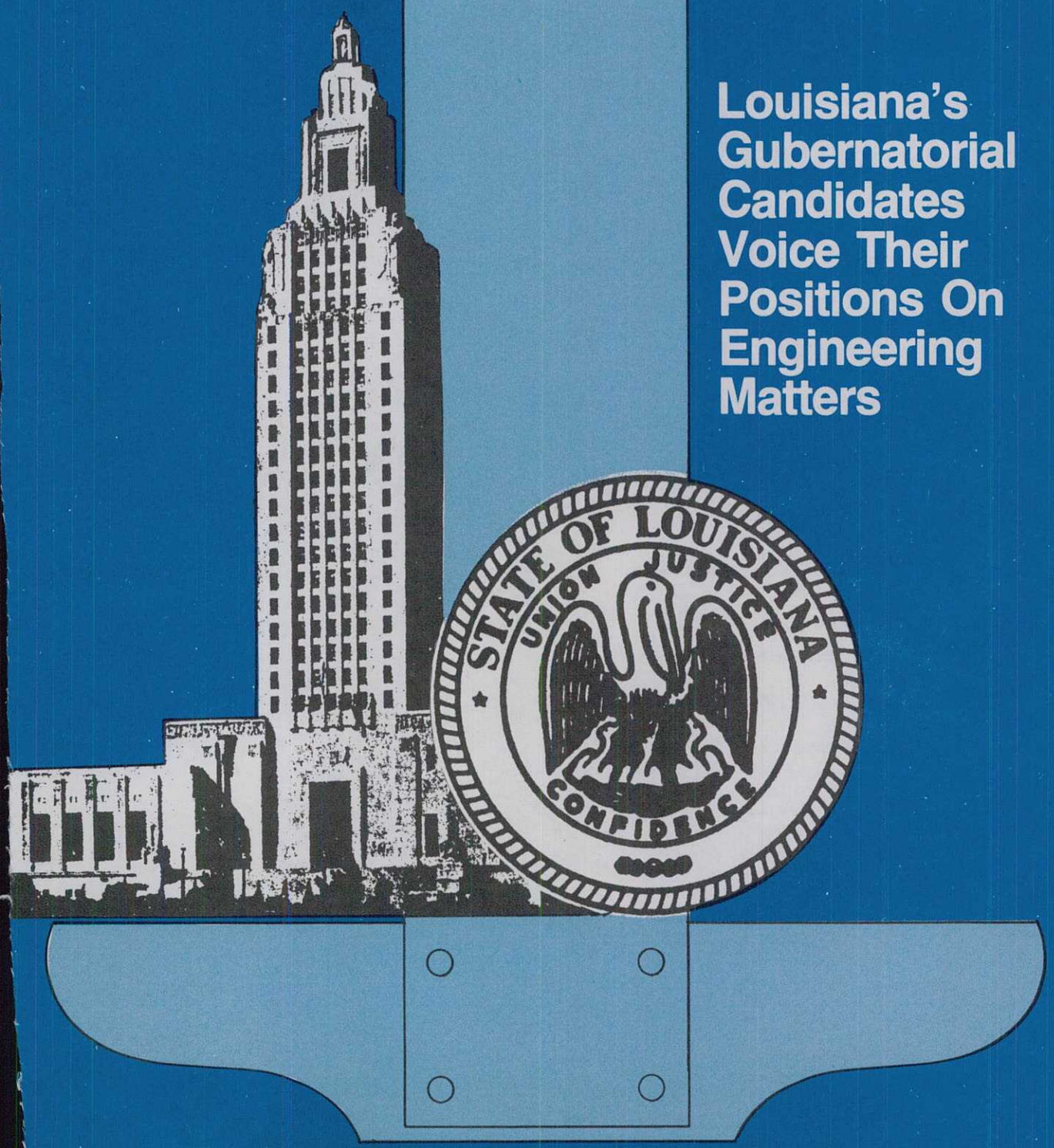

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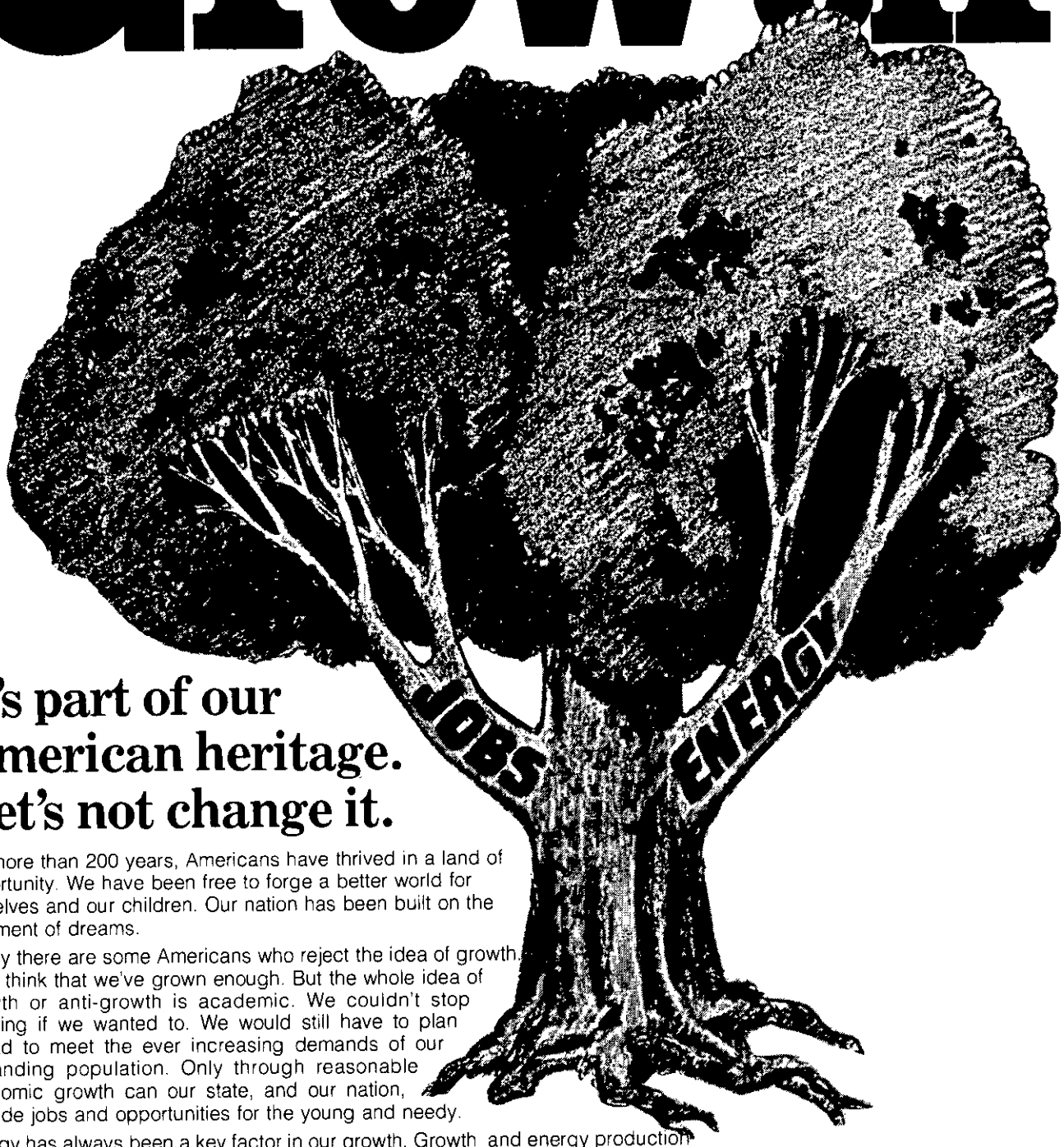

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October, 1979

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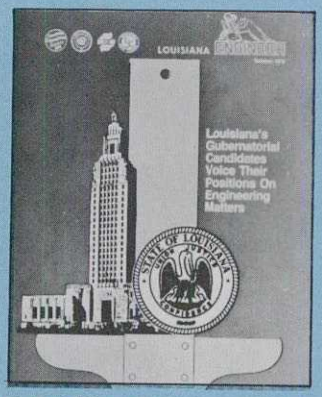

About the Cover:

The six major candidates for Governor of Louisiana answered an extensive questionnaire about engineering matters. Their answers begin on page 6.

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For complete information about upgrading with asphalt, contact your nearest Asphalt Institute engineer or write The Asphalt Institute, College Park, Maryland 20740.

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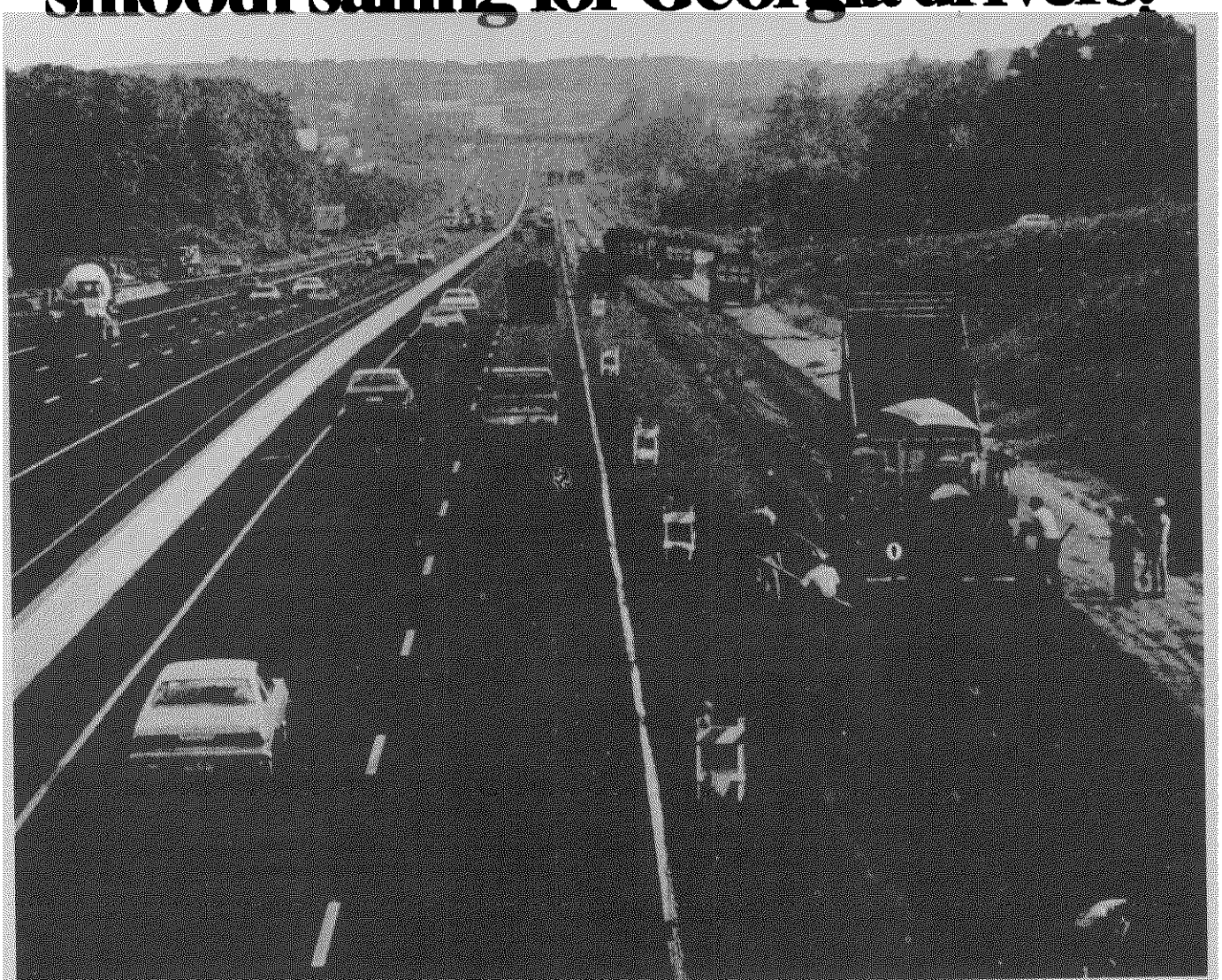
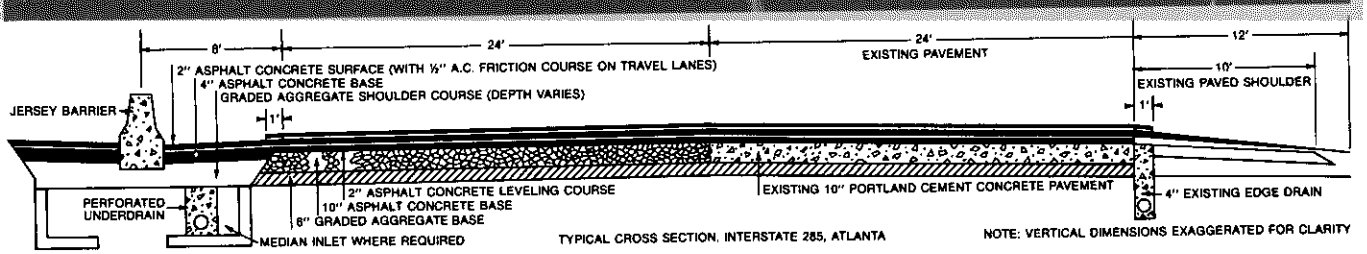
Upgraded interstates mean smooth sailing for Georgia drivers.





PRESIDENTIAL PRIVILEGE

I got home about 4:00 p.m. on Saturday, September 15 following the Annual Chapter Officers' Training and State Planning Conference in Alexandria. With a sigh of relief I plopped the ole travel bags down, and prepared to relax. It had been a very satisfying but full conference, and I felt a bit "drained." LSU was well on its way toward humiliating the Buffaloes up at Boulder, and so I was opting for a bicycle ride, and then off to the McNeese vs. West Texas game circa 7 p.m. The last thing I wanted to do was read, exercise my little brain, or begin an immediate rehash of the conference.

Enter the little lady of the household, just returning from a visit to Iota. Before the bike ride I grabbed the opportunity to bring myself up-to-date on the latest happenings in that wonderful community. I was thrilled to learn that Iota had won its football game!

But turnabout is fair play and the next thing I knew I was on the reverse end of "Information, Please."

"How was the meeting?"

"Great. Shrimp boil was really good, as usual. The Alexandria Chapter outdid itself as a great host. All the nice people were there; really enjoyable."

"I wasn't exactly referring to the eating and socializing," she retorted.

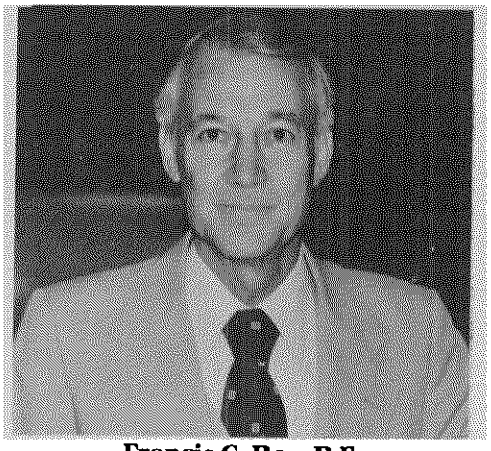
"Oh, very successful meeting. We got a lot done."

"Like what?"

"Well, since part of the Fall Conference was devoted to training, we spent all of Friday morning toward tutorial coverage of the standing committees. You know the committees form the nucleus of LES. The input to the Society on vital issues is in direct proportion to the activity of the committees, on both chapter and state levels. This really is the crux of how LES policy is formed."

"I always thought the Board of Direction was responsible for the professional policies of LES." The lady was determined that Sunday would be a better day to ride a bike.

"Sure, the Board is responsible, but that means that they have to be responsive to the entire membership. Committees are the best way we have found, so far, of reading the will of the membership. I really wish every member realized how readily his voice could be heard in the profession through the LES committees. Often the input of a committee reaches the national level."



Francis C. Roy, P.E.
LES President

"How does it do that?" My former stint as a teacher was getting me in deeper. I would have to try the "short but accurate answer" technique.

"We're very active in NSPE, the National Society of Professional Engineers."

"You mean LES is a part of NSPE?" she pressed.

"Yes."

"Who represents LES at the NSPE meetings?"

"We now have one National Director as our representative on the NSPE Board of Directors, and with just a few more NSPE members we will have two. Additionally our five practice division chairmen are members of the Board of Governors for NSPE."

"So then every LES member is also an NSPE member."

"No, not in Louisiana."

"You mean **all** the members of the other 49 state professional engineering societies also belong to NSPE?"

"All, plus those from the U. S. Territories."

"How'd that happen?"

"I'm not quite sure. I only know that at least some of the membership is giving it a hard look. As a matter of fact, we had another somewhat long but spirited discussion at the General Membership meeting on a petition for a constitutional amendment which deals partially with the issue. Actually, it was first discussed in Lake Charles last April, and the members there directed that it be given to a committee when they were unable to come to an agreement. It was still deemed necessary at Biloxi for a rewrite and second trip to committee."

"But you settled it in Alex, right?"

"Wrong. We have to send it back a third time, and hope for agreement of what will be sent out on the ballot after the meeting in Shreveport next April."

"How can you possibly be doing any good as a profession with so much controversy? Engineering has a pretty good image, I guess, but it could be so much better if people who are not professional engineers would stop using the title of engineer. When they goof, the general public doesn't know they are not really professional engineers." Spouses can apparently be very observant of other things besides how badly the yard needs attention, or of one's behavior at the New Year's Eve party.

"I think you are so right on the second count, and it actually all ties together. However, differences of opinions must be expected anytime independently thinking people address an issue."

"And professional engineers are independent?"

"Very much so, and that can be very advantageous. It goes back to the importance of having the input of **all** interested members on an issue. But I must accede conditionally to your observation that we might have trouble doing any good if we can't intelligently and professionally compromise our differences for the public good, and afterward pursue the majority opinion of the membership as a **unified** group. Naturally, anytime we attempt to address an issue which could be controversial we will probably accomplish little unless we can feel the pulse of the whole profession."

"So LES is going to work toward that."

"I hope so, but it really remains to be seen. Anyone who joins LES and gets active on a committee or two will stay with us, I'm sure. I do wish they would give us a try."

"You're back to committees, but you haven't told me what each committee accomplished or discussed at Alexandria." The bike ride would be once around the block if I didn't cut this off.

"Doc Spears will have a summary of the Board of Direction minutes of the meeting in Alexandria in the LOUISIANA ENGINEER or Perspective. If your interest gets twitched on anything, drop Doc a note and he'll send you a copy of that committee's report."

P.S. The evening was relaxing. The weather was ideal and the Cowboys won.

Gubernatorial Candidates Answer Questions Important to Engineers

The Legislative Committee of the Louisiana Engineering Society, chaired by Lamon Moody, P.E., prepared a letter with 15 questions covering items of importance to engineering to be sent to the six candidates for Governor of Louisiana. Francis C. Roy, P.E., LES President, mailed each candidate a questionnaire, and requested answers be returned to LES in order that they could be published in this issue of the LOUISIANA ENGINEER.

We feel this clarification of the candidates' positions will give the individual engineer a better insight for determining his support in the upcoming election.

What is your position regarding the shortage of energy and the possible solution Louisiana could take to alleivate energy shortages?

FITZMORRIS

I favor complete deregulation and decontrol of oil and natural gas. There are still large energy supplies deep inside our state, but it takes a lot of money and federal encouragement for production companies to make the drilling commitment. I also favor the development of alternate energy sources in Louisiana such as lignite coal in North Louisiana, and gasohol production in the South. In addition, I think we must make a stronger effort at conservation.

HARDY

First, I believe Louisiana, as the second largest producer of oil and natural gas, should receive allocations of gasoline from the Department of Energy at equivalent levels. Long gasoline lines, caused this summer when Louisiana was 49th in gasoline allocations, are inexcusable. I am a strong believer in logical utilization of America's natural resources, and I will be a strong and outspoken opponent of continued attempts to force Louisiana industry to switch to coal-generated energy, while industries in other states operate on Louisiana's clean-burning natural gas. Louisiana should not be forced to utilize coal from out-of-state sources and endanger our atmosphere and environment, when such abundant sources of clean-burning natural gas exist under our feet. I will continue any efforts to keep our gas in Louisiana, notwithstanding obvious constitutional barriers.

HENRY

We need to do everything in our power to see that Louisiana energy resources remain in our state for use by Louisiana residents. We need to take our royalty on oil and gas leases on state land "in-kind" wherever possible for use within the state. We need to develop additional energy resources such as the lignite coal in North Louisiana, geopressurized methane and geothermal energy as rapidly as possible.

LAMBERT

I do not believe the depletion of our natural resources is as imminent as some people think. The discovery of the Tuscaloosa Sand natural gas deposit has almost reversed the downward trend in the production of this fuel. While oil production remains off somewhat, the energy shortage has increased exploratory activity in our state. This has been a boon to the economics of the southern area of our state. I see no reason why this boon should not continue for several more years. As petroleum firms move to more advanced recovery techniques, such as tertiary methods, the northern areas of our state should benefit also. More specifically:

I plan to be an active spokesman and representative of our state on vital energy issues at the national level.

I propose establishing a special office in the Department of Natural Resources that will be responsible for looking after state interests in all federal regulation of oil, gas, and other minerals.

Each year I will prepare a separate annual message on energy in the state. This will keep the people of Louisiana informed on all developments affecting energy in the state and will provide a report on what the adminstration has done in the past year to promote the best interests of the citizens and what it plans to do in the following year.

The agency described above will be charged with investigating the regulatory and paper work requirements of each state agency operating in the energy area. Not only will the agencies themselves be investigated, but also public hearings will be held so that our citizens can provide their input and ideas on this issue.

To encourage energy conservation, I will have the Department of Natural Resources compile methods for consumers to save energy—including descriptions of federal tax incentives—and have these mailed periodically by the utilities when they bill their customers.

Vast amounts of lignite coal exist in the northwestern section of our state. It has been estimated that approximately one billion tons of recoverable lignite exist in that area. That is enough coal to fuel 10 steam-driven electric power plants, each generating 500 megawatts of electricity for 35 years. By using the coal that is located within our state we not only gain the valuable fuel but also the jobs and income associated with extracting it.

MOUTON

The energy shortage has been compounded by the federal government's mismanagement of energy policies. If we let the free market deal with energy, we wouldn't have the problems we now face. With deregulation, oil and gas production would vastly increase in a free market atmosphere. The function of government must be to provide seed money for projects which are not commercially feasible now.

TREEN

Complete decontrol of pricing of oil and gas, alleviation of the delays and difficulties in getting drilling permits, etc., will stimulate oil and gas production. Proper development of lignite coal for electricity generation, encouragement of gasohol production and use of solar energy wherever possible.

What is your position on nuclear versus coal or oil powered electric generation facilities?

FITZMORRIS

I am not going to become hysterical or act irrationally because of the Three Mile Island accident. But, I do believe that Louisiana has done more than its share in the nuclear field. I think we must complete the two plants now under construction with all the safeguards known to man included. There must also be completed evacuation routes in place before the plants are allowed to open and we must guarantee regular inspections of these facilities. I do not think there should be other plants in our state. Of course, I would rather see coal and oil powered plants in Louisiana.

HARDY

I am apprehensive about nuclear power in Louisiana. I openly discourage construction of new nuclear power plants, and will back generation of nuclear power in Louisiana when plants under construction are completed, if there is a clear danger to the public safety and health of Louisiana residents. I am opposed to coal and oil-powered electric generation facilities, when clean-burning natural gas is abundant right under our feet. I believe

it is an illogical use of America's natural resources for Louisiana natural gas to be shipped out of the state to fire industries there, while our own industries are forced to shut down or operate on coal from out-of-state sources.

HENRY

I want to see our electical power generated as safely and cheaply as possible, with due consideration given to the maximum possible conservation or our natural resources and the the cleanest possible environment. Since our technology in this area changes so rapidly, it is impossible to say what will seem to be the best alternative next month or next year. I would make up my mind at the time each new facility is proposed, based upon the best information available at that time.

LAMBERT

I am not opposed to nuclear development in itself; however, there seems to be growing uncertainty about both the safety measures and the generation costs associated with electricity generation via this resource. At the very minimum, I will not encourage its further development in Louisiana without additional assurances that risks of nuclear accident have been reduced to the lowest level humanly possible.

Also, additional evidence is beginning to surface which suggests that when subsidies to suppliers of nuclear fuel are included in its costs, electricity generated by nuclear power is no longer very competitive with, say, electricity generated from coal.

Again, when so much uncertainty exists about a fuel source whose damaging effects could be catastrophic, my position is to go very slowly and very carefully in allowing its use.

MOUTON

The real argument against nuclear power is an economic one. The necessary investment in nuclear power is extremely high, and the net energy the plants produce over time is extremely low. Nuclear fuel is scarce, and it is predicted that the high-grade sources will be depleted by 1985. Coupled with the impossible task of bringing nuclear plant expenditures down, nuclear power is not an economically sound energy alternative. Coal is a viable economic answer, because it allows us a much longer transition period. Oil will always be in demand because of its versatility. In terms of long term choices for the future, we must realize that oil will eventually run out—even Louisiana's oil.

TREEN

I am awaiting the report of the President's Commission on the Safety of Nuclear Power Generation. If all reasonable doubts are removed as to its safety, it should take its place as one part of our electric generation program, but we should not become overly dependent on it. I am greatly concerned about the problems of waste disposal. I think we should use the lignite coal deposits in North Louisiana to maximum advantage, but I see no reason why we should import coal into Louisiana in large quantities to convert our present oil and gas burning generators to coal, when gas is plentiful, and we are shipping gas to the coal producing regions. I doubt the energy efficiency of bringing coal to Louisiana — the foremost producer of natural gas.

What is your position on the first use tax on energy produced in the state of Louisiana and sold to other states?

FITZMORRIS

I strongly favor it. For too long, Louisiana has been denied its rightful share of monies derived from oil and gas produced or transported inside our state. I believe there is a good chance the law will be upheld in the courts. It will mean many millions in needed revenues.

HARDY

I support the first use tax on oil and natural gas generated in federal waters off Louisiana's coast and shipped to Louisiana for refining or distribution to other parts of the country.

HENRY

I supported this tax in the Legislature and still support it.

LAMBERT

Louisiana public resources—roads, schools, etc.—were involved in the production of this gas. I view the first use tax as a means by which these companies pay for use of our resources. I definitely support this tax.

MOUTON

I favor the first use tax and favor the cost of same to be passed on to the rest of the nation.

TREEN

I hope the first use tax will be sustained by the courts as constitutional, and will do everything in my power to help fight this case. We need the money for development of our state for the days when oil and gas revenues will decline.

What is your position on furthering the development of industry in Louisiana?

FITZMORRIS

For the past two years, I have headed the Office of Commerce and Industry. In that time, Louisiana has experienced its greatest economic growth in history. It has been a team effort, but I headed the team and gave it leadership and direction. As Governor, I will personally direct the operations of the office. I will place the office and staff under control of the Governor. I have made economic development and more jobs the number one priority of my administration.

HARDY

As governor, I will emphasize attracting job-oriented, rather than pollution-oriented industries. I believe that, with passage of right-to-work and with the utilization of natural resources like the Mississippi River, Louisiana has the appropriate climate for job-oriented industries.

HENRY

My administration will place greater emphasis on attracting smaller, more labor-intensive industries and businesses with lower emissions of pollutants. We will also work to attract small industries and businesses to service our existing industries.

LAMBERT

It is impossible for me to be brief in answering this question since it is a crucial plank in my platform. I will simply list here my major points; each is explained in detail in my industrial inducement position paper.

a. Improve public education: a skilled, educated labor force is the key to any inducement program. This is the number one priority in my administration.
b. Completion of a North-South Highway.
c. Improvement of our coastal zone highways, specifically Highways 1 and 90.
d. Establishment of a research and development tester charged with implementing a systems approach to industrial inducement.
e. A media campaign to improve Louisiana's business climate image.
f. A careful review of state regulations with an eye to eliminating unnecessary paperwork.
g. Strengthen our "office industry" inducement efforts.
h. Establish a $3 million "matching funds" fund for securing federal received money.

MOUTON

We need to bring job-intensive industry into the state and encourage them through tax credits to locate here. Our vo-tech program has attracted many industries into our state and must be strengthened and coordinated more closely with the needs of industry. Louisiana can be transformed with careful management and planning into a state where a steady, high-paying job is the norm, rather than the exception.

TREEN

We must develop industry in Louisiana to provide jobs for our people and broaden our tax base for the days when oil and gas revenues decline. To do so we need drastic improvements in education, better control of violent crime, better vocational-technical training, and to clean up our political environment in general.

What is your position in strengthening the Louisiana Department of Commerce and Industry's requirements that industires, seeking tax benefits, give preference to Louisiana materials, labor and services, including Professional Engineering services?

FITZMORRIS

Right now we require that industries seeking tax benefits give preferential treatment to Louisiana firms and that will continue. I am not married to any specific system of tax in-

centives. I am willing to review them and to recommend changes to the Legislature. My personal view of the situation is simple: industries that create new, permanent jobs should be given incentives. Louisiana must remain competitive, but the days when we can simply give blanket tax incentives are gone.

HARDY

I would support requirements that industries, seeking tax benefits, give preference to Louisiana materials, labor and services.

HENRY

I support this concept and will work on a specific program to accomplish this goal.

LAMBERT

My feeling is that "Rule 1," which you are referring to, needs to be much more strictly enforced. Not only that, but I also believe that the industrial tax exemption needs to be re-examined with an eye towards tying the amount of the exemption to the number of new jobs created.

MOUTON

Of course, we should insist that industries do their shopping at home, if they possibly can. We need to develop the economic base of the state, and we can only do so by making the full use of all of Louisiana's resources by encouraging industry to use them. The tax credits would be granted by the people of the state of Louisiana, so the benefits should be spread among the people.

TREEN

I would certainly agree that industries seeking Louisiana tax benefits should give preference to Louisiana materials, labor, services including engineering services. I would enforce Rule 1 of the Tax Exemption Law.

What is your position regarding improvement of Louisiana's environmental laws?

FITZMORRIS

I believe there can, and must, be a balance between a healthy, clean environment and a growing economy. We may have neglected the environment in the past in order to attract more industry. That has changed. We have recently passed a series of new environmental laws. I support them and will see that they are enforced. Also, we recently passed laws to crack down on the dumping of hazardous waste in our state. There are about 40,000 pits and ponds where waste has been dumped. In the future, that will be closely monitored and the persons or companies responsible will be required to clean up the pits and ponds. I support those laws.

HARDY

I favor strengthening enforcement of Louisiana's existing laws, which I believe are adequate, if enforced.

HENRY

I think we took a good first step in the Legislature this year with the consolidation of all our environmental agencies into one agency. This reorganization needs to be continued and strengthened. I would appoint the environmental professionals to top positions in this agency and provide the agency with the funds it needs for monitoring and enforcement.

LAMBERT

I plan to encourage maximum economic growth and development within the constraints necessary to protect public health and safety. I feel that states are going to have great difficulty achieving the ultimate goal of "zero pollutant discharge into surface waters" within the federal 1985 deadline. Enforcement of zero discharge prior to the development of the required technology is impractical and would virtually shut down 90% of Louisiana industry. The law of diminishing returns applies to environment as well as business. Maintaining an absolutely pristine environment provides little comfort to the jobless man who cannot feed his family.

I plan to consolidate all state environmental programs (e.g., air-quality, water quality, hazardous waste disposal, underground injection) within a single, cabinet level department. This department shall administer state and federal environmental protection programs/regulations, operate a statewide air and water quality monitoring network, and manage a centrally located state permit office. An office of this nature could be of great assistance to the public in providing the types of specific information needed to identify areas which are most environmentally suitable for future growth and development. This new department must not only monitor EPA requirements as they develop, but must also influence federal policy and legislation to reflect our state and regional needs.

MOUTON

We need to place all offices relating to the environment and natural resource protection into one centralized, strong office in the Governor's office. We need to bring business and government together to protect the environment, not to have these groups fighting each other.

TREEN

All environmental matters should be combined under one agency with an Environmental Control Board that will consider each case of conflict between environment and industrial development on its merits and act reasonably so as to protect our environment without increasing difficulties in industrial development.

Do you favor maintaining the Right to Work law in Louisiana?

FITZMORRIS

Right to Work is the law of Louisiana and I support the law.

HARDY

As governor, I will openly oppose the repeal of Right to Work; and it will not pass during a Hardy administration.

HENRY

Yes. I believe the law has been successful in helping to create a climate of labor/management balance in the state.

LAMBERT

Since the announcement of my candidacy for Governor, I have steadfastly maintained the position that the jury is still out on right to work. I believe that the emotionalism generated by the right to work controversy in Louisiana has served to obscure the real problems of our state, e.g., economic development, industrial inducement, unemployment, and the standard of living of those persons in our state who work for a living. I believe that right-to-work should be considered on the basis of economics rather than emotionalism. For that reason, I would say that the right-to-work law currently on the books has not been in effect in Louisiana long enough to determine its real economic impact on the state.

The economic expansion we are now experiencing is a result of decisions made three to five years ago by major industries and employers who chose to locate in Louisiana. It is my opinion that the economic expansion now being enjoyed in Louisiana occurred because of these decisions. Thus, it is too soon to tell the impact of the law.

As Governor, I would favor an independent study to be conducted on behalf of the state to objectively determine the economic impact of the existing right to work law in Louisiana. This study should consider the real effect of right to work on industrial inducement, permanent employment, living standards and economic growth. I would ask the legislature to fund such a study and seek their input in its design because I think the issue is fundamentally legislative in nature. I respectufully submit that the opposing interests in this controversy substantiate their arguments in favor of or against right-to-work with arguments most conducive to their respective stand. Thus, an independent study is necessary, in my opinion, so that the governor and legislature are objectively informed about the economic effects of right to work in Louisiana.

Finally, I would state that I believe this issue addresses itself more appropriately to the legislature. Elected from single-member districts, the members of the legislature are better able to articulate and represent the many varied interests in our state. Like Edwin Edwards, I would consider the will of the legislature as the most accurate barometer of our citizen's feelings and concur in their judgement.

MOUTON

I take no position on the retention or rejection and shall sign whatever legislation is passed.

TREEN

Yes, I favor maintaining the right to work law. During my first four years, if it were repealed by the Legislature, I would veto the repeal.

What is your position on improving th

quality of education in Louisiana's public schools?

FITZMORRIS

As Governor, the problems of education will receive my closest attention. There is a strong need for coordination and the setting of priorities in education. Louisiana spends more money on food than any other state. We rank fourth in the nation in administrative costs. We are at the bottom in providing quality education. Our priorities are topsy turvy and must be corrected. As Governor, I will be sensitive to the budgetary needs of education.

HARDY

We must make some fundamental, common sense changes to improve the quality of education. Incompetent teachers must be weeded out of the school system and replaced with new teachers, who are certified as professionals immediately after graduation. This will insure that incompetent teachers are not replaced by more incompetent teachers. Louisiana teachers must be paid at least $2000 a year more, to bring their salaries up to the national average. We must pay good teachers adequate salaries if we want to keep them teaching in Louisiana.

To weed out incompetent teachers we need a professional standards board to review allegations of incompetency and devise a test for use in certifying college graduates. The professional standards board would review allegations of incompetency and recommend either dismissal or additional training to local school boards for final action. I believe Louisiana must build a new foundation for education. To do that, we must have an elected board of elementary and secondary education, which in turn would appoint a Superintendent of Education. I also believe school board members and these board members should run at the same time during off-year elections so that the attention of the public can be focused on the problems of education.

HENRY

Solving our educational problems will receive the top priority in my administration. I can supply the leadership to take the hard positions that will be necessary to bring about improvement in our public schools. We have a constitutional and a moral obligation to provide our children with the best education possible, and I'm ready, willing and able to take on the educational establishment and special interests to see that the state delivers.

LAMBERT

This has been by number one priority issue. As I mentioned earlier, it is the keystone to economic growth for our state. But more importantly, our children, the most precious resource we have, deserve the very best opportunities in the future, and more opportunities are closely tied to the quality of education they receive.

My education platform is varied, but I mention here just a few major points. Our teachers need the support of our state government. They need to know their governor is interested in them and in the quality of their work. They need to know that he will support them in their financial requests when the merit of their work justifies it. I plan to give our teachers that support and attention.

But we need to also be sure that qualified teachers are educating our children. In this regard we should:

a. Continue to strengthen screening devices now in place (ACT; early counseling by non-educators; field experience in the sophomore year; grade point average requirements; NTE results; student teaching grading systems) prior to certification.
b. Urge school systems to participate more vigorously in the process of assuring classroom competence by: employing new teachers whose records are above average or better; improving their evaluation policies and procedures after a teacher has been hired; refusing more often to award tenure; implementing effective, relevant in-service programs for faculty.
c. Encourage the parental community to participate often and fully enough in school affairs to induce teachers to develop a higher degree of accountability for the quality of what they do in the classroom.

MOUTON

Education is the lever to lift Louisiana into the future. The quality of the education our

Continued on page 13

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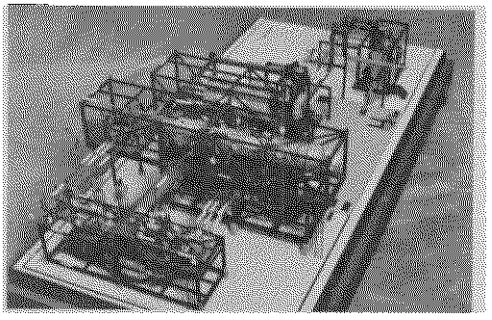

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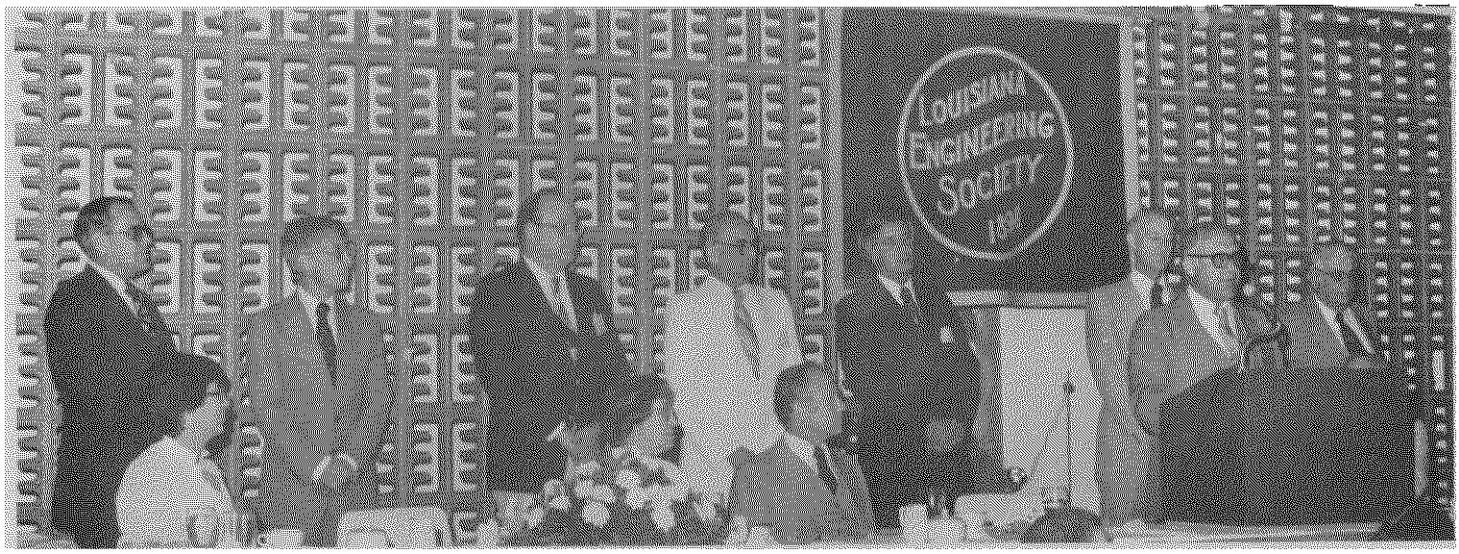
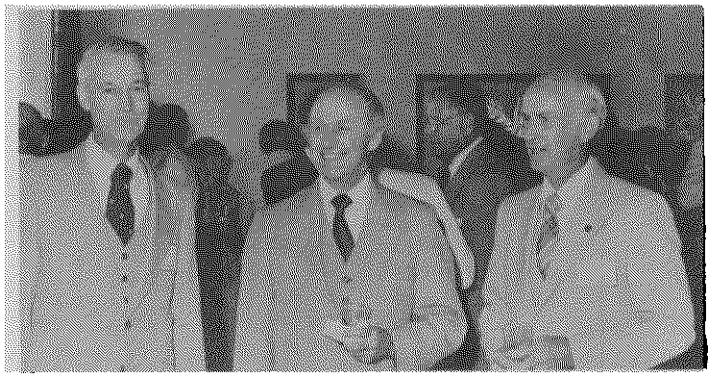
Annual LES Convention — Outstanding



Standing: Jerrel J. Freeman, P.E., 1st VP; James Porter, P.E., State Director; Curtis Dyle, P.E., State Director; Waldemar S. Nelson, P.E., National Director; T. Dudley Hixson, P.E., Secretary-Treasurer; Francis C. Roy, P.E., President; Sammie Lee, P.E., NSPE President; and John E. Ritter, P.E., 2nd VP. Seated: Mrs. Freeman; Mrs. Ritter and Gerald Carr, former astronaut.



Francis Roy, P.E., Gerald Carr, P.E, and Carl Thomas, P.E.



Jack Thigpen, P.E. and A. J. Szabo, P.E.

The 1979 Annual LES Convention held at the Broadwater Beach in Biloxi July 30-August 1 was outstanding. The weather was beautiful and the various functions were interesting and productive. There were 85 engineers and 61 wives registered for the three-day affair. The Monday-Tuesday-Wednesday format was a new twist over our usual Thursday-Friday-Saturday meeting days.

The convention started with recreation; 23 golfers teed off at the Sun course and 14 tennis buffs braved the heat and played tennis on the hotel courts. In golf, Lloyd Hoover, P.E., won the low gross and Calloway. Dennis Meyer was second and Blaise Carriere, P.E., was third in the Calloway. The longest drive award was won by Blaise Carriere and closest to the pin award was won by Richard Matula, P.E.

In the tennis, Edgar Benoit, P.E., won the men's first place trophy, Marlyn Freeman, the ladies trophy, and Robert and Jean Blanche were second.

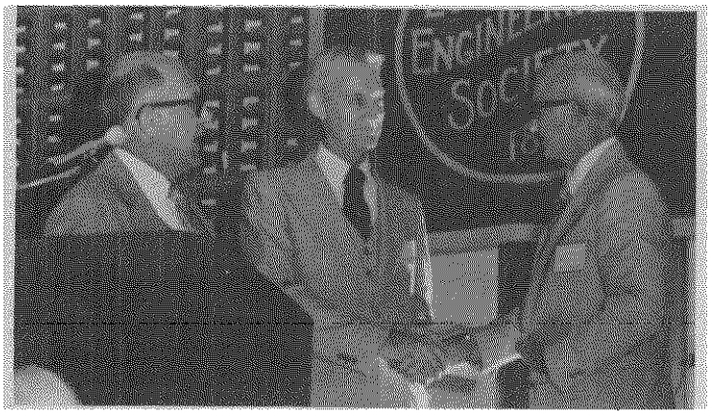
On Tuesday morning over 100 engineers attended the formal session of the meeting where Sammie Lee, P.E., NSPE president and Waldemar S. Nelson, P.E., past NSPE Vice President, presented "Action 80", NSPE's master plan for the future. The plan recognizes our responsibilities and provides goals and objectives for maintaining NSPE's leadership position in the profession. Sammie Lee is a native of Kentucky, and holds B.S. and M.S. degrees in civil engineering from the University of Kentucky. As president of NSPE 1979-80, he sees NSPE's role in the decade of the '80's as service to the public. "Let's make the decade of the '80's an action decade devoted to turning America in a positive direction in energy deficiency, abundant water supply, and an improved quality of life for its people."

The luncheon Tuesday was attended by 89. The golf and tennis trophies were presented by Dudley Hixson, P.E., golf chairman, and Vic Lefeve, tennis chairman. Carl Thomas, P.E., presented Paul D'Antoni, Baton Rouge Chapter president, the portable podium, the award for winning the 1978-79 LES membership contest.

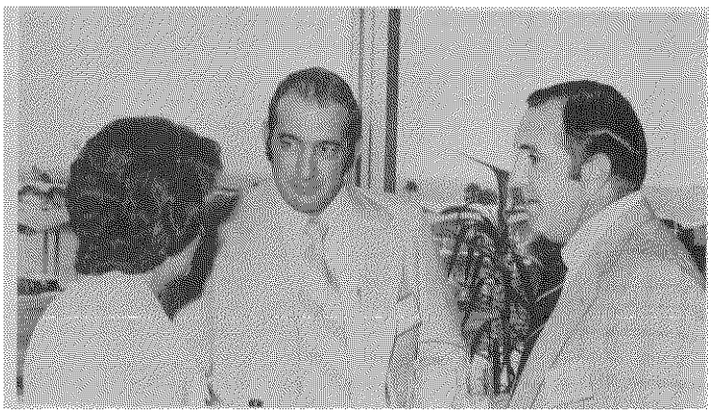
One hundred forty-four engineers and guests attended the installation banquet Tuesday evening. Lee installed the 1979-80 LES officers. The highlight of the meeting was Gerald Carr, P.E., former Skylab and Apollo astronaut, who used movies and words in a one hour presentation of his involvement in the space programs. It was outstanding.

Wednesday morning the Louisiana Engineering Foundation (LEF) Board of Directors met. The LES general meeting had lots of excitement regarding NSPE membership of LES members. The LES Board of Directors met from 11:00 a.m. to 3:00 p.m. under the direction of Francis Roy, P.E., LES 1979-80 president.

The 61 ladies enjoyed the hospitality and the Gulf Coast. Mrs. Betty D'Antoni and ladies of the Baton Rouge chapter arranged for a luncheon at the Sea & Sirloin, Biloxi on Tuesday noon. The ladies did their own thing: swimming shopping, visiting and enjoying the Gulf Coast weather.



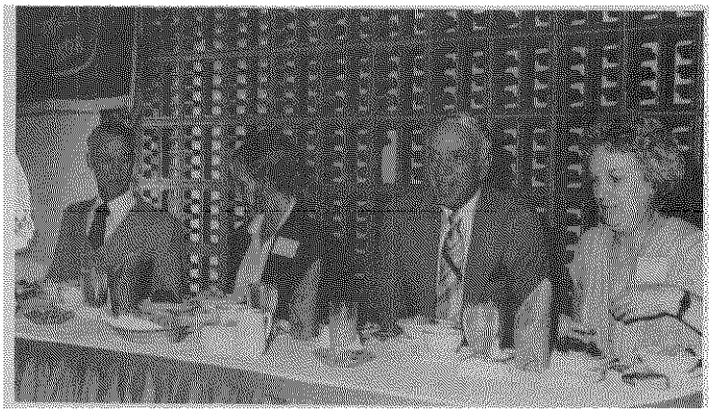
Sammie Lee, P.E., NSPE President; Francis C. Roy, P.E. incoming president; and Carl H. Thomas, P.E. outgoing president.



Mrs. Fuselier with back to camera, Carroll Fuselier, 1979-80 membership chairman and Bob Blanche, 1979 membership chairman.



Head table: Jerrel Freeman, Maryln Freeman, John Ritter, Mrs. Ritter, Gerald Carr, Sammie Lee.



More head table: Francis Roy, Mr. Roy, T. J. Hogue, and Mrs. Hogue.

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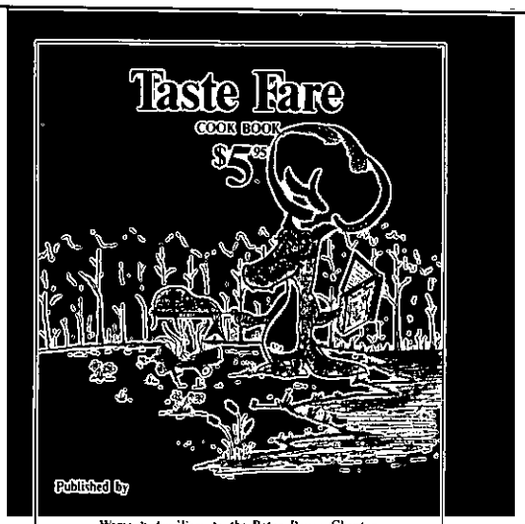

Woman's Auxiliary to the Baton Rouge Chapter of the Louisiana Engineering Society

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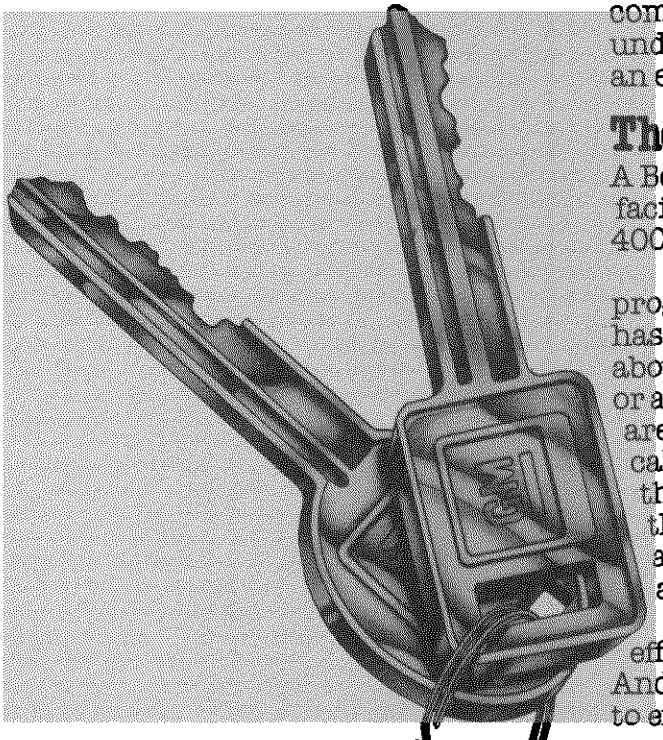

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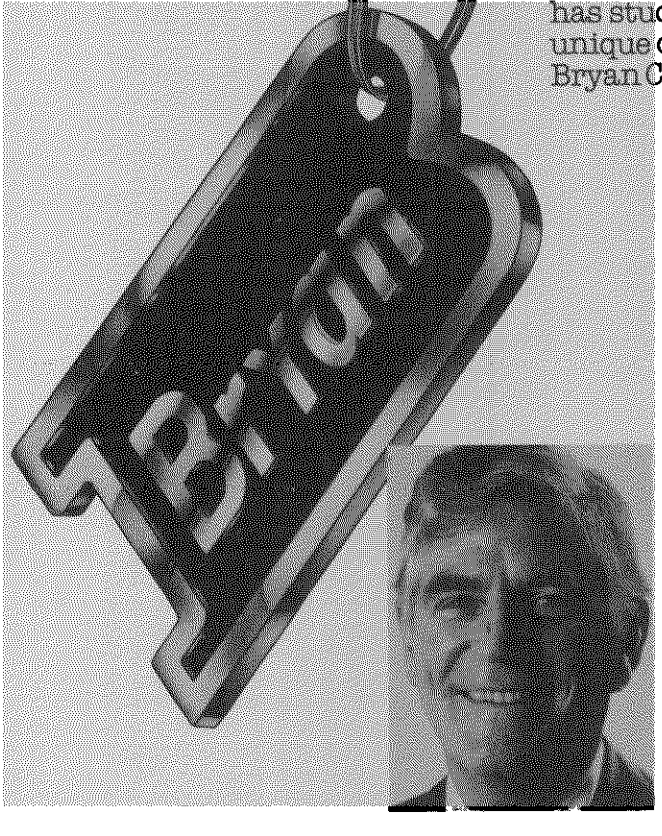

"The Dimension system lets us take more calls, make more sales, and give our customers first-class service. That's a money-making edge."

James Bryan, President
Bryan Chevrolet, Inc.
Metairie, Louisiana

GUBERNATORIAL CANDIDATES

Continued from page 9

young people receive will be the key to what type of jobs and what income they receive. We must make sure that they are prepared for the future.

TREEN

In short, my program for improving education includes lowering the pupil-teacher ratio in the early elementary grades, improved teacher certification testing and other requirements, retraining of tenured teachers who are inadequate, elimination of social promotions, better discipline, better guidance counseling, directing students to vo-tech rather than academic endeavors where appropriate.

Since 1976 the state government, except the Louisiana Department of Transportation and Development, has procured Professional Architectural and Engineering services by following the procedures of the Selection Board Act. Do you favor retention and funding of the Engineer, Architect and Landscape Architect Selection Boards?

FITZMORRIS

Yes, I favor retention and funding of the Engineer, Architect and Landscape Architect Selection Board.

HARDY

Yes.

HENRY

Definitely! Formation of these boards was a big step in putting an end to the old "political spoils" system. I also pledge to see that funds are provided to pay travel and other expenses of the selection board members.

LAMBERT

Yes, I do. I feel this is the only equitable method for taking politics out of the selection process for these professionals.

MOUTON

I support the existing laws of the selection board and see no reason for change.

TREEN

I do favor retention and funding of the Engineer, Architect, and Landscape Architect Selection Boards. I would actually favor, if anything, improving these boards so as to completely remove politics from the selection process.

What is your position on appointing non-engineers as members of the State Board of Registration for Professional Engineers and Land Surveyors?

FITZMORRIS

I prefer the appointment of professionals to boards that regulate Professional Engineers and Land Surveyors.

HARDY

I would oppose appointing non-engineers to the State Board of Registration for Professional Engineers and Land Surveyors.

HENRY

I believe in the concept that professional boards should be made up of members of the profession involved.

LAMBERT

My feeling is that the majority of board appointees should be engineers. However, I also believe that non-engineers, but persons somewhat familiar with the profession, should also be on the boards. The reason I hold to this philosophy on all board representations is that there have been instances (though not with this particular board) when boards made up only of members of the profession have used their authority to be over restrictive in allowing new entrants into the profession. Most boards do not practice this behavior, but if one routinely follows the procedure of appointing some non-professionals to each board this problem can be avoided.

MOUTON

Lawyers approve lawyers and doctors approve doctors. A profession is really the only qualified judge of its own profession. Non-engineers are not really in a position to rule on the qualifications of the engineering profession.

TREEN

I believe that members of the State Board of Registration for Professional Engineers and Land Surveyors should be engineers.

Continued on page 18

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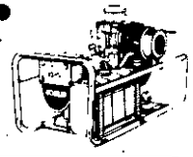



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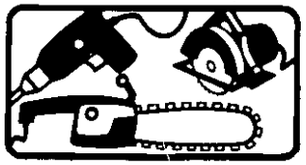

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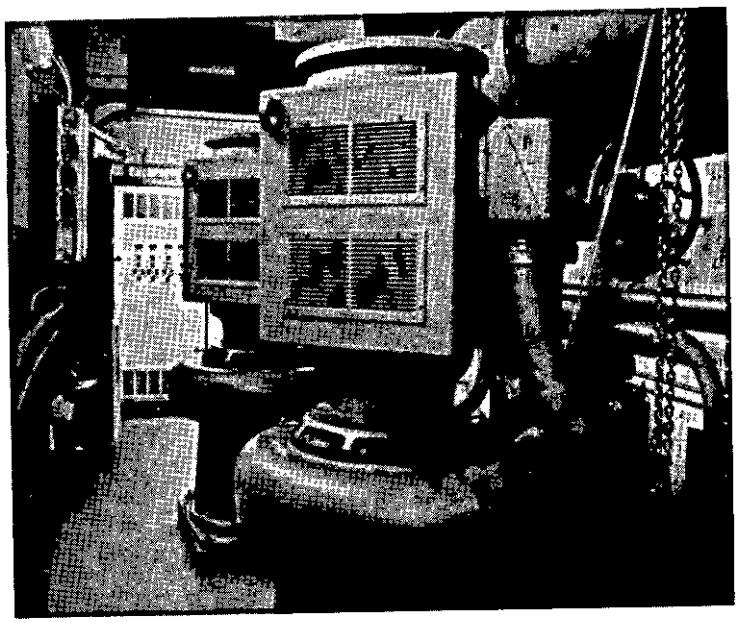

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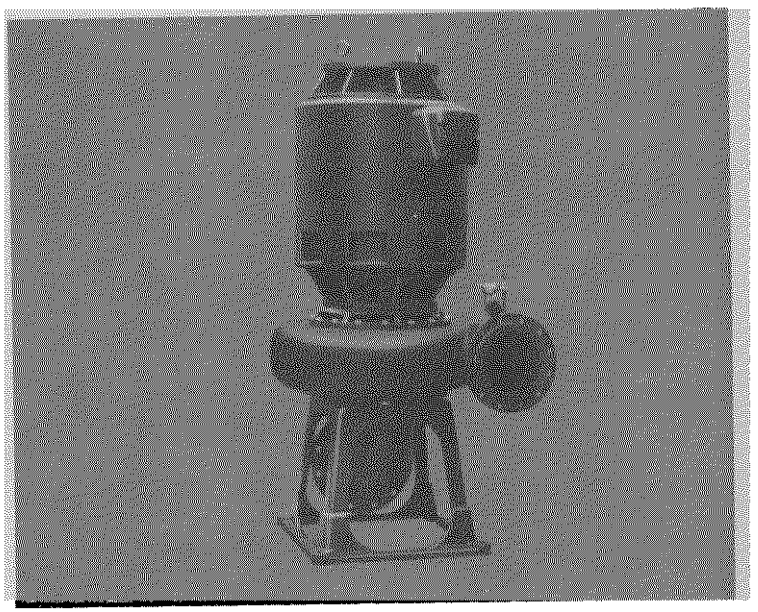

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LES AWARDS PROGRAM

Recognition of fellow engineers has always been an important program of the Louisiana Engineering Society. It is the Society's feeling that honors and awards should be given deserving members so that public recognition of their attainments will inspire others.

E.E. "Buddy" Moncla, P.E. Chairman
Honors and Awards Committee

The Society has six basic awards:

- The Andrew M. Lockett Medal for Civic Activities
- The A.B. Paterson Medal for an Engineer in Management
- The Charles M. Kerr Public Relations Award
- The James M. Todd Technological Accomplishment Medal
- The F. Hugh Coughlin Young Engineer Award
- The Leo M. Odom Professional Service Award

Nominations for recipients of the six basic awards may be made by:

- Any elected officer of the State Society or one of the Chapters.
- By the Board of Direction of the Society.
- By the Executive Committee or equivalent body of the Chapter.
- By three or more members of the Society.
- By the individual Chapter Honors & Awards Committee.

Nominations may be submitted to a member of the Honors & Awards Committee, or to the Honors & Awards Committee in care of the State Office, no later than December 1, 1979. Nominations for the awards must be submitted on the appropriate form. These forms were distributed to each Chapter September 14. The forms should be supported by:

1. A full statement of the formal academic training, experience, progress, and notable technical or engineering contributions made by the nominee.
2. A statement of the basic reasons for submitting the nomination, and for believing that the nominee is eligible for the honor.
3. Such other information and references as may be of assistance to the Board of Direction in considering and acting upon the case.
4. Documentation carrying the present title and company connection of the nominee, setting forth clearly and concisely why he should be named for the award recommended.
5. A photograph of the nominee.

It is time for the Chapters to screen and select worthy candidates. Nominations for the awards must be in the hands of the Executive Secretary by December 1, 1979. The Honors & Awards Committee will meet shortly thereafter to select award winners.

Awards will be presented during the Society's spring meeting April 18, 1980 at the Chateau Motor Hotel, Shreveport.

VLIET'S VIEWS



Daniel H. Vliet, P.E., Executive Secretary
Louisiana State Board of Registration for Professional Engineers & Land Surveyors

Recent Changes in Examinations

During the last several years there have been significant changes in the area of our registration examinations. The most recent occurred last week when the Board decided that examinations in the principles and practice of engineering would be offered at all of our testing centers—Ruston, Baton Rouge, Lafayette and New Orleans. These examinations, in all the major branches of engineering, have long been popular with registered Professional Engineers in Louisiana preparing to meet the requirements for reciprocity registration in other states. Until now, they have only been offered in New Orleans. The examinations in the principles and practice of engineering are offered at the same time we offer examinations in fundamental engineering subjects.

The Board provides the opportunity for persons registered as Professional Engineers in Louisiana to take the examinations of the National Council of Engineering Examiners (NCEE), for record purposes only. Application to take the examination is made by letter 60 days in advance of the testing date with payment of a $25 testing fee. It is understood that the results of the examination will have no effect on the status of the applicant's registration in Louisiana. Scores on examinations will not be voluntarily released without the approval of the applicant.

This summer, NCEE published a paperback book containing the topics covered in all of its examinations for engineers as well as a complete set of typical examinations. The cost of this book is $8.00. It is titled **Professional Engineering Examinations, Vol. III** and may be ordered from NCEE, P. O. Box 5000, Seneca, SC 29678.

New Changes

Five years ago the Louisiana Board began a program of changing the requirements for registration to bring our requirements to the acceptable national level. Now no person can be approved for initial registration unless he has passed an examination in the principles and practice of engineering. This includes those who apply on the basis of graduation plus experience as well as those who apply on the basis of long established practice.

Recently, changes were made to permit applicants to use any and all bound references during open-book examinations. Looseleaf notebooks are not recognized as acceptable binders. In addition, an applicant may use any hand-held, battery-powered silent calculator. Our examinations in the principles and practice of engineering and in fundamental engineering subjects are open-book examinations.

Can a person who has passed the examination in fundamental engineering subjects take the examination in the principles and practice of engineering before he has sufficient experience to qualify for registration? "Yes" is the an-

Continued on page 21

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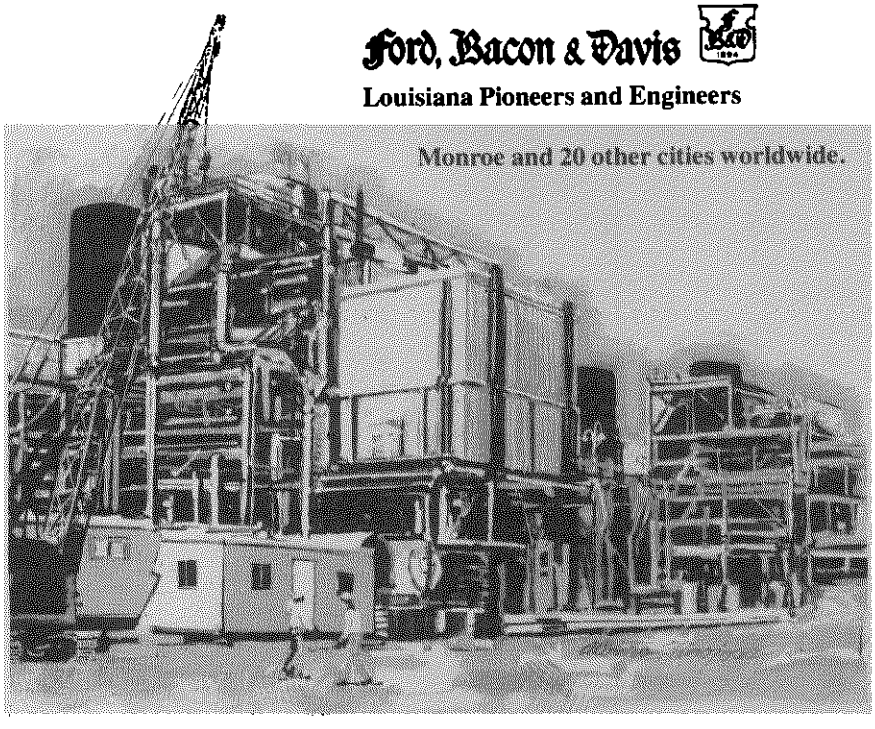

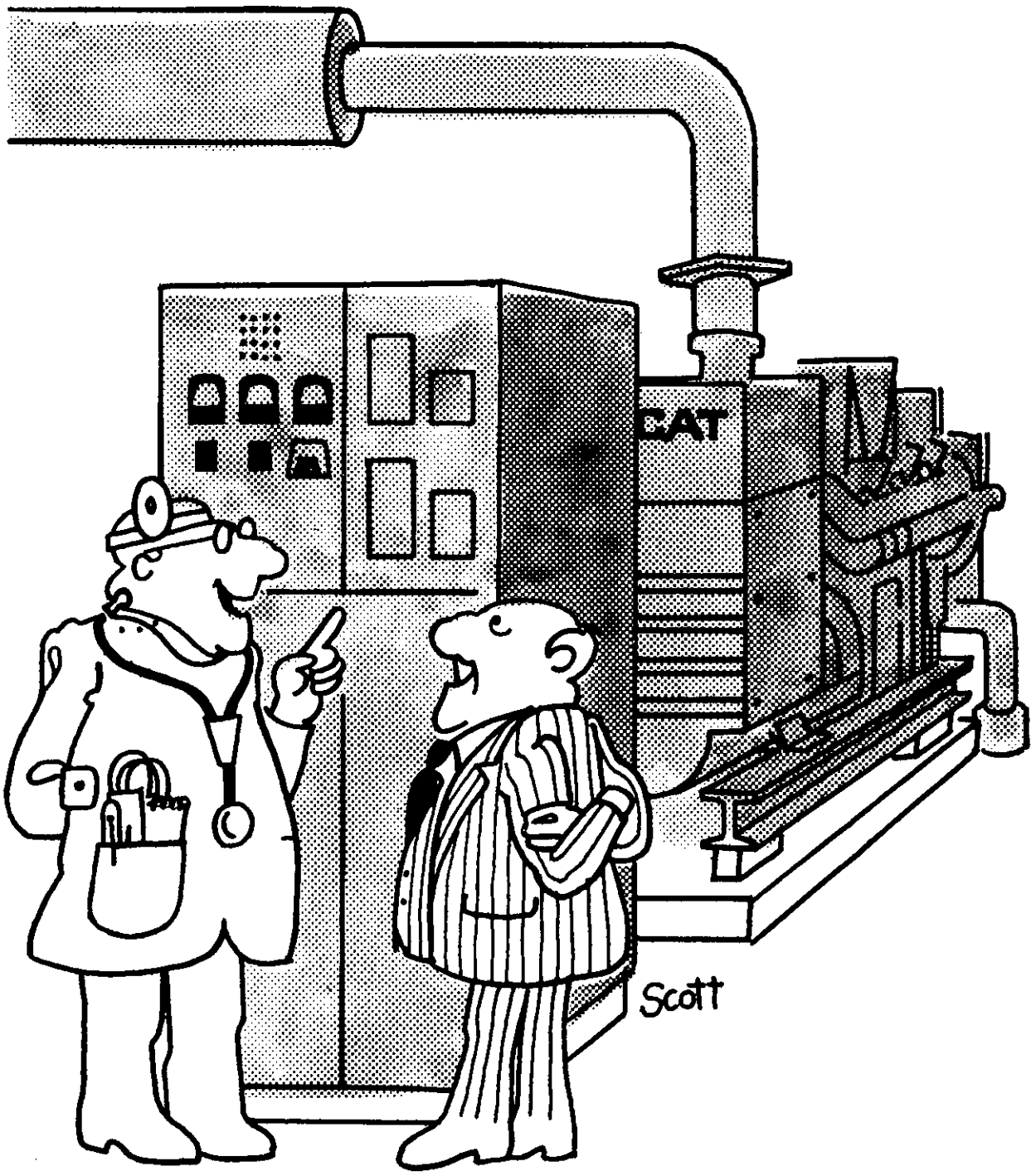

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GUBERNATORIAL CANDIDATES

Continued from page 13

What is your position on Professional Engineers, employed by the state, being given time off, with pay, to attend professional and technical engineering meetings?

FITZMORRIS

I support the proposal allowing state Professional Engineers to be given time off with pay to attend professional and technical engineering meetings.

HARDY

I would favor time off with pay to attend professional and technical engineering meetings.

HENRY

I support this. Professional improvement sessions such as these have been shown to be of great value.

LAMBERT

I plan to run our government in an efficient, business-like manner. Among the proposals I will vigorously enforce is the zero-based budgeting technique where each agency head must justify his unit's existence periodically.

Under this procedure, each agency head must make the decision as to whether attendance at a professional meeting will improve his workers' productivity enough to make the investment. If in his judgement, the decision is to provide the travel support from the agency budget I will not overturn that decision.

MOUTON

Within reason.

TREEN

I would favor allowing Professional Engineers employed by the state to be given time off with pay to attend professional engineering meetings.

Engineers Week is held each year during the week of Washington's Birthday. As Governor, will you issue an official proclamation for statewide Engineers Week, and make yourself available each year to pose with the President of the Louisiana Engineering Society for a public relations photograph?

FITZMORRIS

I will continue the practice of issuing an official proclamation for statewide Engineers Week. Of course, I will be delighted to pose with the President of the Louisiana Engineering Society for public relations photographs.

HARDY

Yes.

HENRY

Yes.

LAMBERT

I would consider that a privilege and a pleasure.

MOUTON

Yes.

TREEN

Absolutely.

Do you favor compensation for new employees in Civil Service, allowing consideration for prior parallel experience in private industry?

FITZMORRIS

I could support such a proposal allowing consideration for prior parallel experience in private industry when determining compensation for new Civil Service employees.

HARDY

Louisiana's Civil Service regulations need review, and I would consider allowing compensation for prior parallel experience in private industry for new state employees.

HENRY

Yes.

LAMBERT

I realize that Civil Service is not able to attract the qualified professionals it needs because it is not able to compete with private industry in the area of salaries, but I would certainly consider making civil service more competitive with private industry by implementing compensatory wages.

MOUTON

Civil Service needs close, careful supervision on what can be done to make it work better. Louisiana needs to put a premium on getting qualified people in state government, and we must be willing to pay the price.

TREEN

Yes. I think that engineers and professional people employed under Civil Service, whose pay scales are graded according to experience, should be given credit for parallel prior experience in private industry.

Are you a strong advocate of the free enterprise system?

FITZMORRIS

There is no stronger advocate of the free enterprise system than Jimmy Fitzmorris.

HARDY

Yes.

HENRY

Very much so.

LAMBERT

Yes, unequivocally.

MOUTON

The free enterprise system in America is what made this country great. It may sound corny, but it's true.

TREEN

Absolutely.

What is the keystone of your candidacy, the compelling reasons the people of Louisiana should vote for you?

FITZMORRIS

The keystone of my candidacy is experience in state and local government. Having served 12 years as a city councilman and seven years as Lieutenant Governor, I believe I am ready for the top job. I have the "on the job" training for the position. I am the only Lieutenant Governor ever given an administrative role. Governor Edwards named me head of the Office of Commerce and Industry, and I have run that department for two years.

I have served as head of the State Energy Commission gaining expertise in this critical field. And, I have been privileged to head the state's trade and international relations program.

HARDY

I want to be governor because I believe service to humanity is the best work a man can do, and as governor, I will be in a position to do more good for more people.

HENRY

I'm running for governor because I believe it makes a critical difference what happens to this state under the next administration. The problems we face in education, in transportation, in the state economy and in the environment are well within the grasp of determined leadership to change . . . and there is no candidate in this race who is more determined or better prepared than me.

LAMBERT

I am devoted to the principle of citizen input and I have never been out of communication with my constituents whether as senator, constitutional convention delegate, or chairman of the Public Service Commission. I am an advocate of citizen participation in government. I believe that in many areas, such as education, industrial development, energy, and other primary problems of Louisiana, that government has drifted away from citizen awareness and become indifferent to their most earnest desires. As Governor, I believe I can demonstrate the leadership, strength, and moral commitment to the citizenry to bring government back to truly representing the real feelings of the people of this state.

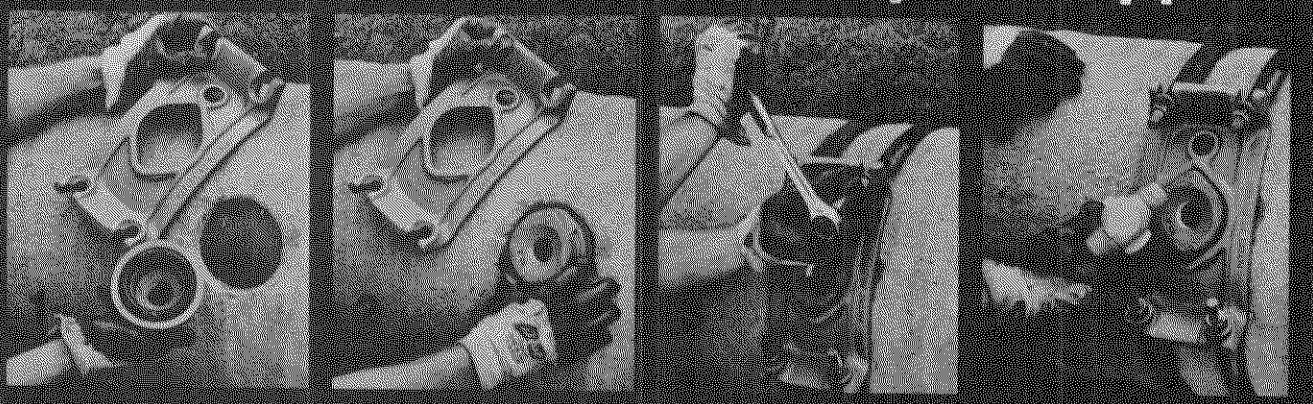
MOUTON

We can take the oil and gas revenues and use that money to transform the economic base of Louisiana. We can permanently take ourselves out of the poor Southern state syndrome where the largest asset is merely a cheap work force. We must invest that money in our people. We must make sure that the blessings of our oil and gas revenues are spread equally. Only thoughtful, experienced and compassionate hands can make sure that this transformation happens fairly and equitably. Louisiana must not waste this opportunity to build an extremely bright future. I am confident that I can lead Louisiana into the future—a proud and prosperous state.

TREEN

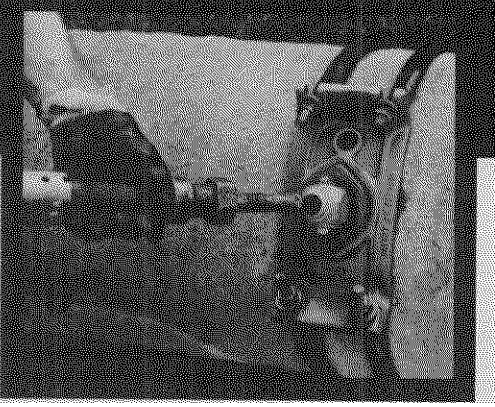
I want to restore integrity and efficiency in government, eliminate waste, sweetheart political deals, etc. I want to improve the quality of education in Louisiana to attract the new industry we need to produce more jobs.

There's no blow-out gamble when Concrete Pressure Pipe is tapped



because...the safe-seal is there...

before the hole!



One of the many advantages of Gifford-Hill-American Concrete Pressure Pipe is that it can be tapped under pressure... **easily and economically**... using standard tapping equipment and established tapping methods.

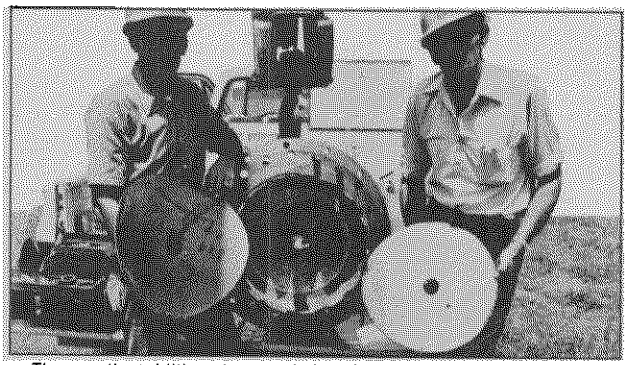
Tapping procedures are simple on any tap – whether ¾" or 42", threaded or flanged, 50 or 350 psi – for this same safer sequencing technique is used on all of them.

The tap's safe-seal (which includes the valve)... is finalized... and tested... before the tapping hole is cut into the pipe. (photos **1** to **5**).



The key to this safe-seal is in the tapping assembly gland, with its o-ring rubber gasket (shown at right and photo **1**), which is positioned against the steel cylinder (in photo **2**), and compressed (in photo **3**) for a watertight, safe seal.

The precision, factory-cut threads in the gland provide a perfect connection for the corporation stop (photo **4**).



The excellent drilling characteristics of the pipe can be seen in the near perfect condition of the removed steel and concrete cores.

G-H-A is equipped to make pressure taps from 3/4" through 42".

A complete stock of tapping assemblies is maintained for immediate shipment to those desiring to make their own taps.

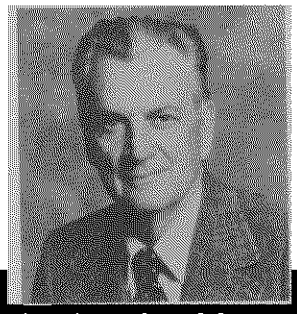
Let G-H-A give you "peace of mind" with Concrete Pressure Pipe – manufactured in **diameters from 10"-through-144"** – for pressures through 350 psi – all of which is easily and economically tapped under pressure... ***without introducing a gamble.***

Gifford-Hill-American, Inc.

MANUFACTURER OF CONCRETE PRESSURE PIPE

POST OFFICE BOX 47127 DALLAS, TEXAS 75247

POTPOURRI



R. C. "Doc" Spears
Executive Secretary
Louisiana Engineering Society

LES Training Conference, Alexandria

The 23rd Chapter Officer's Training and State Planning Conference held September 13-15 at the Sheraton Inn, Alexandria was attended by 96 engineers and 32 ladies.

More than 60 engineers and guests attended the Thursday evening early bird cocktails and seafood dinner at Tunks Cypress Inn near Alexandria. Leta Bueto, LES secretary, celebrated her birthday and the cake was enjoyed by all.

The Friday morning session was conducted by Francis C. Roy, P.E. Each activity chairman made excellent presentations to the new officers and committee members:

State Office	R. C. Spears
Inter-Society Relations	John J. Bergeron, P.E.
State Board of Registration	Dan Vliet, P.E.
Membership Development	Carroll Fuselier, P.E.
Legislative	Lamon Moody, P.E.
Meetings & Programs	James W. Reeves, P.E.
Young Engineers	Charles Eustis, P.E.
Engineering Education	Larry Lafleur, P.E.
Ethics & Professional Conduct	Al McKee, P.E.
Public Relations	James W. Stevens, P.E.
Practice Divisions	Bob Blanche, P.E.

One hundred eight engineers and guests attended the luncheon Friday and heard E. L. "Bubba" Henry, speaker of the House, tell why he wants to be governor of Louisiana.

Practice divisions and committee meetings were held Friday afternoon. Representatives from the eight chapters attended these meetings and outlined goals and procedures for the coming year.

One hundred nine engineers and guests enjoyed a delicious shrimp boil at the civic center Friday evening. Our sincere thanks again to Louisiana Industries, Inc. for hosting the pre-dinner refreshments. A number of door prizes were presented and Francis Roy was at his best with a Cajun story about granting three wishes to a 76-year-old lady.

Sixty-five engineers and guests attended the Saturday breakfast and heard Ken Saunders, P.E. explain the Louisiana Engineering Advancement Program for Minorities (LEAP).

The ladies' tour of Camp Beauregard and coffee at Stafford House was enjoyed Friday by 22 ladies.

LES Membership Compared to Potential

In July 1979, a comparison of professional engineers and engineers-in-training members was made with the State Board of Registration lists of registered PE's and EIT's residing in the state. This comparison shows that LES membership is 28 percent of the total potential membership, the same percentage as in 1978.

The following is a breakdown, by chapter, of the ratio of present to potential registered members: Alexandria, 52%, down from 59% in 1978; Baton Rouge, 26%, down from 27% in 1978; Bayou, 44%, down 1%; Lafayette, 32%, up from 31% in 1978; Lake Charles, 35%, up from 28% in 1978; Monroe, 39%, down from 47%; New Orleans, 23% down from 25%; and Shreveport, 32%, same as 1978.

LES Automobile Insurance Program

The LES automobile insurance program is now in its fifth year and has over two hundred participants. This service of your Society is often overlooked. It only takes a few minutes to get a quotation and you may be able to save some money on your personal automobile insurance. For a free quotation, contact: Employers Insurance Represenatives, 14697, Baton Rouge 70808, telephone (504) 926-0483.

Engineers Offer 103 Scholarships, Grants

The National Society of Professional Engineers is making available 103 grants and scholarships to aid high school seniors interested in pursuing engineering careers.

Dr. Paul N. Hale, P.E., who heads the scholarship effort of LES-NSPE reports that students will be selected for the awards on the basis of academic standing, participation in extra-curricular activities, evidence of leadership, character and self-reliance, comments of teachers and administrators, and financial need. LES-NSPE scholarships are provided with the cooperation of 34 leading companies and educational institutions; recipients receive awards of $1000 to $4000 with some full scholarships.

To be eligible for the awards a student must be a high school senior ranking in the top quarter of his or her graduating class, plan to enroll in a college or university with an engineering curriculum approved by the Engineers Council for Professional Development, and be a U.S. citizen or plan to become a naturalized citizen.

Students must submit scholarship applications to one of the eight chapters of LES by December 15; national winners will be selected by March 31, 1980.

For more imformation on the program, contact Paul N. Hale, P.E., Box 5503, Tech Station, Ruston, 71272.

Taste Fair

The Baton Rouge Women's Auxiliary of LES is advertising a "Taste Fair" cookbook in this issue. Consider ordering one for your home and one or two for your friends. It is a great idea for Christmas with favorite recipes and a special section for microwave. Proceeds go to scholarships.

Opportunities for Engineers & Architects in a Growing Energy Market

NSPE is sponsoring a seminar on "Opportunities for Engineers and Architects in a Growing Energy Market." Topics will be varied, and wherever possible unique, custom designed presentations will be included in the array of offerings. On October 25-26, 1979 a seminar will be presented in Houston, Texas, at the Host International Hotel.

Topics will include:

- Billions of dollars now available for A & E services.
- What the projects are—who to contact
- What's required to participate
- How to get your share.

Contact NSPE, Educational Service Department, 2029 K Street, N.W. Washington, D.C. 20006. (202) 331-7020.

AG Engineers Meet in New Orleans

"Regulations: The New Dimension to Agricultural Engineering" will be the theme of the annual Winter Meeting of the American Society of Agricultural Engineers, to be held December 10-14, 1979, at the Hyatt Regency Hotel in New Orleans. The meeting will include over 500 technical presentations, a special symposium, four Continuing Education Workshops, and tours of export grain elevators and sugarcane mechanization.

Regulations as they relate to energy and business will be addressed by general session speakers Louis B. Strong, President of the Kentucky Association of Electrical Cooperatives, Inc., and Geoffrey H. Joseph, Director of the Government and Regulations Office of the U.S. Chamber of Commerce. The special events include the Hydrologic Transport Modeling Symposium, the Dynamic Modeling Demonstration, the Workship on Design of Land Treatment Systems for Industrial Wastes, the Hydraulic Power Workshop, and the Microcomputer Short Course.

Complete programs are available from ASAE, Box 410, St. Joseph, Michigan 49085.

Gubernatorial Questionnaire

The Legislative Committee, chaired by Lamon Moody, P.E., felt the gubernatorial election of such importance in Louisiana that they prepared a questionnaire that was sent to each candidate. The answers are featured in this issue and they should be considered by engineers in the voting booths.

Intersociety Meeting Calendar Announced by LES Committee

The Intersociety Relations Committee of the LES has announced plans to publish a Calendar of Engineering Society Meetings in the LOUISIANA ENGINEER magazine. The Calendar will consist of a chronological list of meetings which will include Society name, meeting date, location, time, topic, contact man, and telephone number. All information will be compiled by members of the LES Intersociety Relations Committee, Any engineering society, either local or statewide may participate in this program by contacting the nearest committee member. It is hoped that the engineers throughout the state as well as the societies themselves will benefit from the widespread dissemination of this program information. Remember, the LOUISIANA ENGINEER is received by every registered engineer in the state.

Intersociety Relations Committee Members

Alexandria
Wayne E. Staton
445-8211, ex. 232

Baton Rouge
Roy C. Kuyrkendall, Jr.
925-2429

Bayou (Houma)
John M. DeFraites
876-6380

Lafayette
George Womack
233-8200

Lake Charles
Don Scallon
477-8308

Monroe
Jesse Harrison
387-8373

New Orleans
Arthur Mott
586-2236

Shreveport
Charles Goodrich
687-5711, ex. 204

EngiNEWS

Promotions at Ford, Bacon & Davis

Fred N. Westrom has been named president of Ford, Bacon & Davis Construction Corporation, headquartered in Monroe, Louisiana.

Westrom was promoted to the position with responsibility for the operation of the firm which employs approximately 800 engineers, supervisory and general office personnel, as well as a field construction force varying from 1,000 to 3,000 according to construction needs.

Westrom has been serving as executive vice president and resident manager of the firm which primarily engineers and/or constructs heavy industrial facilities, including pulp and paper mills, chemical plants, industrial power plants, railroads and pipelines.

May G. Smith has been promoted to assistant vice president for Ford, Bacon & Davis, Inc. Smith was named to the new position with responsibility for coordinating the marketing activities of all operating divisions.

Frank Thrash, P.E., has been designated as manager of Technical Services in the engineering department at FB&D, Monroe.

Charles Pressley, P.E., has been named manager of Project Engineering, Monroe.

Both Thrash and Pressley are members of the Louisiana Engineering Society. Thrash graduated from Mississippi State Univerisity with a B.S. in mechanical engineering and Presley has a B.S. degree in civil engineering from Texas A & M University.

Management Changes At Bovay Engineers

Duli C. Sharma will assume the position of manager of the Structural Department at Bovay Engineers, Baton Rouge. He received his B.S. from Aligarh University, India and earned a M.S. degree in civil engineering from the University of Miami. Sharma is a member of ASCE, LES, NSPE and ACI.

Alfred B. Williamson will assume a major role in the Civil Engineering department that will allow him to concentrate his 38 years of design experience on the complex problems of the department with emphasis on the North/South expressway (I-49). Williamson is a member of LES and NSPE.

Nelll D. Schexnayder will assume the position of manager of the Civil Engineering department. He has a B.S.C.E. degree from USL. He is a member of ASCE and in the process of joining LES.

Engineering Scholarships Presented

Richard Matula, P.E, Dean of Engineering LSU, presented a $500 check to Renee M. Laborde of Arabi and a $250 check to William L. Brown of Pineville as part of their LES scholarship winnings.

Renee won the LES $1,000 scholarship and she will receive the additional $500 the second semester. She is studying chemical engineering at LSU.

William won an LES $500 scholarship and he will receive the additional $250 the next semester. He is enrolled in petroleum engineering at LSU.

IN MEMORIAM

G.J. Seghers, Jr., P.E.

Guy Joseph Seghers, Jr., a former New Orleans director of the Department of Housing and Urban Development, died August 3, 1979 in Arlington, Virginia.

A native of New Orleans, Mr. Seghers received a B.A. degree in business administration from Loyola University and a B.S. degree in civil engineering from Tulane University.

He was a registered professional engineer in Louisiana, a former member of LES, a member of the Tulane Society of Engineers, the Louisiana Land Surveyor Association, the Engineers Club of New Orleans, and the American Institute of Accountants.

The Society extends its deepest sympathy to his wife and family.

VLIET'S VIEWS

Continued from page 16

swer to this often-asked question. On the basis of information presented in an application for registration, the Board may give its approval for an applicant to take the examination one year before an applicant has enough experience to qualify for registration. There is no required waiting period between the fundamentals examination and the principles and practice examination for persons with at least 12 years of acceptable experience or for those who are graduates of approved curricula. Others must have at least three years of acceptable experience after they have passed the fundamentals examination for certification as Engineers-in-Training.

Rules regarding the re-taking of examinations have been changed. Briefly stated, the new rules permit the Board to allow a person who has failed an examination for the first time to re-take it the next time it is offered, for the second time there must be a delay of at least two years and thereafter delays of at least three years after the last failure.

Examination dates for the next nine years are published here. These dates should allow some of our readers to plan ahead or to help others to plan ahead. Remember, applications to take the examinations must be submitted to my office at least two months in advance.

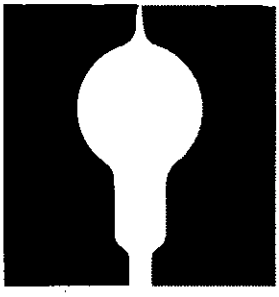
NCEE UNIFORM EXAMINATION DATES

1979		**Nov. 3**
1980	**Apr. 19**	**Nov. 1**
1981	**Apr. 11**	**Oct. 31**
1982	**Apr. 17**	**Oct. 30**
1983	**Apr. 16**	**Oct. 29**
1984	**Apr. 14**	**Oct. 27**
1985	**Apr. 20**	**Oct. 26**
1986	**Apr. 12**	**Oct. 25**
1987	**Apr. 11**	**Oct. 31**
1988	**Apr. 16**	**Oct. 29**



Centennial of Light

1879 - 1979



One hundred years ago, Thomas Alva Edison invented the first successful electric light bulb. Edison's contribution, regarded by many as his greatest gift to mankind, was only one of his countless inventions that laid advanced technology on the very threshold of the Twentieth Century.

We join in a salute to the International Centennial of Light and pledge to continue Edison's work in making progress possible for all to enjoy.

YOUR FIVE LOUISIANA INVESTOR-OWNED ELECTRIC COMPANIES

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Gulf States Utilities Company
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New Orleans Public Service Inc
Southwestern Electric Power Company

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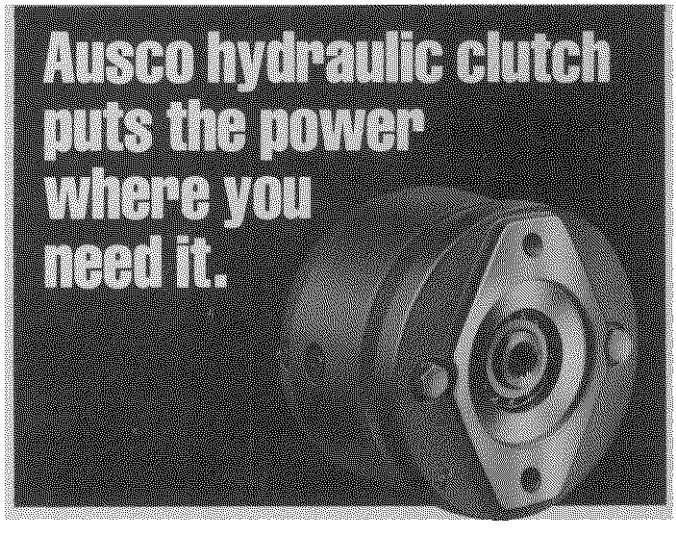

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For more information, consult your local Fluid Power Distributor, or write Auto Specialties Mfg., Brake Div., P.O. Box 8, St. Joseph, MI 49085. Tel: (616) 982-2373.

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Kenner, LA 70062
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Hahnville, LA 70057
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River Ridge, LA 70123
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Industry
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New Orleans, LA 70127
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BASF Wyandotte Corp.
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Geismar, LA 70734
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Metairie, LA 70001
Industry
Barry E. Ripple, P.E.
6304 Gladys St.
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Kenner, LA 70062
Industry
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New Orleans, LA 70114
Industry
Michael J. Williamson, P.E.
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Metairie, LA 70001
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Clayton C. Grigg, P.E.
2661 Waggoner
Shreveport, LA 71108
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P.O. Box 37
Homer, LA 71040
Education

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Austin, TX 78703
Government
Dennis W. Lee, EIT
11900 Barryknowll #1701
Houston, TX 77024
Industry
Stephen E. Morrison, EIT
716 East Calle Sun
Hobbs, NM 88240
Industry
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Bucyrus-Erie Co.
Box 397
Thorndale, TX 76577
Private Practice
Charles R. Wale, Jr., EIT
1218 Annette Drive
Longview, TX 75604
Industry

New Registrations

Amy, Lydon E.
Briarcliff Manor, NY—Civil
Anderson, Paul K.
Baton Rouge, LA—Electrical

Babineaux, Thomas C.
Lake Charles, LA—Mechanical

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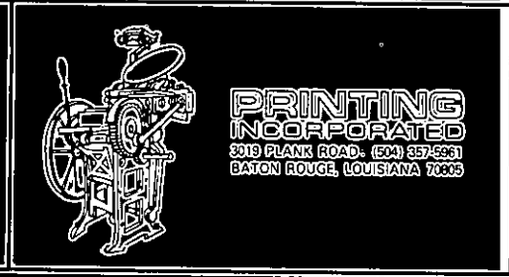

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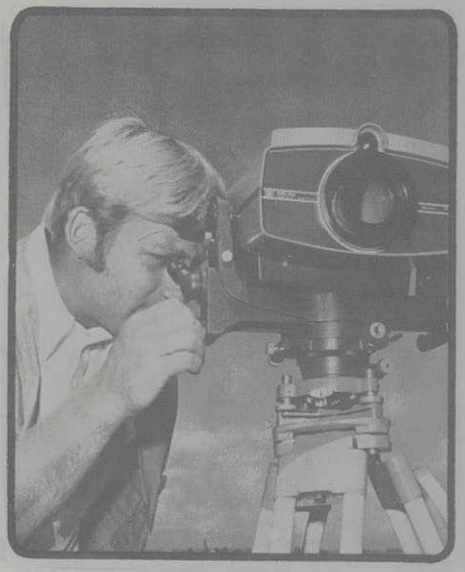

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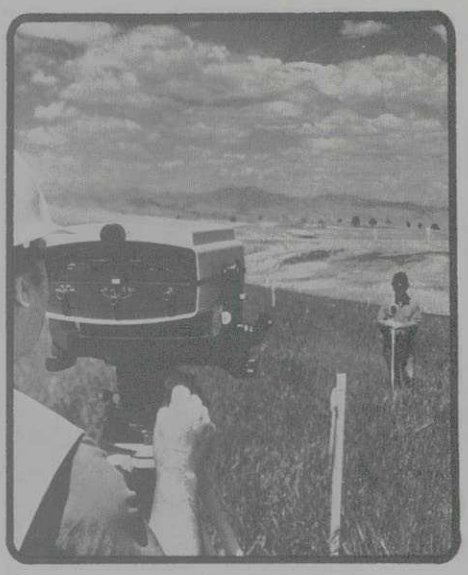

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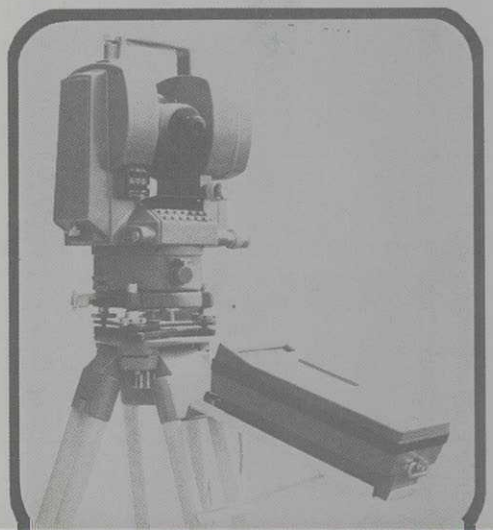

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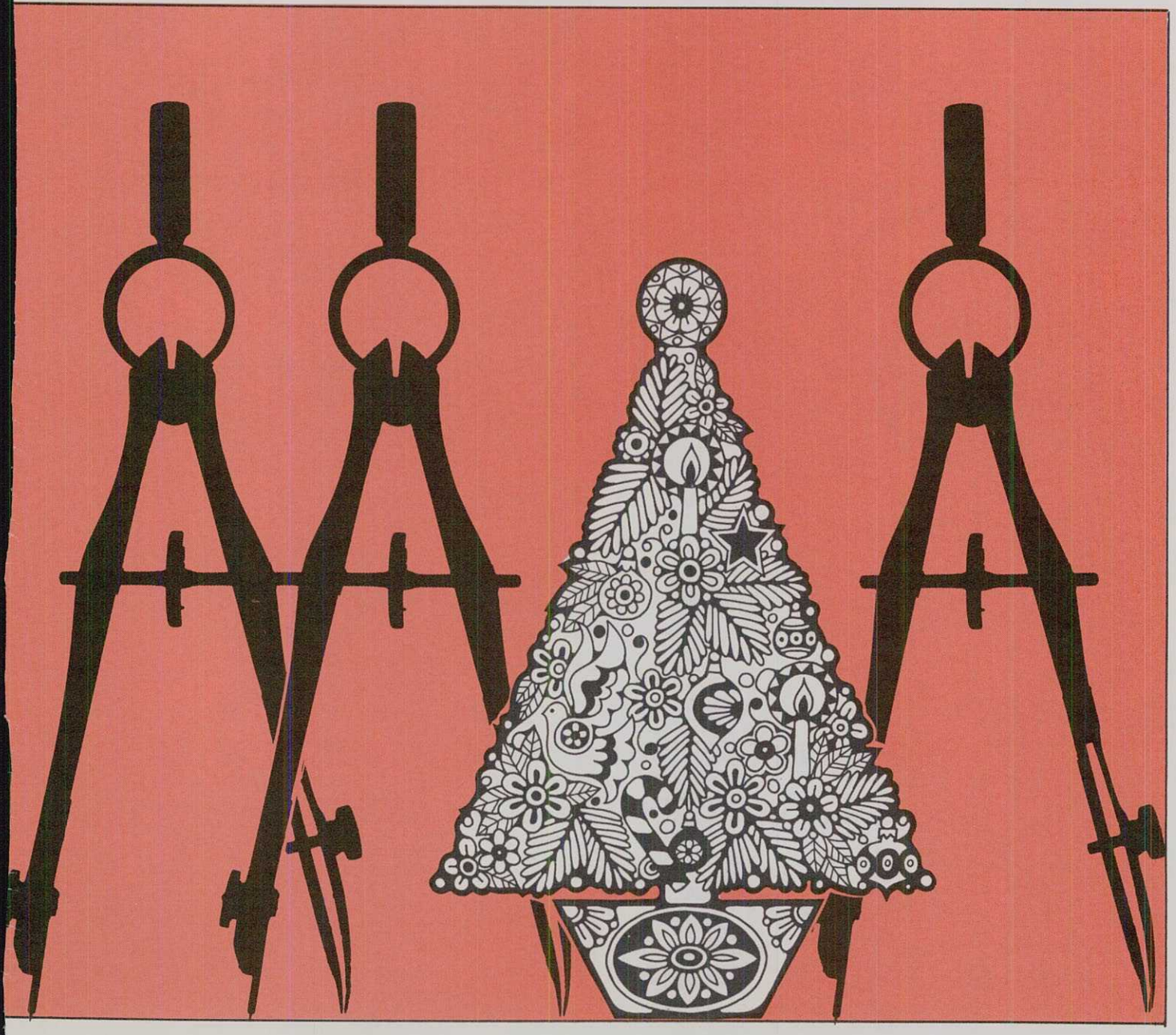

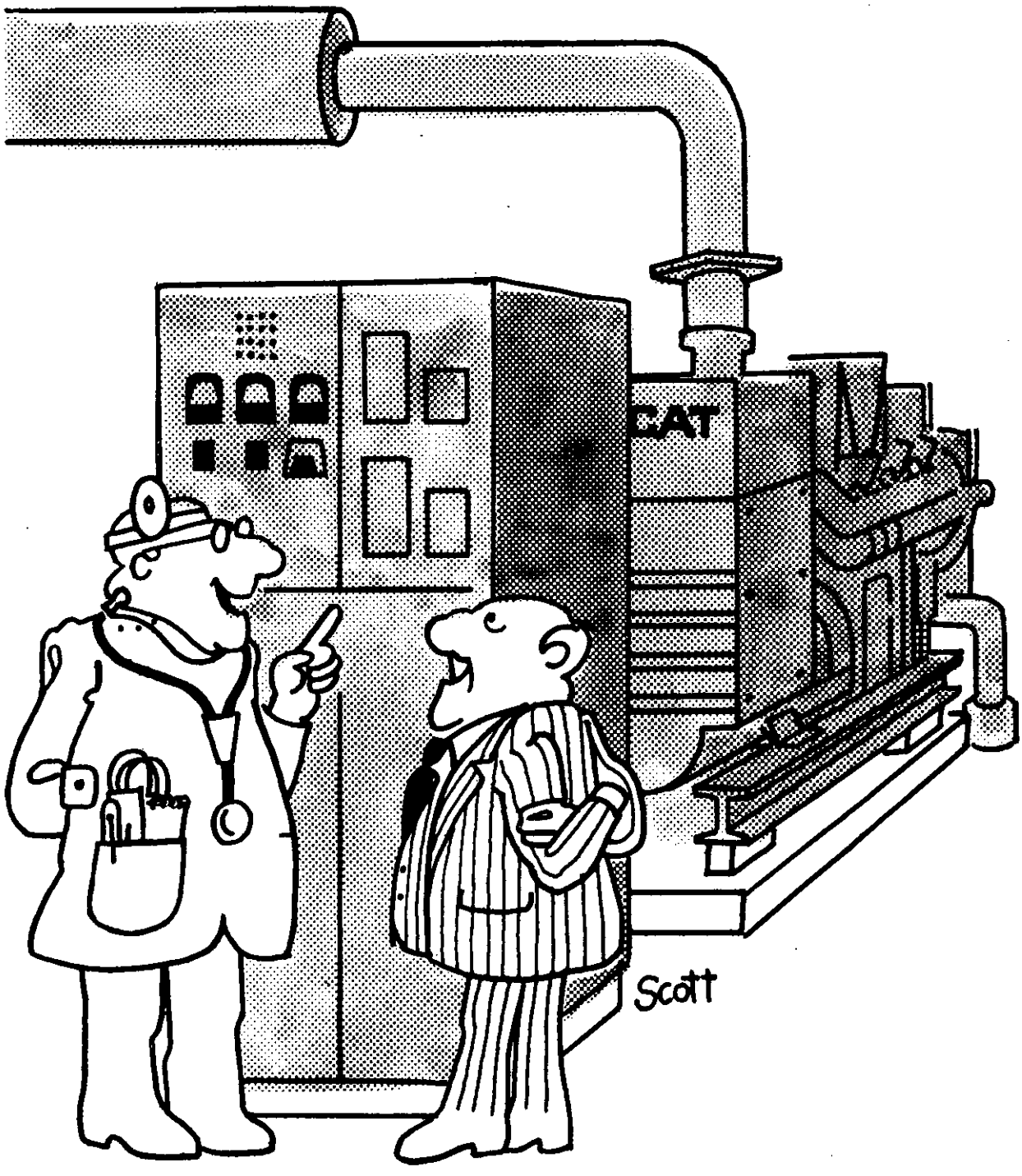

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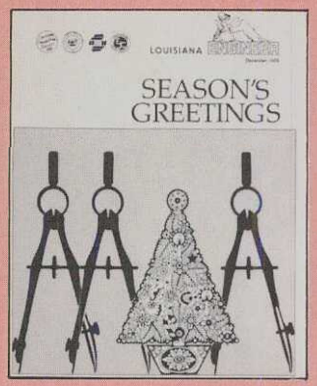

About the Cover:

Season's greetings from the State Board of Registration for Professional Engineers and Land Surveyors, and the Louisiana Engineering Society.

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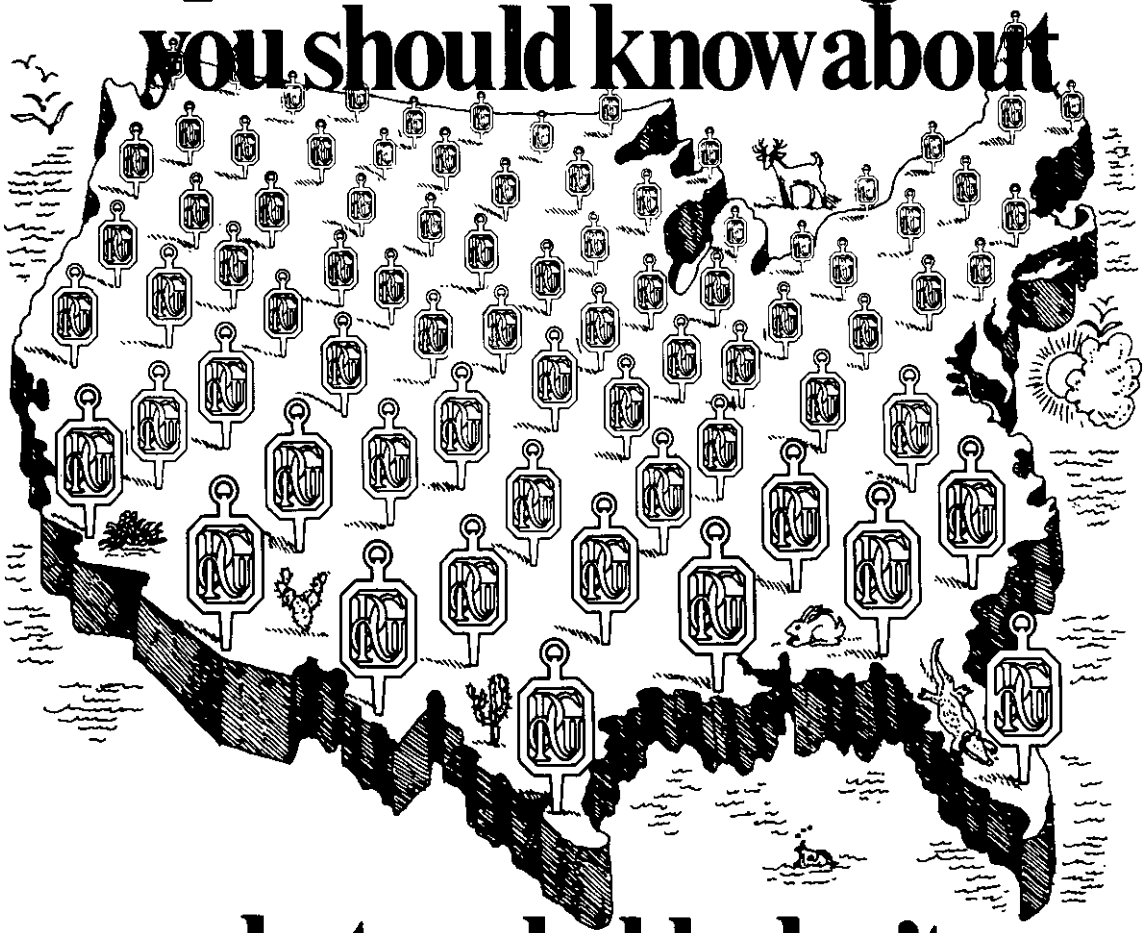

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As a young boy I watched with envy as my elder brothers "came of age" to start doing all those marvelous grown-up things. Surely, when one could use the family auto for an out-of-town date or game, he had reached the pinnacle of maturity. Perhaps, like many of you, I have come to the point of realizing that as humans we are never really fully mature, unless we look upon maturity as that point in life where we

(1) acknowledge that problems arise, even in the most ordered and well planned individual lives, organizations, nations, or society;

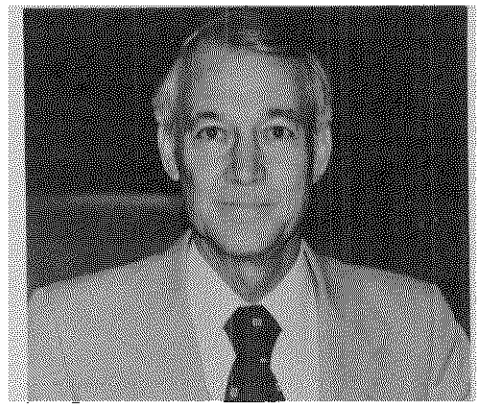
(2) as first priority, get a concise definition or clear concept of the problem by asking the correct questions; and

(3) address solutions in the context of impact upon our lives and others, with the cooperation of all concerned.

Everyday conversations convince me that others share my disgust, or pity, as the situation warrants, with that segment of society which has never grown past the Santa Claus stage—the something-for-nothing guys and dolls. The fact that they breathe means that society owes them all the luxuries for which the working stiff can be fleeced.

Although it is not necessarily a daily topic, that "singing cricket" group which, through ignorance or laziness, hopes that the problems will disappear if ignored, is equally disheartening. And then there is the "let George do it" element which is perhaps the most repugnant of all. They sit in the wings and while away their many idle hours in non-constructive criticism of the real problem attackers, but are ready and eager to share in any benefits derived from a solution.

To say that America is in trouble is a relative statement — many other countries are also, some in much worse shape than we. To iterate all problems would not be humanly possible, and to point out even a few is irrelevant since you are as familiar with them as I. What is more important is whether we can rid ourselves of selfishness, ignorance, and the childish attitude of having our way on everything, or walking out on the game.



Francis C. Roy, P.E.
LES President

If we can first become mature, concerned adults, we have our best chance at equitable solutions to our problems. But most important, we must have enough of the people concerned and actively cooperating as mature adults.

Even though we must write off the Santa, Cricket and George groups, we still have a large segment of well meaning folks, the "toilers," who are frustrated with our complex society and its problems. They are busy earning daily bread and trying to do their bit toward a society they hope could be more honest, ethical, and equitable. Theirs is the voice which needs to be heard, but seldom is. The key is to find a way to bring this group into meaningful participation, within a framework of time and talents they can afford. That may well be America's number one problem, and if properly solved could reunite and strengthen our resolve of 1776, even in today's complexity.

As members of the Engineering Profession we have an opportunity to demonstrate whether we can begin the solution to that number one problem within the profession. We have problems — I am certain you will agree. Can we address the problems as mature adults, and get the active participation of all our well meaning, daily-working professionals to whatever extent their time and talents allow? I am optimistic enough to believe we can.

And when and how will this test for the profession occur?

The Louisiana Engineering Society, through its Legislative Committee, is preparing proposed legislation to strengthen the registration law for Professional Engineers and Land Surveyors. There are many gaps and weak points in the law which could be to the detriment of the public and the profession. The committee has listed 13 points in its proposal. The reaction of the whole profession, pro or con, to these points is the pressing need. We need that reaction before we approach the Legislature. A debate among a few is not enough. If you are among the "toilers" you may be asking now, how can I be heard on these issues?

I would like to invite all of you to become members of the Louisiana Engineering Society (LES) and National Society of Professional Engineers (NSPE). You probably already belong to one of the technical societies. With this in mind, I respectfully request that you:

(1) Familiarize yourself, (if not already so) with the 13 points of the legislative proposal. The LES Legislative Committee has sent these to the Chairman or President of all technical societies, known to the LES office, within the state. Additionally, these points are covered in the November LES PERSPECTIVE and also in this issue of the LOUISIANA ENGINEER.

(2) Let your views be known within the communications framework of your organization.

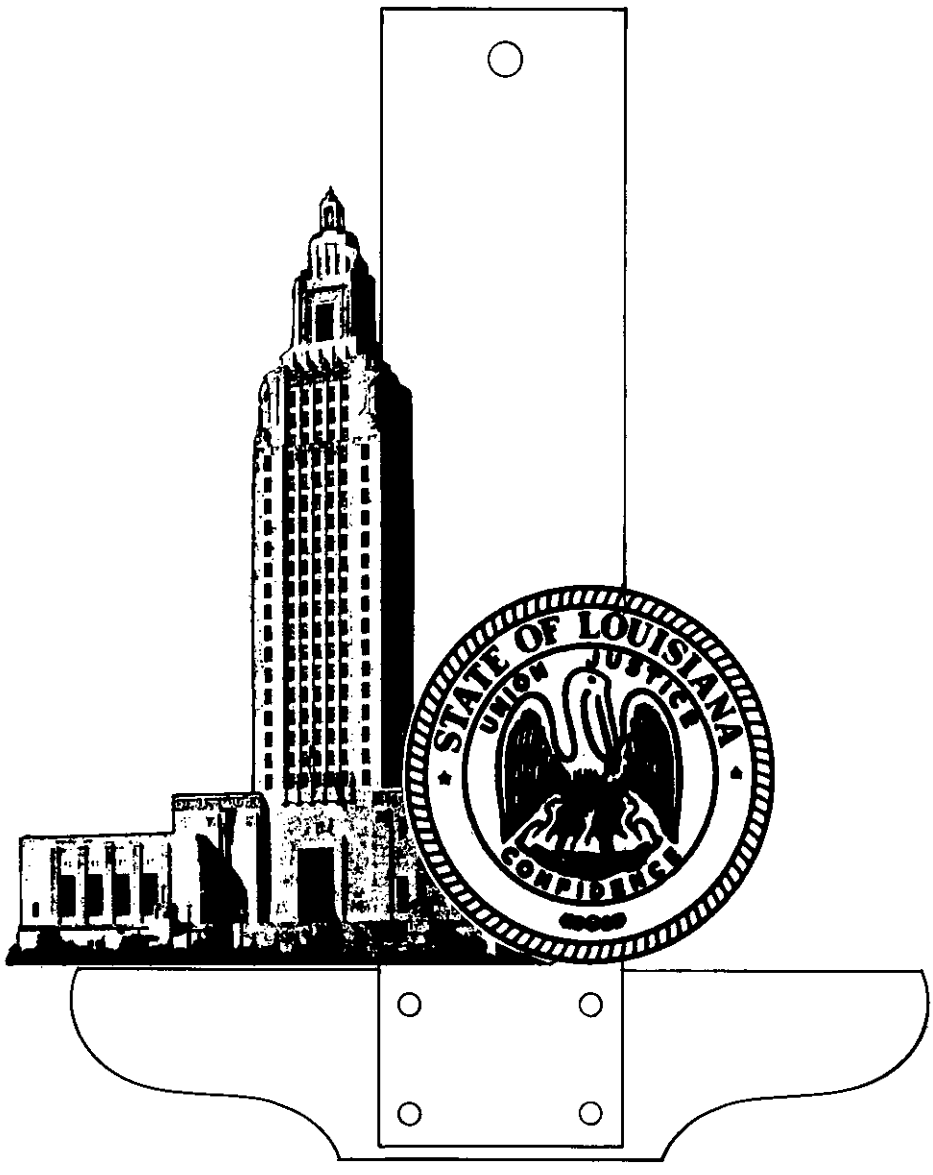
(3) Urge your chairman or president to communicate the majority opinion and pertinent comments to the LES state office.

(4) Help demonstrate our maturity by cooperating with the majority opinion. Perhaps it can be an encouraging start in convincing the "toilers" outside the profession that it is not a hopeless case.

(5) Above all, let us be calm and considerate throughout. People aren't perfect, and that includes you and I.

If we can handle this, and I believe we can, we'll be once again entitled to that feeling which we had the first time we drove off on that big date in the old family bus.

Registration Law Changes Are Needed



As you know, Act No. 73 of 1950, as amended, is our Registration Law for Professional Engineers and Land Surveyors in Louisiana. Due to Louisiana court rulings, Attorney General opinions and changes in registration laws in other states, all reflecting changes in the professional practice of engineering and land surveying, our registration law is weakened and parts of the law are insufficient and outdated. It is therefore imperative that the registration law be amended in the 1980 Regular Session of the Louisiana Legislature.

Due to the fact that most engineering technical societies, and other organizations, are prohibited from lobbying in legislative matters by their respective charters, and due to the fact that the Louisiana Engineering Society is not so prohibited, the LES has historically sponsored any needed legislative changes to the registration law with the general consent of the engineering and land surveying professions in Louisiana. The LES offers membership to all engineering and land surveying professionals regardless of their respective disciplines. Therefore, the LES feels a deep sense of responsibility to the engineering and land surveying professions to be a "watch dog" in all matters relative to legislation affecting the professions in our state.

Our Legislative Committees always spend considerable time, and money for legal advice, **in every session** of the State Legislature. This is true whether we are sponsoring legislation for the betterment of the professions or fighting defensive battles by testifying before legislative committees and lobbying against legislation detrimental to the professions.

During the past few months, the LES has been researching and developing, with the aid of legal counsel, the following suggested technicat amendments to the Registration Law:

1. Incorporate into the law the 16 hours of examinations for Professional Engineers, and 16 hours for Registered Land Surveyors (which is the current

Lamon L. Moody, Jr. P.E., Chairman
LES Legislative Committee

practice of the Board of Registration.)

2. Strengthen the restrictions on repeating examinations that applicants have failed. (Before re-admission to the examination in the event of a second failure, the applicant must appear before the Board of Registration with evidence of having acquired the necessary additional knowledge to qualify.)
3. Include in the definition of Land Surveyor a reference to registration by the Board of Registration. (This is inferred in the present law but specific language to that affect is not in the law.)
4. Empower the Board of Registration with as much authority as possible, under the prevailing State and Federal laws, to hold its examination files and replies from personal and employer references as documents that are not public records. (Of course, such documents would be available under a court subpoena.)
5. Strengthen the requirements for registration and require that registrants be graduates of curricula approved by the Board of Registration, and clarify that all curricula and schools of engineering and surveying be approved by the Board of Registration. (Such approval by the Board of Registration would recognize national accreditation councils such as the Engineering Council for Professional Development.)
6. Provide for publishing the Professional Engineering and Land Surveying Roster (published by the Board of Registration) for individuals, including places of business, to be published every even year.
7. Empower and mandate the Board of Registration to adopt a meaningful set of Rules for Professional Conduct for Professional Engineers and Land Surveyors including the authority to enforce such rules. (The present law only empowers the Board to police registrants (a) who have been convicted of a felony; (b) who have been found guilty by the Board of any fraud, deceit, gross negligence, misrepresentation, violation of contract or gross incompetence in his practice; and (c) who have been found guilty of any fraud or deceit in obtaining their certificate of registration or violation of any provision of this act.)
8. Add provisions and definitions to the law for "Engineer-in-Training," and "Land Surveyor-in-Training." (These programs are currently required by the Board of Registration but specific language is needed in the Law.)
9. Strengthen the powers of the Board of Registration in protecting the public by applying the Registration Law to the corporate practice of Professional Engineering and Land Surveying in **private practice**. (The Board of Registration has for several years been enforcing rules and regulations on Engineering and Land Surveying Corporations in private practice, but due to recent Louisiana court rulings specific language is needed in the Registration Law.)
10. Remove the requirement that Board of Registration Members be from particular functional areas (such as private practice, education, government, and industrial functional areas.)
11. Add a requirement in the law that a Board of Registration Member completing a full term appointment cannot be reappointed.
12. Reduce the Board of Registration membership from nine (9) Professional Engineers, and one (1) Registered Land Surveyor, to five (5) Professional Engineers and one (1) Registered Land Surveyor, and reduce the term of Board of Registration Members from nine (9) years to six (6) years.
13. Provide for registration as a Professional Engineer but permit, at the registrant's option, the continued display of the discipline under which the license was granted on letterheads, seals, etc., and listed in the Board of Registration's Roster of Registered Professional Engineers and Land Surveyors.

It is readily apparent that these suggested changes to the Registration Law will eliminate antiquity and modernize the law that governs our Professional Engineering and Land Surveying Professions in order that we may be easily recognized by the public we serve as true professionals. These suggested changes will also result in a stronger relationship between our Board of Registration and the Boards of Registration for Professional Engineers and Land Surveyors of other states.

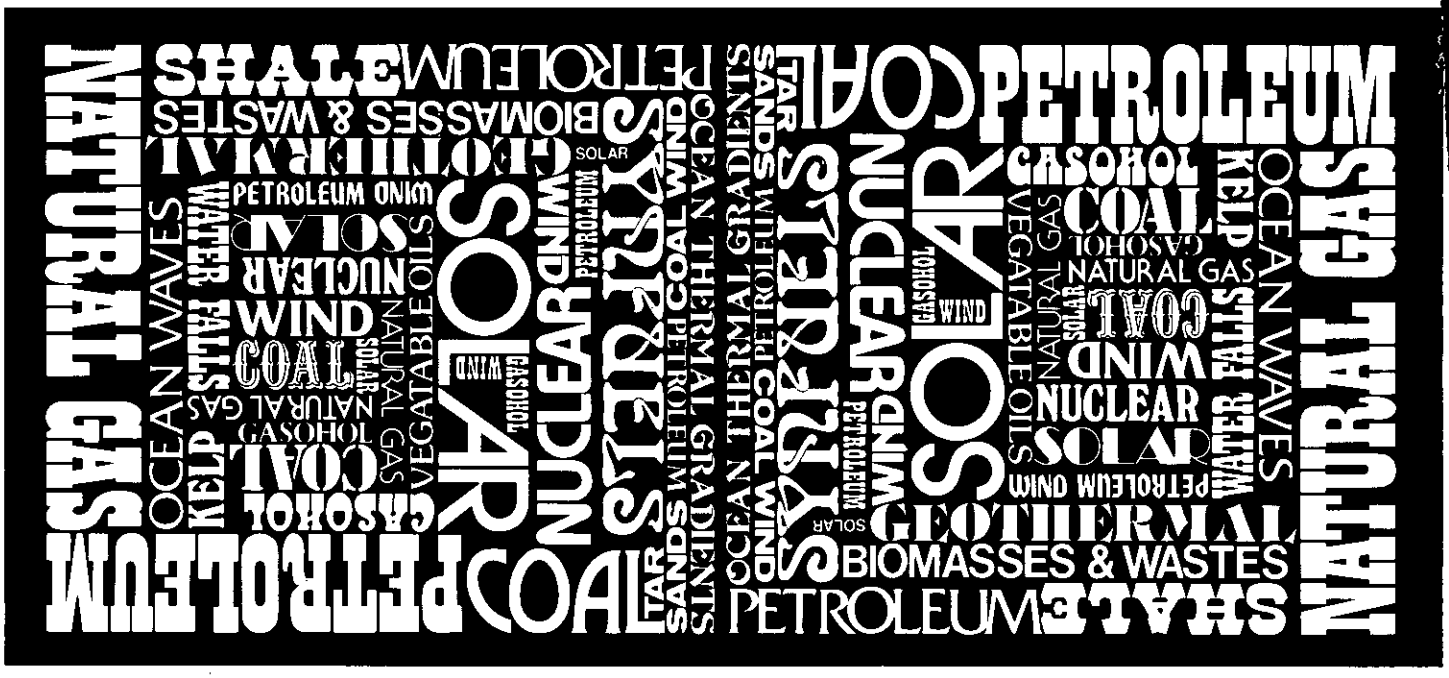
On November 6, 1979 the LES Legislative Committee addressed a letter to all engineering and surveying societies and organizations in the state of Louisiana, on record with the LES State Office, informing them of the suggested amendments to the Registration Law, and requesting their comments, endorsement, objections, or approval therefor.

Through this message, to approximately 17,000 Registered Professional Engineers and Land Surveyors receiving the LOUISIANA ENGINEER magazine, the LES Legislative Committee also requests your comments, endorsements, objections, or approvals of the foregoing suggested changes to the Registration Law. Time is of extreme essence in receiving your input, as much more continued work is needed in drafting the ultimate legislation, and promoting the ultimate legislation with lobbying groups and our State Senators and Representatives long before the 1980 Louisiana Legislature convenes.

Please address your comments, or any questions you may have, concerning this most important matter to Mr. R.C. "Doc" Spears, LES Executive Secretary, at P.O. Box 2683, Baton Rouge, Louisiana 70821, or telephone "Doc" at A/C 504 344-4318. The LES Legislative Committee will assist "Doc" in timely response to your comments and inquiries.

Your individual input, help and concern in this most important, and timely, matter is deeply appreciated.

WHATEVER THE ENERGY SOURCE...



ETCE is Where You'll See And Hear the Latest Energy Engineering Developments

The Rivergate, New Orleans • February 3-7, 1980

Seven Prestigious Sponsors

American Society of Mechanical Engineers • American Institute of Plant Engineers
American Society of Civil Engineers • American Society of Lubrication Engineers • American Society for Metals
Instrument Society of America • National Association of Corrosion Engineers

Whatever the energy source, if you're involved in energy engineering, you should be at the 1980 Energy-sources Technology Conference and Exhibition (ETCE). All of the major sources as well as many novel sources will be included in the technical program and exhibition to be held at the Rivergate in New Orleans. Conference activities are scheduled for Feb. 3-7 while the exhibition will be open Feb. 4-6.

Highest Quality Technical Program & Exhibit

With all seven co-sponsoring societies conducting sessions, the 1980 technical program shapes up as the best ever. A total of approximately 75 sessions will include some 250 papers and panels featuring authors and panelists who are leading authorities in a wide array of specialized technical skills.

Subject areas are diverse and include the following: Drilling & Production — Equipment Design & Manufacture — Metals & other materials for selection & use — Internal Combustion Engines —Transporting energy-sources — Rock Mechanics — Emerging Energy Technologies — Ocean Engineering — Civil Engineering in Energy Projects — Lubrication of Equipment — Instrumentation for Energy-Sources Applications — Corrosion Prevention & Control — Plant Engineering.

The exhibition will display a variety of products and services representing many leading companies and organizations related to the energy industries. Whether you're interested in attending technical sessions or not, you can register for the exhibit only and see the latest equipment, components, materials and services being shown at ETCE.

Trinidad Energy Minister to Participate

The Honorable Errol Mahabir, Minister of Energy and Energy-based Industries for Trinidad and Tobago, will present the keynote address. He'll tell how the republic has successfully planned and achieved sharp increases in crude oil and natural gas production and will outline plans for future exploration and development.

For More Information: If you would like to receive an advance program for the 1980 ETCE, send your name and address to: ETCE Advance Program; P.O. Box 59489; Dallas, TX 75229.

etce

Energy-sources Technology Conference & Exhibition

Code of Ethics

Preamble

The Engineer, to uphold and advance the honor and dignity of the engineering profession and in keeping with high standards of ethical conduct:

- *Will be honest and impartial, and will serve with devotion his employer, his clients, and the public;*
- *Will strive to increase the competence and prestige of the engineering profession;*
- *Will use his knowledge and skill for the advancement of human welfare.*

Section 1—The Engineer will be guided in all his professional relations by the highest standards of integrity, and will act in professional matters for each client or employer as a faithful agent or trustee.

a. He will be realistic and honest in all estimates, reports, statements, and testimony.

b. He will admit and accept his own errors when proven wrong and refrain from distorting or altering the facts in an attempt to justify his decision.

c. He will advise his client or employer when he believes a project will not be successful.

d. He will not accept outside employment to the detriment of his regular work or interest. Before accepting any outside employment he will notify his employer.

e. He will not attempt to attract an engineer from another employer by false or misleading pretenses.

f. He will not actively participate in strikes, picket lines, or other collective coercive action.

g. He will avoid any act tending to promote his own interest at the expense of the dignity and integrity of the profession.

Section 2—The Engineer will have proper regard for the safety, health, and welfare of the public in the performance of his professional duties. If his engineering judgment is overruled by non-technical authority, he will clearly point out the consequences. He will notify the proper authority of any observed conditions which endanger public safety and health.

a. He will regard his duty to the public welfare as paramount.

b. He shall seek opportunities to be of constuctive service in civic affairs and work for the advancement of the safety, health and well-being of his community.

c. He will not complete, sign, or seal plans and/or specifications that are not of a design safe to the public health and welfare and in conformity with accepted engineering standards. If the client or employer insists on such unprofessional conduct, he shall notify the proper authorities and withdraw from further service on the project.

Section 3—The Engineer will avoid all conduct or practice likely to discredit the profession or deceive the public.

a. The Engineer shall not make exaggerated, misleading, deceptive or false statements or claims about his professional qualifications, experience or performance in his brochures, correspondence, listings, advertisements or other public communications.

b. The above prohibitions include, but are not limited to, the use of statements containing a material misrepresentation of fact or omitting a material fact necessary to keep the statement from being misleading; statements intended or likely to create an unjustified expectation; statements containing prediction of future success; statements containing an opinion as to the quality of the Engineer's services; or statements intended or likely to attract clients by the use of showmanship, puffery, or self-laudation, including the use of slogans, jingles, or sensational language or format.

c. Consistent with the foregoing, the Engineer may advertise for recruitment of personnel.

d. Consistent with the foregoing, the Engineer may prepare articles for the lay or technical press. Such articles shall not imply credit to the author for work performed by others.

Section 4—The Engineer will endeavor to extend public knowledge and appreciation of engineering and its achievements and to protect the engineering profession from misrepresentation and misunderstanding.

a. He shall not issue statements, criticisms, or arguments on matters connected with public policy which are inspired or paid for by private interests, unless he indicates on whose behalf he is making the statement.

Section 5—The Engineer will express an opinion of an engineering subject only when founded on adequate knowledge and honest conviction.

a. The Engineer will insist on the use of fact in reference to an engineering project in a group discussion, public forum or publication of articles.

Section 6—The Engineer will undertake engineering assignments for which he will be responsible only when qualified by training or experience; and he will engage, or advise engaging, experts and specialists whenever the client's or employer's interests are best served by such service.

Section 7—The Engineer will not disclose confidential information concerning the business affairs or technical processes of any present or former client or employer without his consent.

a. While in the employ of others, he will not enter promotional efforts or negotiations for work or make arrangements for other employment as a principal or to practice in connection with a specific project for which he has gained particular and specialized knowledge without the consent of all interested parties.

b. He will not, without the consent of all interested parties, participate in or represent an adversary interest in connection with a specific project or proceeding in which he had gained particular specialized knowledge on behalf of a former client or employer.

Section 8—The Engineer shall disclose all known or potential conflicts of interest to his employer or client by promptly informing them of any business connections, interests, or other circumstances which could influence his judgment or the quality of his services. or which might reasonably be construed by others as constituting a conflict of interest.

a. When in public service as a member, advisor, or employee of a governmental body or department, an Engineer shall not participate in considerations or actions with respect to services provided by him or his organization in private engineering practice.

b. An Engineer shall not solicit or accept an engineering contract from a governmental body on which a principal or officer of his organization serves as a member.

Section 9—The Engineer will not accept compensation, financial or otherwise, from more that one interested party for the same service, or for services pertaining to the same work, unless there is full disclosure to and consent of all interested parties.

a. He will not accept financial or other considerations, including free engineering designs, from material or equipment suppliers for specifying their product.

b. He will not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with his clients or employer in connection with work for which he is responsible.

Section 10—The Engineer will uphold the principle of appropriate and adequate compensation for those engaged in engineering work.

a. He will not accept remuneration from either an employee or employment agency for giving employment.

b. When hiring other engineers, he shall offer a salary according to the engineer's qualifications and the recognized standards in the particular geographical area.

c. If in sales employ, he will not offer, or give engineering consultation, or designs, or advice other than specifically applying to the equipment being sold.

Section 11—The Engineer will not compete unfairly with another engineer by attempting to obtain employment or advancement or professional engagements by taking advantage of a salaried position, by criticizing other engineers, or by other improper or questionable methods.

a. He will not pay, or offer to pay, either directly or indirectly, any political contribution, or a gift, or other consideration in order to secure work. He will not pay a commission, percentage or brokerage fee in order to secure work except to bona fide employees or bona fide established commercial or marketing agencies retained by him.

b. Contingency provisions for professional engineering services are not recommended. When a contingency provision must be accepted, however, in order for the Engineer to make available the technical expertise necessary to secure funding for a project for a public body, such acceptance shall not be considered unethical if the engineering agreement assures the engineer of his continued employment once funding arrangements are completed, or full payment be made for his preliminary services (quantum), should his employment be terminated. When a professional commission must be accepted on a contingency basis, an engineer shall not permit his professional judgment to be compromised in order to assure funding of the project.

c. While in a salaried position, he will accept part-time engineering work only at a salary not less than that recognized as standard in the area.

d. An Engineer will not use equipment, supplies, laboratory, or office facilities of his employer to carry on outside private practice without consent.

e. An Engineer will not use "free engineering" as a device to solicit or otherwise secure subsequent paid engineering assignments.

Section 12—The Engineer will not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice or employment of another engineer, nor will he indiscriminately criticize another engineer's work. If he believes that another engineer is guilty of unethical or illegal practice, he shall present such information to the proper authority for action.

a. An Engineer in private practice will not review the work of another engineer for the same client, except with the knowledge of such engineer, or unless the connection of such engineer with the work has been terminated.

b. An Engineer in governmental, industrial or educational employ is entitled to review and evaluate the work of other engineers when so required by his employment duties.

c. An Engineer in sales or industrial employ is entitled to make engineering comparisons of his products with products by other suppliers.

Section 13—The Engineer will not associate with or allow the use of his name by an enterprise of questionable character, nor will he become professionally associated with engineers who do not conform to ethical practices, or with persons not legally qualified to render the professional services for which the association is intended.

a. He will conform with registration laws in his practice of engineering.

b. He will not use association with a nonengineer, a corporation, or partnership, as a "cloak" for unethical acts, but must accept personal responsibility for his professional acts.

Section 14—The Engineer will give credit for engineering work to those to whom credit is due, and will recognize the proprietary interests of others.

a. Whenever possible, he will name the person or persons who may be individually responsible for designs, inventions, writings, or other accomplishments.

b. When an Engineer uses designs supplied to him by a client, the designs remain the property of the client and should not be duplicated by the Engineer for others without express permission.

c. Before undertaking work for others in connection with which he may make improvements, plans, designs, inventions, or other records which may justify copyrights or patents, the Engineer should enter into a positive agreement regarding the ownership.

d. Designs, data, records, and notes made by an engineer and referring exclusively to his employer's work are his employer's property.

Section 15—The Engineer will cooperate in extending the effectiveness of the profession by interchanging information and experience with other engineers and students, and will endeavor to provide opportunity for the professional development and advancement of engineers under his supervision.

a. He will encourage his engineering employees' efforts to improve their education.

b. He will encourage engineering employees to attend and present papers at professional and technical society meetings.

c. He will urge his engineering employees to become registered at the earliest possible date.

d. He will assign a professional engineer duties of a nature to utilize his full training and experience, insofar as possible, and delegate lesser functions to subprofessionals or to technicians.

e. He will provide a prospective engineering employee with complete information on working conditions and his proposed status of employment, and after employment will keep him informed of any changes in them.

Statement by NSPE Executive Committee

In order to correct misunderstandings which have been indicated in some instances since the issuance of the Supreme Court decision and the entry of the Final Judgment, it is noted that in its decision of April 25, 1978, the Supreme Court of the United States declared: "The Sherman Act does not require competitive bidding."

It is further noted that as made clear in the Supreme Court decision:

1. Engineers and firms may individually refuse to bid for engineering services.
2. Clients are not required to seek bids for engineering services.
3. Federal, state, and local laws governing procedures to procure engineering services are not affected, and remain in full force and effect.
4. State societies and local chapters are free to actively and aggressively seek legislation for professional selection and negotiation procedures by public agencies.
5. State registration board rules of professional conduct, including rules prohibiting competitive bidding for engineering services, are not affected and remain in full force and effect. State registration boards with authority to adopt rules of professional conduct may adopt rules governing procedures to obtain engineering services.
6. As noted by the Supreme Court, "nothing in the judgment prevents NSPE and its members from attempting to influence governmental action . . . ."

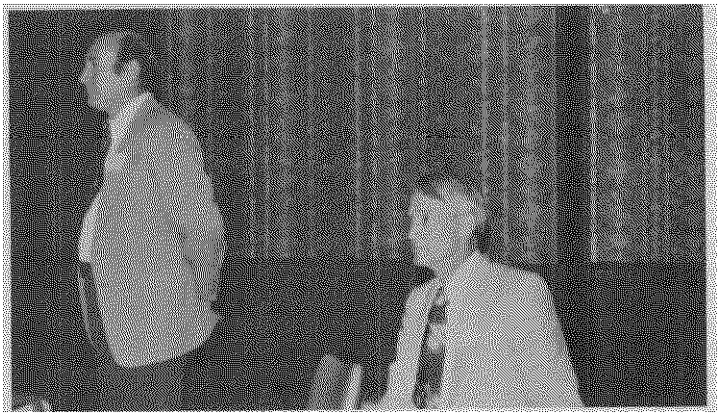
Note: In regard to the question of application of the Code to corporations vis-a-vis real persons, business form or type should not negate nor influence conformance of individuals to the Code. The Code deals with professional services, which services must be performed by real persons. Real persons in turn establish and implement policies within business structures. The Code is clearly written to apply to the Engineer and it is incumbent on a member of LES to endeavor to live up to its provisions. This applies to all pertinent sections of the Code.

LES Code of Ethics, As Adopted November 2, 1979

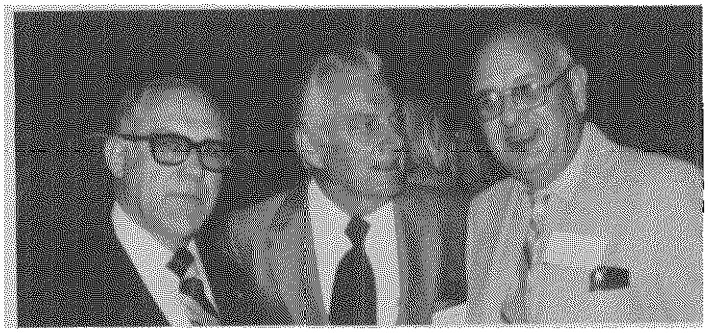
NSPE Southwest Regional Meeting Held in New Orleans



Mrs. Buddy Moncla; Jerrel Freeman, Mrs. Freeman; Mrs. Jim Janssen; Garth and Mrs. Kennedy, Oklahoma.



Marvin Spector, P.E., New York; Francis C. Roy, P.E., LES President.



Sammie Lee, P.E., President, NSPE; R. C. "Doc" Spears; Milt Lunch, Gen. Counsel, NSPE.



Marvin Spector, P.E.; Sammie Lee, P.E.; Del Schmand, P.E.; Herb Koogle, P.E., Waldemar Nelson, P.E.; and Ira Oliver, Executive Director, Oklahoma.

Characterized by professional rather than technical matters, the Southwest Region of NSPE meeting was held at the Monteleone Hotel in New Orleans on October 10, 11, and 12. Jerry Freeman, First Vice President of the Louisiana Engineering Society, assisted by his secretary Mary Sudduth, made all the necessary advance arrangements and with help from LES members John Bergeron, Bob Brossette, Charlie Eustis, Dale Hunn, Phil Legendre, and Henry Markel, saw that everything went as planned during the three-day meeting.

Waldemar Nelson, in his capacity as National Director and immediate past NSPE Vice President for the Southwestern Region, attended, greeting delegates and their spouses and assisted with arrangements. The ladies' activities, which were very well received by the visitors, were planned and conducted by Claire Roach, Adele Cressy, Betty Grundmann, and Dot Janssen.

A highlight of the program was the Thursday morning seminar on forensic engineering entitled "The Engineer as an Expert Witness." The experts who made the presentations at the session were two consulting engineers, Paul Pritzker and Marvin Specter, both nationally known and in demand in their field. They brought out many points of importance to engineers engaged in presenting technical evidence. Two of these were: get a clear, written agreement with the client and his attorney, and get on the job early while the evidence is still "hot." The afternoon was devoted to practice division and committee meetings, some of which ran overtime due to the great amount of interest in the topics covered.

But we did break up in time to meet the ladies for a cocktail hour and a better-than-usual dinner in the hotel where the principal speaker was Sammie F. Lee, NSPE President from Louisville, Kentucky. His talk was followed by an amusing presentation by John Chase, local cartoonist and historian whose topic was "The Low Down on New Orleans." Chase lived up to his reputation of spicing facts relative to history, street names, New Orleans cartoons and traditions with a good deal of humor.

Friday morning and luncheon were devoted largely to NSPE national and regional affairs including the relationship of our national society with others. It was announced that NSPE's healthy growth in members (now over 80,000), activities, and influence are continuing.

That afternoon the entire group convened for a panel discussion on "Enforcement of Professional Practice Statutes and Rules of Conduct." Texans Bob Layton and Stan Gilbert were joined by Jerrel E. Godfrey, Jr., attorney for the Louisiana Board of Registration, and Milton F. Lunch, NSPE's General Counsel in Washington, D.C. Here it was brought out that violations can generally be stopped by advising the culprit of his transgression. However, when such cautions are ignored, the registration boards do bring action to enforce the law. Following this presentation, there was a wrap-up summary which indicated that the affairs of the professional engineers of this country, members and nonmembers, are in good hands.

The wives of members had a full program of activities including a continuously open hospitality room in the hotel, a tour of lakefront boat houses, lunch at Masson's famous New Orleans restaurant, and a **gouter** ("snack" to us non-French speakers) at Morton's Antiques. The ultramodern, fully automated, computerized, push-button controlled boat houses were an instant success with the ladies who went home with some new decorating ideas. They agreed with their husbands that the meeting was a great one. A number of delegates stayed over to enjoy our famous restaurants and the other things that America's Most Interesting City has to offer.

Hire More Workers, Pay Less Taxes!



Employers! You can get a tax credit of up to $3,000 each time you hire a worker eligible for the Targeted Jobs Tax Credit. And it's easy. Just hire the worker, fill in the blanks on the eligibility voucher, and drop it in the mail to your local Job Service office. No red tape, no complicated record-keeping. It makes good business sense and it helps people who need jobs.

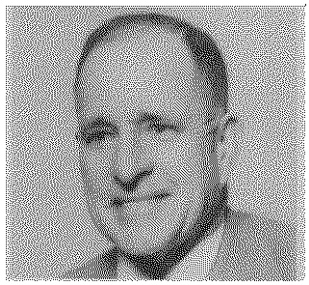
Hire more workers, pay less taxes. Help put America to work.

Contact your local Job Service or IRS office for details on the Targeted Jobs Tax Credit.

Targeted Jobs Tax Credit

Prepared as a public service by the U.S. Department of Labor and the Internal Revenue Service.

VLIET'S VIEWS



Daniel H. Vliet, P.E., Executive Secretary
Louisiana State Board of Registration for Professional Engineers & Land Surveyors

The New Fundamentals of Engineering Examination

My objective in this article is to focus attention on the revised syllabus for the Fundamentals of Engineering Examination (EIT exam) that will become effective in the fall of 1980. The examination will continue to be separated into two parts, Part I administered during a four-hour morning session and Part II administered during a four-hour afternoon session. Each part of the examination will continue to be weighted equally. The questions will continue to be presented with five answer choices (lettered A-E) from which the applicant must choose a single best answer.

Only minor changes will be made in the syllabus of Part I. The most important change is a reduction of the total number of questions from 150 to 140. The subject areas covered by Part I will be the same as they are now. There will only be slight changes in the distribution of the questions. The approximate percentage of questions in each major subject area for Part I are presented below:

TABLE 1

Subject Area	Percent
1. Chemistry	7%
2. Computer Programming	6%
3. Dynamics	9%
4. Engineering Economics	4%
5. Electrical Circuits	13%
6. Fluid Mechanics	10%
7. Materials Science	4%
8. Mathematics	9%
9. Mathematical Modeling of Engineering Systems	6%
10. Mechanics of Materials	9%
11. Statics	9%
12. Structure of Matter	4%
13. Thermodynamics	10%

Significant changes will take place in the syllabus of Part II of the examination. In the recent past, and until the fall of 1980, a person was expected to answer 5 out of 19 problem sets from at least 4 of 10 subject areas. Each problem set required 10 answers. The new examination, effective in the fall of 1980, will have two classifications of problems for Part II, common subject areas and additional subject areas. A person will be expected to answer all of the 50 questions from the four common subject areas and only 20 questions from two of the five additional subject areas, a total of 70 questions. The distribution of these questions in the various subject areas covered by Part II of the examination is shown below:

TABLE 2

Common Subject Areas (4)	Number of Questions Per Subject Area
1. Engineering Mechanics	15
2. Mathematics	15
3. Electrical Circuits	10
4. Engineering Economics	10
Additional Subject Areas (Choose 2)	
5. Computer Programming	10
6. Electronics & Electrical Machinery	10
7. Fluid Mechanics	10
8. Mechanics of Materials	10
9. Thermodynamics/Heat Transfer	10
Total PM Questions (Only 70 Questions must be answered)	100

The maximum score for the 140 questions of Part I will be 70 (one-half point for each correct answer) and for the 50 required questions and 20 selected questions of Part II, 70 (one point for each correct answer).

In summary there will be a significant change in the syllabus of the Fundamentals of Engineering Examination effective in the fall of 1980. The changes have the effect of reducing the options available in Part II of the examination. The National Council of Engineering Examiners (NCEE) believes that a larger fraction of this examination in fundamentals should be required of all who take the examination. The changes also indicate the belief by NCEE that greater recognition should be given to mathematics, electrical circuits, and engineering economics as fundamental subject areas for all engineers.

The last article in "Vliet's Views" was concerned with recent changes to the rules requiring written examinations and with changes in the administration of these examinations. In that article the cost of a new book published by the National Council of Engineering Examiners (NCEE) was incorrectly listed. The true cost of **Professional Engineering Examinations, Volume III** is $8.95. Please accept my apology for the inconvenience this error may have caused.

Mobile Bay Bridge Selected Outstanding Engineering Achievement



Not only engineering excellence, but also environmental concern played a major role in the selection of the I-10 Twin Bridge complex over Mobile Bay in Alabama as one of the country's Ten Outstanding Engineering Achievements of the past year.

The award, made annually by the National Society of Professional Engineers, was presented to David Volkert and Associates of Mobile, consulting engineers for the project, and the Alabama Highway Department, in ceremonies in Mobile.

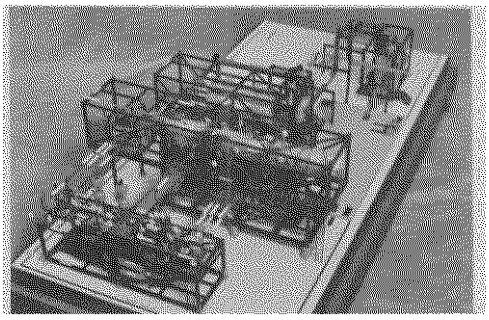
Lynn C. Doyle, who presented the award on behalf of the National Society and who was president of the Mobile Chapter of the Alabama Society of Professional Engineers which nominated the bridge for the honor, stated:

"The Interstate Route 10 Twin Bridge crossing Mobile Bay is an outstanding example of the manner in which the engineering profession is able to satisfy modern day needs of our country in an economical and environmentally acceptable manner."

The importance and strength of the new bridge was strikingly emphasized recently during Hurricane Frederic. While the former route across the bay causeway lay in complete ruins, vehicles rushing vital necessities to stricken areas were able to cross the bay in complete safety and without delay via the new bridge.

The sweeping two-lane, pre-cast, pre-stressed concrete trestle type bridge was completed in March of 1978 at the cost of $79,798,647.74. Although actual construction took only four years, more than 10 years were spent in the planning process and 42 possible designs were considered before final plans were adopted.

Custom-built Models



Southern Model Builders has been in the model building business for approximately 20 years and has experience in building precision scale models ranging from ships to complete chemical and industrial plants.

List of some of the models we have built

Conceptional Engineering (Piping, Struct, Etc.)
Planning
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Lawsuit
Drill Rigs
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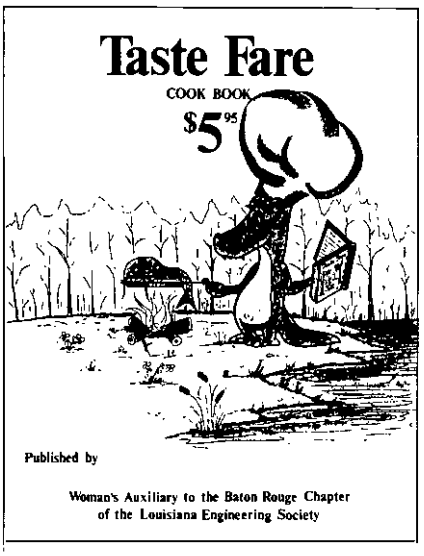


(Cook book - $5.95 plus $1.25 handling and postage.)

Woman's Auxiliary to the Baton Rouge Chapter of the Louisiana Engineering Society
1991 Hollydale Avenue
Baton Rouge, Louisiana 70808

NAME _____

STREET _____

CITY _____ **STATE** _____ **ZIP** _____

Summary of Minutes LES Board of Direction

The following is a summary of the minutes of the November 2, 1979 meeting of the LES Board of Direction held in Lake Charles.

1. Twenty members of the 1979-80 Board and five visitors were present. This was the smallest attendance of the 23-man Board in many years.
2. The next Board meeting will be December 14-15, 1979 in Baton Rouge. The Friday special meeting will start at 1:00 p.m. The main agenda item will be the 1980 legislative program. The Saturday meeting will start at 9:00 a.m. and be a regular meeting.
3. James W. Reeves, P.E., was present at the Board meeting to represent the State Board of Registration.
4. Dudley Hixon, P.E., submitted membership report number 2 for Carroll Fuselier, P.E., Membership chairman. Lake Charles leads the contest with 10 new applications against their quota of 17. Lafayette is a close second with 24 applications against a quota of 40. Hixson reminded the Board members the importance of contacting delinquents and introductory members for retention.
5. Dudley Hixon, P.E., secretary-treasurer, presented the financial statement for September. The income and expense items are tracking close to the budget. The audit for 1978-79 prepared by John Daniel, CPA, and presented on September 15, was officially approved by the Board.
6. Jerrel J. Freeman, P.E., made a brief report on the NSPE Southwestern Regional meeting held in New Orleans on October 10-12, 1979. Approximately 80 engineers and 40 spouses attended. He reported a small surplus should be realized from the meeting.
7. The chapter presidents present reported on chapter activities, primarily scholarships, public relations, membership, and honors and awards. Shreveport and Monroe chapter presidents were not present.
8. Francis Roy, P.E., made the following announcements:

a. LES elected to dissolve its membership in EJC, which is moving its activities into the new organization, American Association of Engineering Societies (AAES). The Board concurred in this action.

b. Nominations for the 1980 LES awards must be submitted to the state office by December 1, 1979. The Honors and Awards committee will meet December 14 in Baton Rouge to select winners.

c. A meeting site for the 1981 summer meeting was discussed. Preferred hotel reservations in Biloxi could not be obtained. The Board approved holding the 1981 meeting on July 23-25, 1981 at Toro Hills, Many, Louisiana.

d. The NSPE 1980-81 slate of officers was presented. Otto A. Tennent, P.E., Iowa, was selected as president-elect. LES worked extensively for the nomination of Waldemar S. Nelson, P.E. to this position.

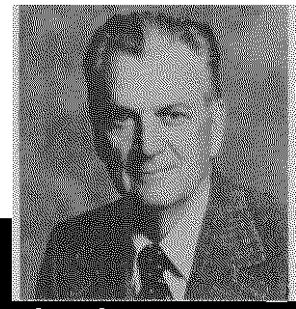
e. LES will have a booth at the Energy Sources Technology Conference and Exhibition at the Rivergate, New Orleans on February 4-6, 1980.

f. Engineers Week will be celebrated February 17-23, 1980 and each chapter is gearing up to celebrate the week.

g. In 1980, if NSPE dues have not been paid before March 31, member service will be suspended. If the dues have not been paid by June 30, the individual will be dropped from NSPE membership.

9. Al McKee, P.E., chairman LES ethics and professional conduct committee, presented a new LES code of ethics for approval. The code follows the NSPE code of ethics with one exception relating to contingency provisions. The code was adopted and will appear in this issue of the magazine.
10. Lamon Moody, P.E., LES legislative Committee chairman, presented a comprehensive proposed legislative package for 1980. The discussions were lengthy. A special meeting of the Board was called for December 14 to approve, disapprove or modify the legislative package consisting of 13 items. A report is included in this issue of the magazine.
11. The Board approved the Student Operations Manual for publication with additional permission given to James Porter, P.E. and the state office for editorial changes.
12. A resolution regarding liability exposure of engineers in government was presented by James Porter, P.E. It was approved to support the concept of liability protection for federally employed professional engineers in their duties as expressed in H.R. 2659. The resolution will be sent to the U.S. House subcommittee on Administrative Law and Governmental Relations of the House Judiciary Committee and to the Louisiana congressional delegation.
13. It was approved to appoint an ad hoc committee to study the programs for annual meetings.
14. It was approved that an ad hoc committee chaired by Blaise Carriere, P.E., be appointed to confirm the Louisiana Engineering Advancement Program for Minorities (LEAP) objectives and to report its goals and status at the December 15 Board meeting.
15. A definition of Engineering firms was submitted by Robert Blanche, P.E. for approval prior to forwarding to the Louisiana Department of Commerce and Industry. The definition was approved.
16. Andre Amy, P.E., president Lafayette Chapter, reported that the dates of July 17-18-19, 1980 were set for the LES 1980 summer meeting in Lafayette.

POTPOURRI



R. C. "Doc" Spears
Executive Secretary
Louisiana Engineering Society

Best Wishes for a Happy Holiday Season are extended to all members of the Louisiana Engineering Society.

LES Auto Insurance Program

The Louisiana Engineering Society Automobile Program now has over 200 participants. When comparing the rates offered under the program, many members find they can save money on their insurance premiums. It takes only a few minutes to write for a free quotation with which you may make your own comparison. For your free quotation, write: Employees Insurance Representatives Incorporated, P.O. Box 14697, Baton Rouge, Louisiana 70808.

Basic Project Management

A three-day seminar on Basic Project Management, Planning, Scheduling, and Control will be held January 30 - February 1, 1980, at Tulane University, New Orleans.

The seminar is designed to provide proven, workable answers to help you solve your project management problems.

For further information and registration form contact: Seminar Administration, Tulane, (504) 865-4461.

NSPE Winter Meeting in Atlanta

The National Society of Professional Engineers (NSPE) has scheduled a heavy slate of activities for its Winter Professional meeting in Atlanta, January 13-19, 1980 at the Atlanta Marriott.

Highlights of the meeting will feature discussions on topics of interest to all segments of the profession, including progress on development of the new unity organization and the Society's special initiatives such as registration of engineers in industry. The Society's Board of Directors will also review membership promotion, public relations, legislative and government affairs, continuing professional development and other current and ongoing programs.

Leading off the week, the executive boards and boards of governors of the Society's five practice divisions are tackling full agendas of important issues.

A special feature at this meeting will be a series of continuing education seminars, offering certified education units. Included in the seminars are:

Forensic Engineering, Wednesday, January 16, which will discuss a variety of services, ranging from accident investigation through courtroom participation.

Engineering Curricula, Wednesday, January 16, reviews current state of curricula in engineering schools.

Uses of Specialty Fabrics in Civil Engineering, Thursday, January 17, featuring producers of specialty fabrics for describing engineering characteristics of their products, including fabrics for sewage treatment, soil stabilization, parking lot and highway construction.

Compensating Executives and Professional Engineers, Thursday, January 17, and Friday, January 18, conducted by Towers, Perrin, Forstor, & Grosby. The workshop will cover all elements of compensation.

NSPE Energy Statement

A comprehensive energy statement outlining America's options for the future has been adopted by NSPE. It is the position of NSPE "that all economically feasible domestic energy options must be developed, coupled with a vigorous, long term national effort on energy conservation." Among these energy options is oil, and NSPE urged the completion of the national petroleum reserve which would supply oil for 90 days after a major cutoff. Research and development of domestic potential sources of natural gas — geopressurized zones of tight rock formations — were key noted as was the need to modernize coal transportation systems. "A strong nuclear industry is vital to the country's future." It is imperative, therefore, that "sites and firm construction schedules for nuclear waste depositories must be established." In addition to the development of tradition sources of energy production, NSPE recognizes the need for the expansion of alternative energy resources. "All potential energy options, such as nuclear fusion, solar energy, electricity from lowhead dams, geothermal, wind power, gasohol and municipal waste, must be pursued." Copies of the statement, which have been sent to President Carter and the Congress, are available from NSPE.

Energy-Sources Conference Planned

Seven major engineering groups will cosponsor the 3rd annual Energy-Sources Technology Conference & Exhibition to be held at the Rivergate in New Orleans, February 3-7, 1980.

The technical program will include sessions conducted by all seven cosponsors and will feature papers covering a wide variety of energy-sources. These include petroleum, natural gas, coal, geothermal, solar, nuclear, ocean waves and thermal gradients, and a number of novel energy sources.

The Honorable Errol Mahabir, Minister of Energy and Energy-based Industries for Trinidad and Tobago, will present a keynote address on Monday, February 4.

EngiNEWS

IN MEMORIAM
Claudius Russell McCauley

Claudius Russell McCauley, long time member of the engineering profession, passed away on May 22, 1979, at Highland Park Hospital in Covington, Louisiana.

Mr. McCauley (Mac) was a retired mechanical engineer and chief engineer with Dixie Plastics Manufacturing Company, a company which he founded at the close of World War II. Previous to this, Mac was with the Maritime Commission in plan approval.

Mac made extensive studies in plastic and was considered by all authorities as expert in the field. An M.E. graduate from the University of Arkansas, his home state, he was a member of Tau Beta Pi Honor Society and several fraternities.

Mac was active in both civic and church work, serving as president of Gentilly Civic Association and president of the St. Charles Avenue Christian Church Board until his retirement and move to Covington in December 1974.

Mr. McCauley is survived by his widow, Frances Patterson McCauley, one daughter, two sons and nine grandchildren.

IN MEMORIAM
Frank T. Carroll, Jr., P.E.

The Society was saddened by the death of Frank T. Carroll, Jr. of New Orleans on September 9, 1979.

Frank was a native of New Orleans and former resident of Baton Rouge. He was a graduate of LSU, associate professor of mechanical engineering at LSU, director of University College at LSU, executive dean of East Campus at Delgado College, New Orleans, and professor of engineering technology at Delgado College.

He has been a member of the Louisiana Engineering Society and the National Society of Professional Engineers since 1972. Frank was chairman of the Vocational Guidance Committee of LES in 1978-79.

LES extends its deepest sympathy to his widow, Patricia Ann, and five daughters and five sons.

IN MEMORIAM
Gerald R. Carter, P.E.

With the death, on August 31, 1979, of Gerald R. Carter, the engineering profession and his many friends suffered a great loss.

Mr. Carter was a native of Billings, Oklahoma and employed by Albert Switzer and Associates, Baton Rouge. He received his B.S. degree in civil engineering from the University of Arkansas and was a registered professional engineer in Louisiana, Arkansas and Florida. He was a member of the Louisiana Engineering Society, Florida Engineering Society, Arkansas Society of Professional Engineers, National Society of Professional Engineers, and the American Society of Civil Engineers.

The Society extends its deepest sympathy to his widow, Mearleane S. Carter, his mother, his son, G.R. Carter, daughter and family.

IN MEMORIAM
Elbert E. Elliott

The sudden, unexpected death of Elbert E. Elliott on October 1, 1979 was a shock to his co-workers at England Air Force Base, Alexandria, Louisiana. Mr. Elliott was the Base Electrical Engineer at England AFB since May 1, 1978. Born July 1, 1919, he had served as an electrical engineer with the Federal Civil Service since July, 1964. He was stationed

at several military bases in Florida and Georgia during his career and at Richards-Gebaur AFB, Missouri, immediately before coming to England AFB.

Mr. Elliott joined the Louisiana Engineering Society in May, 1978, and at the time of his death was serving on various committees in the Alexandria Chapter.

IN MEMORIAM

Charles H. Edwards Jr., P.E.

Charles H. Edwards Jr., professor of civil engineering at Louisiana Tech University, died on June 27, 1979.

Charles was a native of Vivian, LA. He received a BS degree from Louisiana Tech in 1948 and a master of science degree from the University of Texas in 1949. He joined the faculty of Louisiana Tech in 1949 as an assistant professor of civil engineering.

He was a member of the American Society of Civil Engineers, the Tau Beta Pi honor society, the First Baptist Church in Ruston and the Louisiana Engineering Society. Charles joined the Louisiana Engineering Society in 1950 and has been very active in the Monroe Chapter and the state organization. He was president of the Monroe Chapter in 1974-75.

New President at Servitron, Inc.

Stephen M. Spohrer, P.E. has been elected president of Servitron, Inc., Baton Rouge based engineers, designers, planners and surveyors. Spohrer is a 1970 graduate of LSU where he received a bachelor of science degree in civil engineering. He was employed by Servitron in 1974 following two years active duty with the U.S. Corps of Engineers and two years service with the Louisiana Department of Transportation. Spohrer is married and the father of two daughters.

He is a member of the Louisiana Engineering Society and the National Society of Professional Engineers.

General Heiberg to Washington

The Department of the Army has named **Major General Elvin R. "Vald" Heiberg III** as director of civil works for the U.S. Army Corps of Engineers in Washington, D.C. General Heiberg was New Orleans District Engineer in 1974-75. Currently serving as deputy chief of staff, Engineer, for the U.S. Army in Europe, Heiberg will assume his new position on August 23.

Sealant, Ford, Bacon & Davis Promotions are Announced

LES member **O. Landon Miles** has been named President and Director of Sealants International, jointly owned by Ford, Bacon & Davis and West Chester Chemical Company, which offers special services to gas distribution companies worldwide for sealing gas leaks.

In addition to Miles' appointment, **Douglas B. Blackburn**, President and Chairman of the Board of Ford, Bacon & Davis, Inc. and **Fred N. Westrom**, President of Ford, Bacon & Davis, Louisiana Division, were named to the Board of Directors of Sealants International.

Miles graduated from Louisiana Tech University in 1940 and joined Ford, Bacon & Davis in 1941. In 1961, he was named the first manager of Ford, Bacon & Davis' Sealants Department and in 1967 was elected a Vice President. He is a member of LES.

Three vice presidents of Ford, Bacon & Davis' Monroe Division have been named.

James S. Brock was named vice president of Business Development with responsibility for managing and coordinating marketing activities.

Joseph R. English was named vice president of Engineering with responsibility for engineering services within the division.

George D. Pickering, Jr. was named vice president of Industrial Operations with responsibilities for industrial construction, project management, and other duties.

The announcements were made by **Fred N. Westrom**, president of FB&D Monroe Division.

Walk, Haydel Promotion

Patrick C. Hamilton has been appointed Vice President, Business Development for Walk, Haydel & Associates, Inc., a New Orleans based consulting engineering firm.

In his new position, Hamilton will be responsible for the creation and coordination of the firm's domestic and foreign activities. He is a registered professional engineer in Louisiana and Texas, and a member of the American and Louisiana Bar Associations. Prior to this appointment, he has served as design engineer, project engineer, project manager and manager, business development with Walk, Haydel.

Harlan B. Lee has joined the Arkansas Division of Macmillan Ring-Free Oil Company as Project Engineer. Macmillan operates a refinery in Norphlet and crude oil production facilities in South Arkansas. The general office for the Arkansas Division is in El Dorado.

Lee obtained a B.S. degree in mechanical engineering from Louisiana Tech in Ruston in 1972. He is a Registered Professional Engineer in the states of Louisiana and Texas.

He is a native of Shreveport, Louisiana. He is a member of the Shreveport Scottish Rite and El Karuba Shrine Temple. Professional memberships include the Louisiana Engineering Society (past officer), National Society of Professional Engineers, American Society of Mechanical Engineers and American Petroleum Institute. His wife, Ida, is a native of Jackson, Mississippi, and an active member and officer in Woman's Auxiliary to the Louisiana Engineering Society. The Lees will be making their home in El Dorado, Arkansas.

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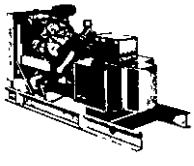

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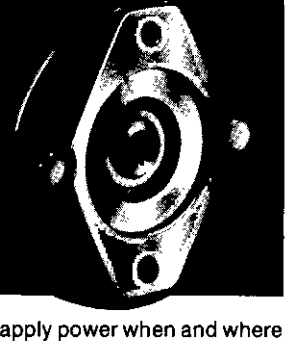

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Leo Young Elected President of IEEE

Dr. Leo Young, Staff Consultant of the Electronics Technology Division of the Naval Research Laboratory in Washington, D.C., has been elected 1980 President of The Institute of Electrical and Electronics Engineers (IEEE), the world's largest professional engineering society.

Dr. Young was elected by a 22,947-to-18,544 margin over the IEEE Board candidate, Burkhard H. Schneider. This is the first time in IEEE history that a petition candidate has defeated the Board nominee for the office of President.

Westinghouse Names Paine Regional Manager

Charles D. Paine, a 33-year marketing veteran with the Westinghouse Electric Corporation, has been appointed manager, southeastern region, with headquarters in Atlanta.

Paine has been southeastern region manager for Power Systems sales since 1969. After joining Westinghouse in the graduate student program in 1946, he held various company sales positions in Louisiana.

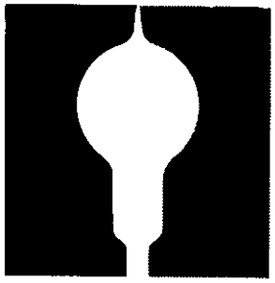
A native of Cheneyville, he earned a bachelor's degree in electrical engineering from LSU. He served as a captain in the U.S. Army Corps of Engineers in WWII, and was recalled for two years during the Korean War.

Paine is a registered professional engineer in Louisiana.



Centennial of Light

1879 - 1979



One hundred years ago, Thomas Alva Edison invented the first successful electric light bulb. Edison's contribution, regarded by many as his greatest gift to mankind, was only one of his countless inventions that laid advanced technology on the very threshold of the Twentieth Century.

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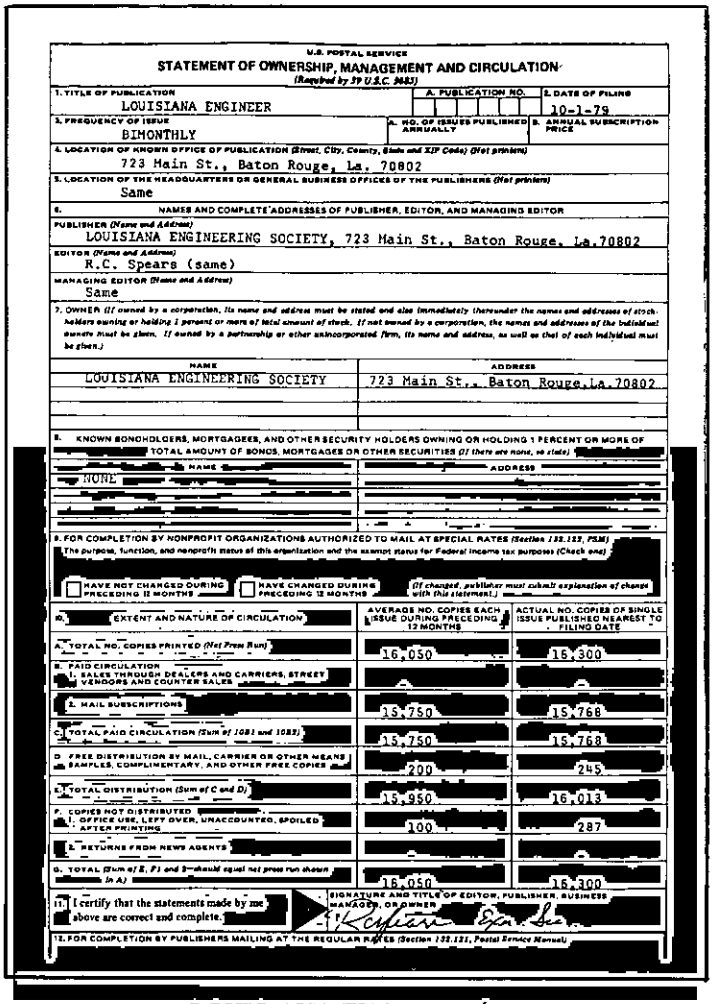

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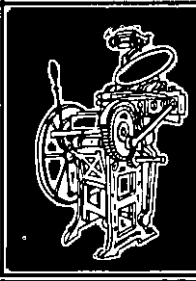

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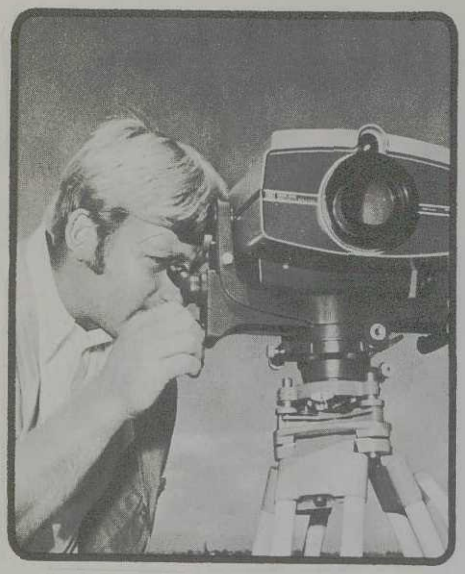

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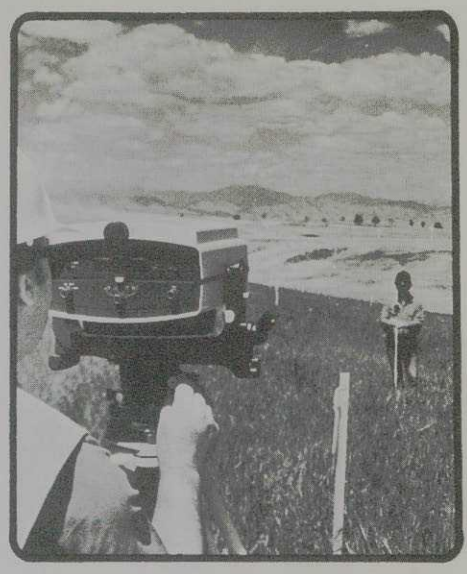

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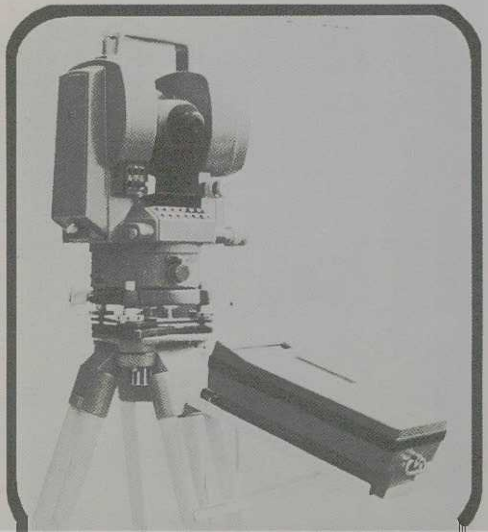

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