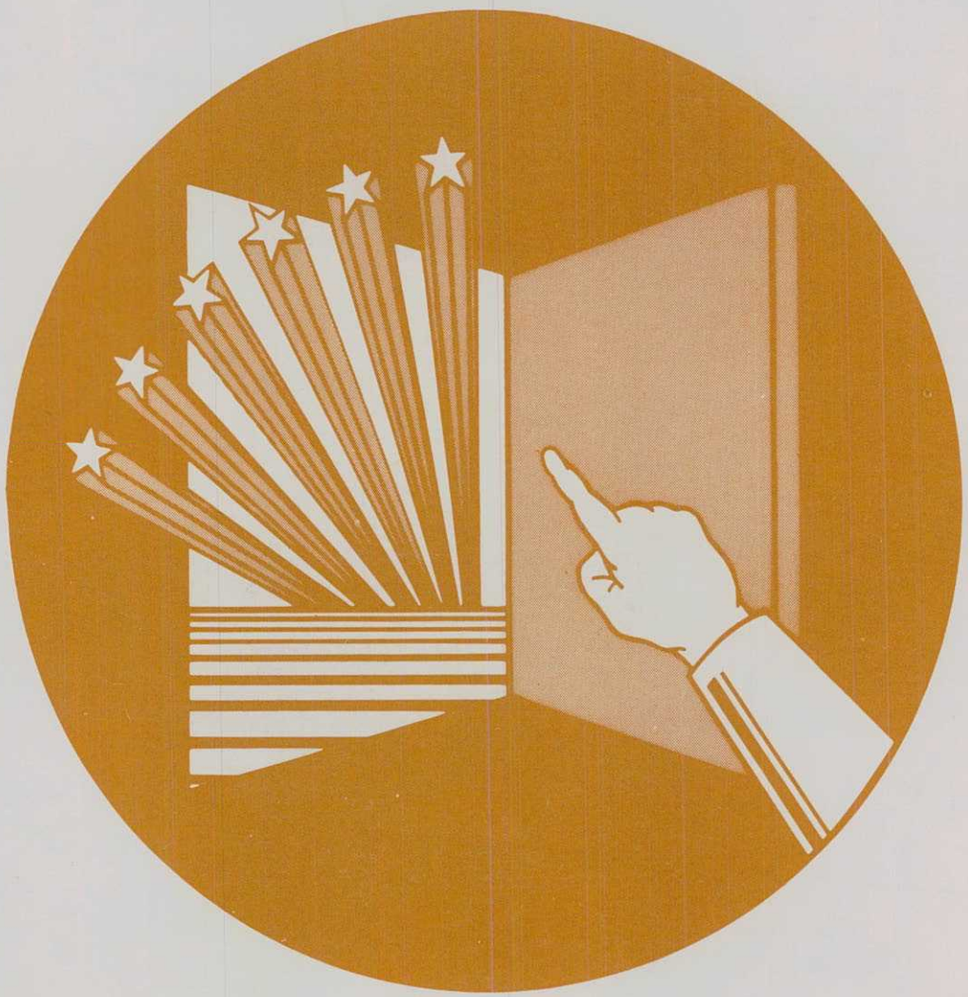
LOUISIANA ENGINEER
February, 1981

NATIONAL ENGINEERS WEEK
FEBRUARY 22-28

Engineers + Opportunity = Progress



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Engineers Week Proclaimed

THE WHITE HOUSE

WASHINGTON

National Engineers Week
February 22 - 28, 1981

It is indeed a pleasure to send my warm personal regards to America's professional engineers during this 31st annual National Engineers Week.

This year's theme identifies engineers with opportunity and progress. Nothing could be more appropriate at this time of national reassessment, a time when our technological leadership is being so severely challenged. Fortunately, our nation's engineers see the challenge as an opportunity for progress. By urgent necessity, engineers are the ones who must and will find solutions to current dilemmas while ensuring that we can create and enjoy an even better tomorrow for ourselves and our children.

I join all Americans in applauding your past and current accomplishments and add my voice to those urging you on to still greater achievement. The rebirth and revitalization we all seek depends in large measure on your successful efforts.

Ronald Reagan

State of Louisiana

David C. Treen
Governor

Proclamation

WHEREAS, National Engineers Week will be celebrated the week of February 22-28, 1981; and

WHEREAS, Engineers throughout Louisiana will conduct special activities emphasizing the 1981 theme: "Engineers + Opportunity = Progress"; and

WHEREAS, In recent years the great American dream appears to be fading and our vital natural resource base has begun to erode. Engineering and science must join with medicine, social science, philosophy, economics, government, humanities and the arts to solve our problems. When technology holds the answers, we must turn to engineers and scientists. They are the people who solve problems and who accept today's challenges. They see not limits, but opportunity and progress; and

NOW, THEREFORE, I, DAVID C. TREEN, Governor of the State of Louisiana welcome the opportunity to hereby proclaim the week of February 22-28, 1981, as

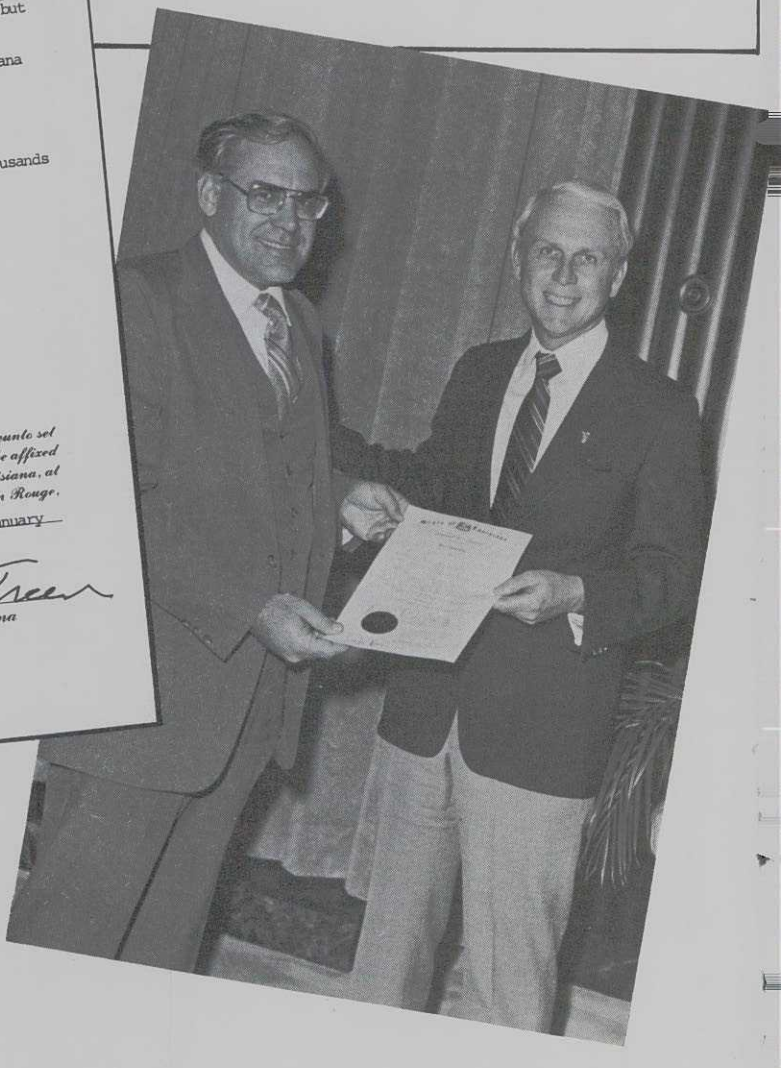
ENGINEERS WEEK

in Louisiana and urge all our citizens to honor the thousands of engineers working and living in our great State.

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 8th day of January A.D., 1981.

David C. Treen
Governor of Louisiana

Attest By The Governor
Jim Brown
Secretary of State



Governor Dave Treen presenting the 1981 Engineers Week Proclamation to LES President Jerrel J. Freeman, P.E.

February, 1981

LOUISIANA ENGINEER

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About the Cover:

The president of the United States and the Governor of Louisiana have officially proclaimed February 22-28, 1981, as Engineers Week. This year's theme is "Engineers + Opportunity = Progress."

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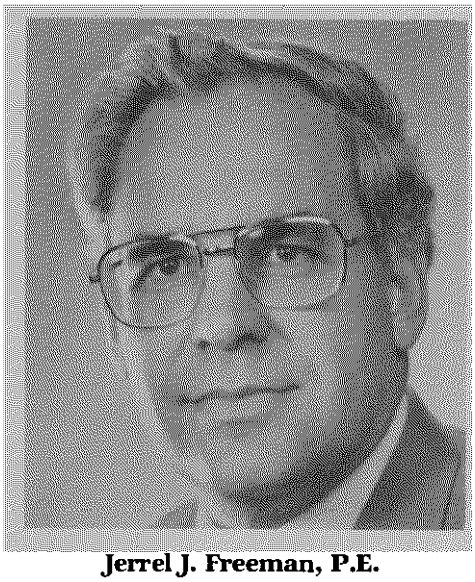
PRESIDENTIAL PRIVILEGE

During the industrial revolution of the nineteenth century and the war torn years of the early twentieth century no one questioned the meaning of progress or doubted that if things were "engineered" they were better. Today we are not even sure of the definition of the word "progress," and engineering, along with other high technology, is sometimes looked on with distrust and suspicion. In the past progress was commonly accepted to be more food, more roads, more houses, more towns and cities . . . in short more of everything. This is no longer a universal truth. There is obviously a need for more of these things in some parts of the world, but many areas are already overdeveloped and overcrowded, and more of anything is simply not the answer.

What has changed; why is "more" not the best answer? What constitutes progress in a developed area? Can we have progress in developed and undeveloped areas simultaneously? There are no ready answers to these questions, but anyone taking time to consider this year's theme for Engineers Week will have to explore these and similar questions.

Perhaps "advancement towards a better condition" will serve as a suitable definition of progress. This imperfect world we live in is certainly in need of progress expressed in these terms. We need to move towards better utilization of our energy resources; we need to resolve the problems of pollution; we need



Jerrel J. Freeman, P.E.
LES President

to rebuild our cities; we need efficient mass transportation; we need . . . ! The list is endless and ever changing, but such lists must be made and priorities established if meaningful progress is to be made. Realistic, attainable goals must be agreed upon, and engineers must be involved in creating such lists, in evaluating the items on the lists, and informing others of their probable impact on society. As engineers participate in this process they must recognize that the problems associated with redevelopment will not only be engineering problems; the task of upgrading our world will involve many other fields of endeavor. The political and social aspects of projects must now be considered as well as the scientific and engineering aspects.

Where there is need there is opportunity, opportunity for the innovative, for the creative, for the dedicated . . . for the engineer! Engineers, as a group, have been trained to solve technical problems, and many of the needs of this world can still be described as technical. Engineers can be creative and innovative; the marvels of the modern world attest to that. But engineers must rededicate their wills and redirect their talents toward improving and upgrading what has been previously done while creating better conditions where the needs exist. If we can reclaim and recycle beer cans and junk automobiles, why not our inner cities and aging industries.

Until recently engineers have held themselves aloof from other than the engineering aspects of a project. This will have to change. Individually and collectively, engineers must become better informed and more willing to become involved in the world around them. The need and the opportunities for progress are as great as ever, but engineers must make adjustments in their attitudes if the profession is to mature into a meaningful, positive force in the affairs of men. If these adjustments are not made then the equation quoted above will be rewritten to "Opportunity = Progress - Engineers" and the engineering profession will be relegated to a sideline role to the detriment of all.

POSITION AVAILABLE — EXECUTIVE SECRETARY

Louisiana State Board of Registration for Professional Engineers seeks an executive secretary to direct the operations of their office located in New Orleans.

This position is responsible for directing and coordinating all activities of the agency.

The applicant must be a registered professional engineer and must have proven capability and experience involving work of an administrative and managerial nature.

Position becomes available May 15.

Submit resume and salary requirements in confidence to Search Committee.

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Deadline for applying is April 1, 1981.

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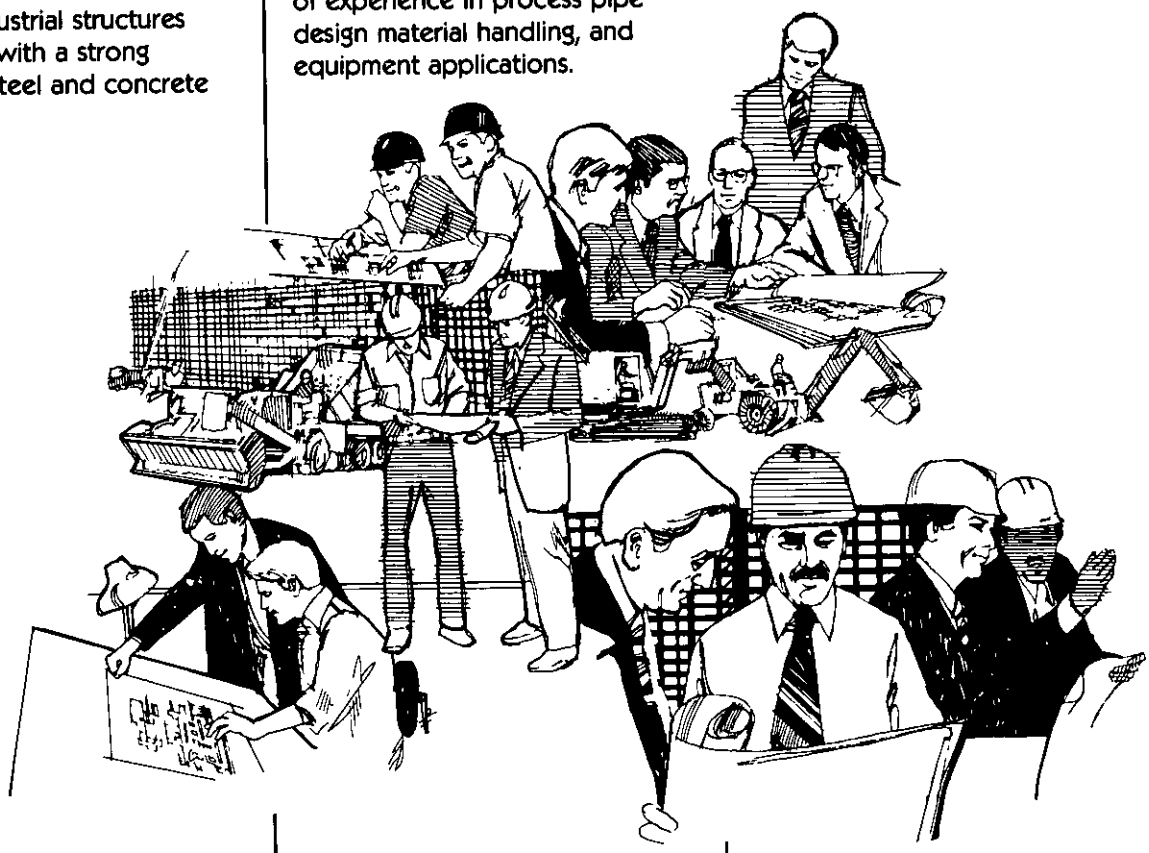

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Salt Mine Accident Costs Millions

By James S. Janssen, P.E.

All photos by Tika Lauden, Courtesy of the Daily Iberian

On the morning of Thursday, November 20, 1980, a drill crew from Wilson Brothers of Lafayette, Louisiana was completing the night shift at 6 a.m. They were in the third day of drilling a new well for Texaco Inc. in shallow Lake Peigneur, 600 or 800 feet west of Jefferson Island which is north of the town of Delcambre in south central Louisiana. Sensing something unusual, the five-man night shift stayed on the rig after the seven-man day crew took over. About a half hour later, the rig began to tilt so the crew called in to report the occurrence and were told to shut down operations and evacuate. It was fortunate that they did so because about an hour or two later water began to show up in the adjacent Jefferson Island Salt Mine at the 1300 foot level gallery and an overhead gushing noise was heard. On receiving this report, authorities of Diamond Crystal Salt Company, owners and operators of the mine, by means of flashing lights and a public address system told the workers in the mine to come up immediately. Nine miners at the 1300 foot or third level were immediately lifted out, by the elevator. Forty-one others who had been working at the 1500 foot or at fourth level rapidly moved by means of a ramp, up to the 1300 foot level only to find egress to the elevator was now blocked by several feet of water. On advice from company officials, they proceeded by available vehicles to the 1000 foot level where they were able to enter the elevator cage which then brought them to the surface. The carefully planned and periodically rehearsed emergency evacuation plan worked smoothly.

Meanwhile the incident of the tilting rig was rapidly developing into the catastrophe of the draining of Lake Peigneur. The fresh or slightly brackish water from this inland lake was following the drill stem downward into the 70 million year old salt deposits and rapidly dissolving them. As the salt was dissolved, the passageway was swiftly enlarged and the flow escalated at an exponential rate, actually forming a whirlpool and then a cataract in the lake. This rapidly developed, sucking in water from the lake and from the 12 mile long Delcambre Canal that connects Lake Peigneur to Vermillion Bay and the Gulf of Mexico. The currents generated were so great that two local commercial fishermen working a catfish trotline in an aluminum skiff in the lake just barely made their way to shallow water which quickly became a mud flat from which they floundered ashore. The shallow lake is in the shape of a lima bean and measures approximately one mile wide by one and three quarters of a mile long. It was quickly drained, creating a waterfall aspect where it poured into the opening which could now be classified as a large shaft. The Delcambre Canal poured into the lake with current velocity that it had never experienced before and for a period flowed north instead of following its usual leisurely southern course. The velocity was sufficient to threaten the bridges over the canal at Delcambre.

The vast shrimp fleet at the town of Delcambre, (the shrimp capital of the world) a mile and a half downstream was left sitting, high if not dry, as the water level dropped some few feet. By 10 a.m., the drill rig had been carried down to oblivion by the swirling waters and by 11 a.m. ten or eleven barges and a tug boat had followed the trees and debris-laden flood down into the new vertical channel. It is interesting to note that the chasm was observed to "burp" air and possibly gas that had been displaced by the intruding water.

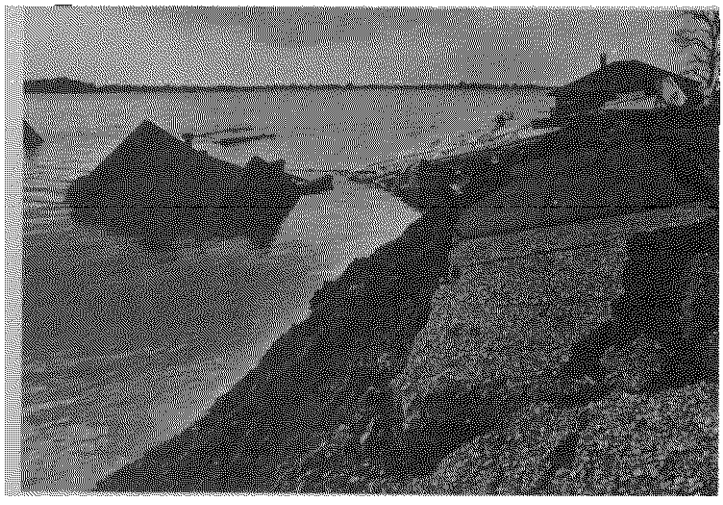
It is estimated that about one fourth of the 70 foot high mound know as Jefferson Island, the mine's barge-loading wharf, and a substantial portion of the tourist attraction Live Oak Gardens literally went down the drain. The island was named for Joseph Jefferson, a well known actor of the 19th century, renowned for his portrayal of Rip Van Winkle. The mansion that Mr. Jefferson built on the site in 1869 has escaped the subsidence so far.

Basically a salt mine is an operation to remove almost pure salt, sodium chloride, from a salt dome that is an extrusion of an underlying bed of salt, perhaps as much as 8 miles deep, laid down millions of years ago. In later deposition of water-borne sediment to depths of one to three miles, imposed downward pressures caused the domes of salt to rise to, or even above, the ground surface. Some of these have carried a stratum of cap rock up with them while others have broken through the overlying layer.

The first attempts to produce and utilize this natural product involved the evaporation of briny salt water from the areas. This soon yielded to driven vertical shafts, horizontal galleries, pick and shovel, mule carts and man power. Modern methods involve blasting, powered machinery and all mechanical aids.



Conservatory and Tourist Center collapsed.



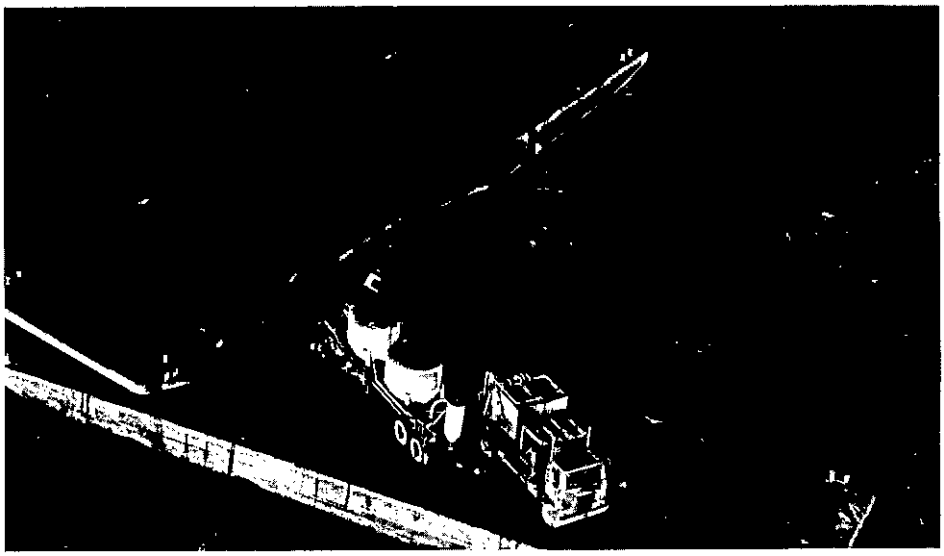
Only the peak of the Tourist Center was visible after the rushing waters.

A trip into a developed salt mine is awe-inspiring. The visitor is impressed by the vast whiteness of the 80 foot high chambers whose ceilings are supported by huge square columns of rock salt left in alternate squares. The silence is broken only by the resounding noises of the loosening and handling operations. The pervading fine salt dust flavors your mouth with every breath. You wonder how this tremendous amount of table salt can be used, especially when you learn that Jefferson Island alone had a capacity of 1.6 million tons per year. Then you recall that salt does more than season your breakfast eggs. It is used for preserving food, for curing cattle and other hides, for brine for refrigeration, for metallurgical processes and in the manufacture of many, many products involving hydrochloric acid, chlorine, sodium carbonate and bicarbonate as well as glass and soap. It has been estimated that the United States alone uses about 25,000,000 tons per year.

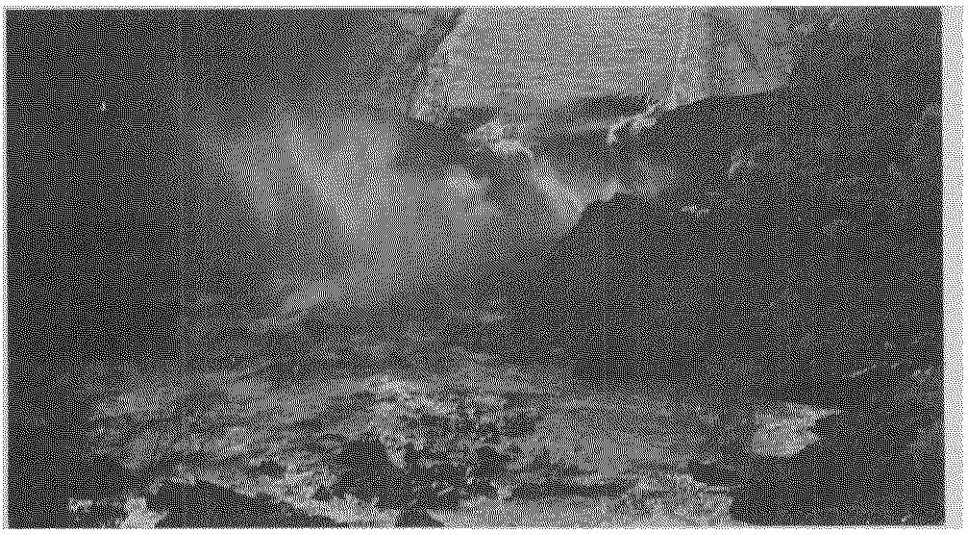
The total cost of the Jefferson Island salt mine disaster has yet to be totalled up. Included in the list will be the drill rig, a tug boat, a house trailer, several barges (some of those originally lost have since popped back up), a sizeable portion of Live Oak Garden, and, of course the mine itself. It is reported that Diamond Crystal Salt Company has filed a claim with its insurance company for $10 million which is the limit of its policy and will sue Texaco Inc. for an additional amount for damage, loss of revenue, etc. On the other hand, it is reported that Texaco will sue Diamond Crystal claiming losses based on misinformation. It is anticipated that litigation will be involved and lengthy. While the flow of water and the ground movement quieted down about two days after the initial puncture, it is not yet definitely known if further dissolving of the pillars and vaults is actually terminated. Time and seismographic measurements will determine that by some future but indefinite date.

A pathetic aspect of the catastrophe will be the loss of employment by approximately 250 persons employed by Diamond Crystal. It is also not possible to determine the ecological effects of possible changes to Lake Peigneur and the Delcambre Canal. These bodies of water are recognized as spawning grounds for catfish and for the vast shrimp industry of the area.

All in all it was a freak occurrence. It happened under a peculiar set of circumstances and may truly be called an unprecedented accident.



After Lake Peigneur drained, barges were stranded in mud at the bottom of the Lake.



Rushing waters pour from Delcambre Canal.

ENGINEERS & ARCHITECTS

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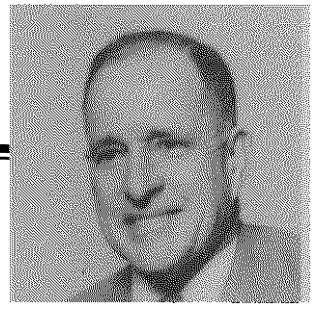
VLIET'S VIEWS



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

At its meeting January 27, 1981, the Board authorized the publication of the following report of its activities for 1980. A statement of receipts and expenditures for the fiscal year ending June 30, 1980 is presented below in this issue of the Louisiana Engineer.

1980 Annual Report-Louisiana State Board of Registration for Professional Engineers and Land Surveyors

Regular meetings of the Board were held in January, 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	627
Applications disapproved	41
Applications withdrawn	57

Land Surveyors

Applications approved	26
Applications disapproved	8

Engineers-in-Training

Applications approved for certification	730
Applications disapproved	237

Land Surveyors-in-Training

Applications approved for certification	15
Applications disapproved	1

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, 1980:

Professional Engineers	14,248
Land Surveyors	3,183
Engineers-in-Training	3,025
Public Employees	28
Land Surveyors-in-Training	21

Below is a tabulation of the number of professional engineers registered in the various branches as of December 31, 1980. (Some persons are registered in more than one branch.)

Agricultural	161
Chemical	1255
Civil	5511
Civil/Industrial	3
Electrical	2350
Industrial	135
Mechanical	3871
Mechanical/Industrial	51
Metallurgical	36
Mining	35
Petroleum	1244
Petroleum/Industrial	2

A total of 1,301 written examinations were administered in 1980, a 6% increase over 1979. Of these, there were 918 examinations in the fundamentals of engineering, 27 in the fundamentals of land surveying, 297 in the principles and practice of engineering, 23 in the principles and practice of land surveying and 36 in the laws and procedures of land surveying in Louisiana. Engineering ex-

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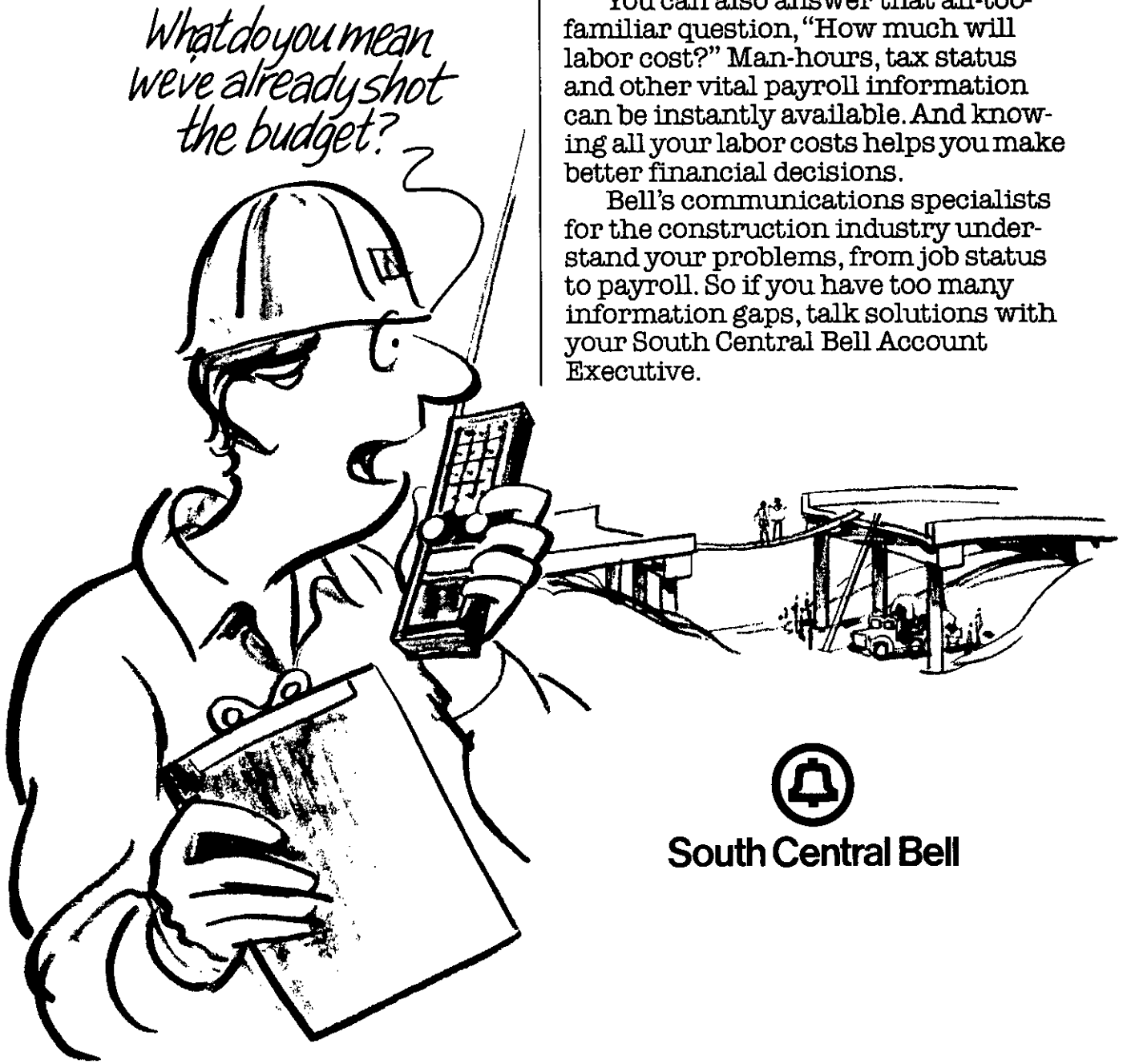


South Central Bell

aminations were administered at examination centers in Baton Rouge, Lafayette, New Orleans and Ruston in April and November. On the same dates land surveying examinations were administered in New Orleans.

The Legislature passed a new registration law in 1980, Act 568. Copies of this act were mailed to all persons registered and certified in the October issue of the *Louisiana Engineer*. Effective September 12, 1980, the Board can only accept applications for certification as engineers-in-training from persons who are college graduates. Since July 1, 1978, all persons who applied for registration as professional engineers were required to pass at least an eight-hour written examination. Effective January 1, 1985, all persons who apply for such registration will be required to pass two eight-hour written examinations. These persons should have no problems in obtaining registration in other states on the basis of reciprocity. The new registration law had no significant effects on the certification and registration of persons in the profession of land surveying.

The Board is in the process of formulating rules of professional conduct, rules governing the use of seals, and rules to establish and recognize additional branches of engineering. Nine engineering branches are specified in Act 568 of 1980.

The new registration law confirmed the authority of engineering and land surveying corporations that have qualified with the Board to provide or offer to provide professional services and the authority of the Board to govern such firms. It is unlawful for a firm that is not registered with the Board to provide or to offer to provide engineering or land surveying services in Louisiana. In September 1979 the Board published a roster of corporations, partnerships, and other firms that had qualified. It anticipates the publication of a similar roster in September 1981. Under the rules of the Board, the registrations of all firms expire annually on June 30 unless renewed before that date.

Governor Treen appointed Francis C. Roy as a member of the Board to replace Andrew M. Moore. Mr. Moore's term of office expired in July 1980. Mr. Roy is vice president of Industrial Equipment and Engineering, Inc. in Lake Charles, Louisiana, and a past president of the Louisiana Engineering Society. He holds an undergraduate degree in engineering from Louisiana State University and a graduate degree from the University of Texas. Before entering his present area of professional practice he was associate professor of electrical engineering at Louisiana Tech University.

In 1980 the Board held seven hearings involving professional engineers and two involving engineering corporations. Each was found to be guilty of having been convicted of a felony. Six professional engineers were reproved privately; one had his registration revoked. The Board decided to publicly reprove the two engineering firms in the *Louisiana Engineer*.

Section 37:683 of Act 568 of 1980, specifies areas of professional practice for members of the Board. With reference to that section and in accordance with the bylaws of the Board, the following list is presented:

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 Francis C. Roy

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

Statement of Receipts and Expenditures
For The Year Ended June 30, 1980

Receipts	
Registration of Professional Engineers and Land Surveyors	$ 35,844
Certification of Engineers in Training and Land Surveyors in Training	2,265
Temporary Permits	735
Renewal of Licenses of Professional Engineers and Land Surveyors	149,818
Renewal of Certification of Engineers in Training and Land Surveyors in Training	12,305
Qualification of Corporations and Renewal of Licenses	10,110
Penalties - Delinquent Licenses	2,896
Miscellaneous Receipts - Sale of Certificates, Compendia, Rosters, etc.	566
Interest:	
U. S. Treasury Notes and Bills, Certificates of Deposit, etc.	9,871
Interest Earned - Savings and Loan Associations	5,930
Total Receipts	$ 230,340
Expenditures	
Per Diem to Board Members	$ 5,288
Expenses of Board Members	28,708
Technical Assistance - Examinations, Grading, etc.	5,285
Salaries - Executive Secretary and Administrative Assistant	34,451
Salaries - Stenographic and Clerical	41,513
Data Processing Service	4,088
Retirement Fund Contributions	2,871
Attorney Fees and Expenses	4,574
Auditing and Accounting Fees	2,000
Insurance - Blanket Position Bond, Accident, Liability, Hospitalization, etc.	2,745
Fees - National Council of Engineering Examiners	1,285
Examination Papers - National Council of Engineering Examiners	19,323
Printing	5,501
Postage	14,966
Rent	11,920
Office Supplies, Rental and Maintenance of Equipment, etc., and Miscellaneous Expenses	6,741
Micro Filming	3,260
Telephone	3,177
Fees Refunded	1,077
Partial Cost of Publishing *The Louisiana Engineer*	*16,378*
State Unemployment and F.I.C.A. taxes	696
NSF Checks	152
Office Equipment Purchased - Desk and Chair	626
Total Expenditures	$ 216, 625
Excess of Receipts Over Expenditures	$ 13,715

POTPOURRI

R. C. "Doc" Spears
Executive Secretary
Louisiana Engineering Society



LES Wins NSPE 1980 Membership Contest

Jerrel J. Freeman, P.E., president of the Louisiana Engineering Society was informed on December 10, 1980 that LES had won the 1980 Membership Award for the greatest percentage increase in membership in Group IV of NSPE. The award was presented at the NSPE winter meeting in Little Rock on January 23, 1981.

LES was recipient of the same award in 1976 and in 1977. States comprising the NSPE Group IV are Louisiana, Washington, Iowa, Oregon, Kansas, Colorado, Maryland, Georgia, and Minnesota.

LES Retains 95% of Members in 1980

A membership retention contest was inaugurated by the LES Board in December 1980. All the members on board are computed with the delinquents in 1980 to determine a retention percentage by chapter.

Congratulations to the Shreveport chapter, winner of the 1980 contest, with a 98.3 retention percent. Overall for LES, the retention rate was 95%.

Retention percentages by chapters for 1980 were:

Shreveport	98.3
Alexandria	97.3
New Orleans	96.7
Lake Charles	95.8
Lafayette	95.7
Bayou	95.0
Monroe	94.2
Baton Rouge	93.0
Non-Residents	87.6

Recognition and an award will be presented to the Shreveport Chapter at the LES Spring meeting, Houma, on April 9-11, 1981.

UNO Gains Status

The Board of Regents, at its October 1980 meeting, promoted the University of New Orleans School of Engineering to a College of Engineering.

This newly gained status is a recognition of growth both in quality (ABET Accreditation) and quantity. Over 10% of the total UNO enrollment in the fall of 1980 was pre-engineering freshmen, engineering majors, and graduate students for a combined total of 1,508.

Baton Rouge WALES to Award Three Scholarships

During the Baton Rouge chapter's Engineers Week banquet on February 26, the Baton Rouge women's auxiliary will be presenting three $600 scholarships to outstanding LSU engineering students. The recipients are:

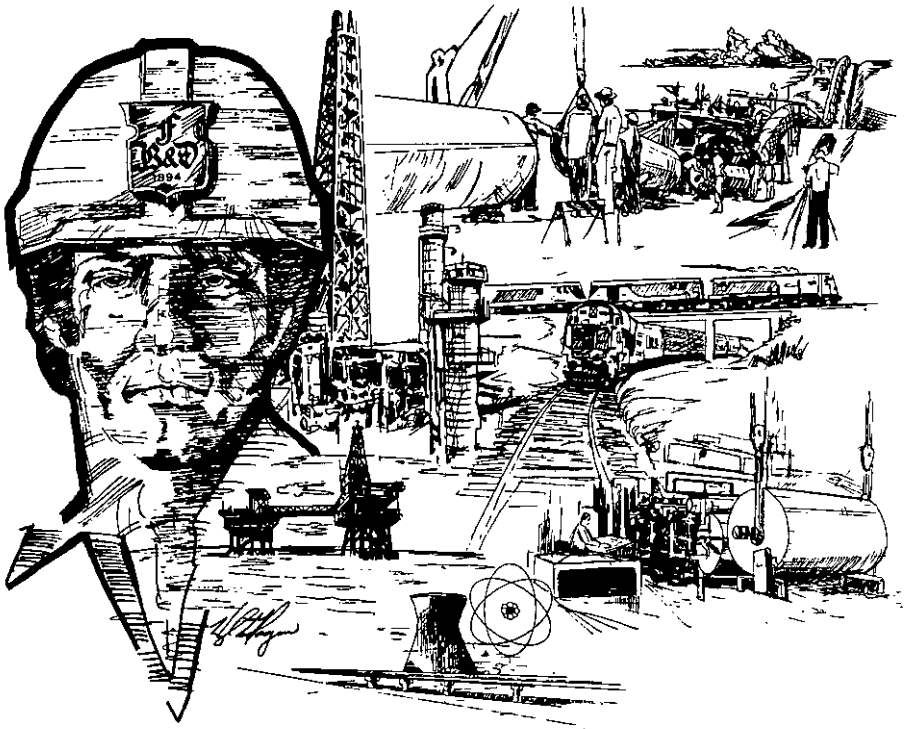
Robert James Heym is the son of Mrs. Nancy Porter of Baton Rouge. A recipient of one of the ladies' scholarships last year, he is a graduate of Lee High School and presently a senior majoring in mechanical engineering at LSU with a grade point average of 3.971.

Charles Daniel Smith, a senior in civil engineering, is the son of Mr. and Mrs. Charles D. Smith of Baton Rouge. Smith is a graduate of Episcopal High and at LSU maintains a 3.921 grade point average.

Sarah Elizabeth Jay is the daughter of Mr. and Mrs. Lester Jay of Avery Island. A graduate of New Iberia High School, Miss Jay is a senior in mechanical engineering and maintains a 3.949 grade point average.

Congratulations to the Baton Rouge WALES and to these fine students.

Working for Louisiana



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Examination Dates for PE, EIT, LSIT & LS

The 1981 dates for examinations for engineer-in-training, professional engineer, land surveyor-in-training, principles and practice of land surveying and laws and procedures for land surveying will be April 11, 1981.

On October 31, 1981, the examinations will be given for all of the above except the laws and procedures of land surveying. This is given only in April of each year.

The 1982 examination dates are April 17 and October 30.

1981 Outstanding Engineers of LES

Five outstanding LES engineers will be honored on April 10 in Houma at the annual LES Spring meeting:

James L. Meyer, P.E., Alexandria-recipient of the Leo M. Odom Professional Service award.

J. Bres Eustis, P.E., New Orleans - recipient of the James M. Todd Technological Accomplishment award.

Marion Chaney, P.E., Alexandria - recipient of the Andrew M. Lockett Civic Activities award.

Dale Hunn, P.E., New Orleans - recipient of the F. Hugh Coughlin Young Engineers award.

Lamon L. Moody, P.E., Baker - recipient of the A.B. Paterson Management award.

The award winners will be featured in the April issue of the *Louisiana Engineer*.

Science and Engineering Education in the 1980's

The U.S. is headed toward virtual scientific and technological illiteracy unless our educational system undergoes a major overhaul. This is the conclusion of the subject report that was commissioned by the White House in 1980 and prepared for President Carter by the National Science Foundation and the Department of Education. Among the findings:

- The number of people who graduate from high school and college with only rudimentary notions of the sciences, mathematics and technology portends trouble in the decades ahead.
- The nation's commitment to science and technology has eroded. This erosion is evident in the decreasing priorities given to science and mathematics in secondary schools.
- The general quality of science and mathematics instruction at the secondary level has deteriorated since the 1960's.
- Judging by SAT and Graduate Record Exam scores, the "best" seem to be doing about as well as ever, while the majority of students learn less and less.
- Shortages of highly trained personnel exist in several engineering fields, computer professions and a few areas in the physical and life sciences.
- Acute shortages in acquiring and retaining high quality faculty in engineering schools and colleges are apparent. Salaries that currently attract students away from academia and into industry are one factor; another is the obsolescence of facilities and technical resources at most engineering schools.

Copies of the report are available from the Forms and Publications Office, Room 235, NSF, 1800 G. St. N.W., Washington, D.C. 20550.

Mississippi Fights DOJ On Antitrust Charge

The state of Mississippi is locked in combat with the U.S. Department of Justice over the State Board of Registration's rule against competitive bidding by licensed engineers.

The National Society of Professional Engineers (NSPE) took the competitive bidding battle all the way to the Supreme Court and lost after a long and costly lawsuit. The Court ruled that any prohibition of competitive bidding is a per se violation of antitrust law. After that victory, the department began to move against state boards of registration. Two states, Mississippi and North Carolina, had rules on their books forbidding competitive bidding. North Carolina backed off and struck down the rule; Mississippi did not.

Mississippi is defending the Board by citing the Parker exemption, a doctrine under which it is stated that an action of the state can be exempted from antitrust or other federal law. No trial date has been set, but it will undoubtedly go to the Fifth Circuit, Federal Court, and could even go to the Supreme Court.

LES struck down its rule immediately after the court decision against NSPE.

UNO Engineering Facility Needed

In November 1980, the LES Board instructed the president to write a letter to Governor Treen recommending funding for a separate engineering facility at the University of New Orleans. A letter was sent on November 28. An answer was received on January 7, 1981 advising that the Board of Regents had recommended $2 million for a facility at UNO. The Division of Administration will evaluate the request. Curtis G. Lee, the assistant commissioner governor in the Division of Administration, further advises that the governor will submit to the legislature a listing of his recommended projects for the capital outlay bill on March 1.

We will be closely watching this project and reiterate that UNO and the engineering profession will benefit from having a separate facility designed to meet the school's specialized needs.

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OR PHONE (504) 838-2792 COLLECT

Kansas State University Wins Engineering/Art Award

The National Society of Prefessional Engineers announced its selection of Kansas State University, Manhattan, Kansas, as recipient of the 1981 Koerper Award. The University has more than 2,700 full-time graduate and undergraduate students.

The 1,000 stipend is made possible by a grant from Erhardt C. Koerper, P.E., who is active in both the engineering profession and the arts. The Award recognizes schools of engineering that provide noteworthy programs to instill professionalism in engineering students and that aid NSPE in communicating the need for professionalism.

Engineering schools having two or more Accreditation Board of Engineering and Technology (ABET) accredited engineering curricula are eligible and encouraged to apply for the annual award.

POTPOURRI

Continued on page 16

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Reservations are confirmed on a first come, first served basis when deposits are accepted. Final payment is due 60 days prior to departure. Reservations made within 60 days must include full payment with your completed coupon.

Cancellation if received in written form more than 60 days prior to departure is not subject to penalties. The penalty for cancellation for any reason within 60 days regardless of booking date is $25.00 per person and, if the space is not resold by you or our agent, there will be an additional charge of $250.00 per person.

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Replacements provided either by you or our agent must make payment in full prior to release of your refund--your funds are non-transferable.

Refunds resulting from cancellation take approximately 6 weeks to process.

Eligibility: Persons who have been members of a group for six months preceding the departure date, their spouses, dependent children and parents living in the same household traveling with member are eligible.

Insurance: Information will be sent 4 to 6 weeks after receiving your reservation.

RESPONSIBILITY: Louisiana Engineering Society and/or its agents act as agents only for services described and are not responsible for services and accommodations which cannot be supplied due to delays, sickness, weather, strikes, war, quarantine, or other causes beyond their control. They expressly disclaim any liability for loss or injury to property or person(s) occurring during the tour(s) and for loss of trip time resulting from airline delays. The right is reserved to cancel the entire tour, or optional side tour(s) before departure in which event the liability is limited to and liquidated by refunding each participant any monies received from participant for such tours. The right to change the itinerary, hotels, air carrier, and/or aircraft with different seat configurations is also reserved. You expressly consent to all terms and conditions set by owner, contractors and public carriers who provide transportation and other services and for whom Arthurs Travel, Inc., 1510 Chestnut Street, Phila., PA 19102 acts solely as agent. Government regulations require quoting air/land costs: trips are based on a minimum of 20 participants and air cost may change based on the actual number of travelers. Only the complete tour package is available. There may be a stop en route to enplane/deplane passengers. Space available close to departure may be offered at a reduced price. The agent has the right to decline, accept or retain any tour member and if removed from the tour, a proportionate refund will be made for unused services. All tickets, coupons and orders are issued subject to the foregoing.

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Phone: AREA CODE AREA CODE
Home ( ) _____ Bus. ( ) _____

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Mail payment to: Same as above

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☐ Less than 60 days prior to departure. Enclosed find full payment in the amount of $_____ for _____ person(s).

I agree on behalf of all persons named on this application to be bound by the terms and conditions set forth in this ad.

Date _____ Signature _____

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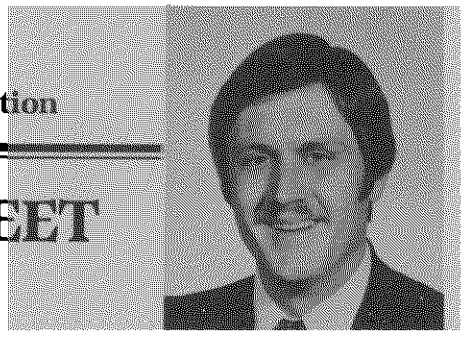

Warren J. Wilder
CEC/L Executive Director

Engineers and Energy

The awareness of shortage of power, of energy needs, and of the necessity for energy conservation—and the search for new energy sources—have opened up new fields of endeavor for engineering firms. While it is quite true that the search for the most practical, economical, and efficient manner of accomplishing any task has always been of utmost concern to the engineer, the increasing awareness of energy shortages and the need for new sources have made possible new avenues of approach and require innovativeness and urgency. The increased cost of power from all sources has made it economically feasible to conduct the searches.

Consulting mechanical engineers are busy analyzing consumption of power in structures and plants and revising systems, adding to them or improving them for more efficient use of the available power. In some industrial plants new power is developed from waste, power sources and machinery are re-designed for more efficiency, and in some instances heat which was previously wasted is captured, stored, and used to reduce power use.

Since many plants were designed years ago without the help of engineers trained specifically in the application of energy producing and saving devices, substantial savings can be effected by retrofitting them.

All these efforts at conservation—and others which may be under study—will not, however, be sufficient. We must also develop new sources of energy. Dr. Edward Teller, the famous nuclear scientist, has made clear repeatedly that we shall need all possible manner of power in the future if our culture is to survive. Some sources and methods, new and old, have been maligned unnecessarily, which has set progress back, resulting in severe detriment to the U.S. Atomic plants, for example, have had bad press. Coal mining, which has become more necessary than ever, has been declared undesirable. Yet, we must press forward in these areas and depend on engineering to render plants and methods safe and environmentally acceptable.

(Atomic plants, according to knowledgeable engineers, are not only environmentally most acceptable and safe but also produce power more cheaply than most other plants.)

Civil engineers are busy with design and studies of added hydro-electric projects which will help to supply some of the power needs of the Northwest. These projects have become practicable since the power shortage has become acute. Civil engineering also makes possible the saving of waste heat for re-use and is reducing the consumption of water, thereby limiting not only the demands for water but also the resulting pollution.

Among energy sources of the future will be solar heat—although it appears to have limited application in our area and the amortization period is long.

We can no doubt expect to see more advances in the efforts to convert agricultural wastes to usable fuel, possibly relieving gasoline shortages and price excesses.

Engineering and Environment

Engineers expressed concern about our environment and worked to improve it long before the term "environment" began to roll from so many tongues and became a popular label for demonstrations and obstruction.

Private consulting engineers and industry have combined their efforts to clean up our environment with gratifying results. Industrial corporations have established Energy Management Departments and associations of industrial firms have formed Air and Water Improvement Divisions which are seeking solutions to air and water pollution problems.

If power consumption is to be decreased it will be engineers who will find ways in which to decrease it. If new power is to be discovered it will be engineering that will discover it. Government must stand back and administer and give private enterprise room to work. More paperwork, regulations and directives will not help; they will inhibit the work which needs to be done—desperately.

An enormous amount of work must be accomplished before we enter the twenty-first century—in a matter of a few years. Consulting engineers can be expected to do their share of this urgently needed vital work.

The Consulting Engineer

A consulting engineer has specialized knowledge and experience in one or more engineering disciplines which he makes available to clients, private and public. He may serve his client with a brief consultation or with planning, design, implementation and project management, depending on the client's needs.

Public and private clients alike may enlist the aid of consulting engineers—when they have no engineering staff of their own, when it is not advisable to expand existing staff, or when specialized experience and skills—not available within the staff—are needed.

Consulting engineers should be retained early in the development phase of a project to help develop the plan, analyze the technical and financial feasibility, consider and suggest alternates, aid in arranging finances and analyzing costs, and develop a realistic implementation schedule.

Consulting engineers know their way through the maze of codes and regulations—local, state and federal.

Consulting engineers consider carefully all aspects of a project to arrive at a solution suited to the needs of their clients. They bring to your project a fund of specific and diverse knowledge in their engineering disciplines. If a project calls for experience and capabilities outside their expertise they retain other professionals who are proficient in those areas.

About Engineering Quality and Prices

Recently a Department of Transportation official in one of the Midwestern states complained about receiving poorly executed plans for county bridge projects and claimed they were getting progressively worse. This same official urged consulting engineers to take action toward improvement because "your profession is developing a poor reputation in our area."

The president of the Consulting Engineers Council in a neighboring state pointed out that the Department of Transportation which voiced the complaint relies almost entirely on competi-

tive bidding for engineering projects. Therefore, the claim of the official that the engineering profession is developing a poor reputation in his area is imprecise. The "poor reputation" is not engendered by the consulting engineering profession; it is caused by cheap engineering firms and in this instance the essaying of the reputation and capability of engineers should rightly be limited to those firms.

It is probably a foregone conclusion that any department, bureau, or office—or, for that matter, any client or company—which makes engineers submit priced bids for engineering work will soon have reason for the same complaint.

It may be difficult for laymen to understand why it is not advantageous for clients simply to hire the cheapest engineer, the one who is willing to complete a project for the least amount of money. The problem is that the cheapest engineering firms tend to be the cheapest for a very good reason: for the same reason that the cheapest of anything else is the cheapest.

It stands to reason that the cheapest bid is apt to originate with the least renowned, the least talented, the least respected firm—or the one which intends to do the least amount of engineering. Those firms which have built up an enviable reputation for quality of performance are not likely to enter the price bidding process.

We have repeatedly championed the method of selection prescribed by the Brooks Law and recommended by the AIA developed Model Code—which provides for retaining consulting engineers on the basis of qualification and experience and subsequently negotiated fee. Our preference for this method is not entirely altruistic. Since price bidding for engineering projects often results in poorly executed projects and since this inadequate performance reacts on the entire profession (witness the expression by the Midwestern DOT official) consulting engineers naturally prefer a method which offers a much better opportunity for engineers to perform to the full satisfaction of their clients.

Qualified, conscientious engineers usually refuse to enter priced bids, knowing that price competition can result in inferior engineering and an unsatisfactory product.

This does not mean that the client is ever forced to tolerate an unreasonable cost of engineering services. All selection methods leave him the prerogative of changing engineers, should disagreements over fees or any other matters arise.

Furthermore, it should be borne in mind that engineering fees are only an infinitesimal part of the total cost of construction or development of a project and that often the total cost can be reduced by thorough and innovative engineering.

Last but not least, consulting engineers who belong to the Consulting Engineers Council of Oregon are charged with holding paramount the health, safety and welfare of the public. We believe that this can best be accomplished by a method which considers first the capabilities, experience and conscientiousness of the engineer and accords to these qualities the importance which they deserve.

Neither a Borrower Nor a Lender Be? —Only with Precautions

If you lend one of your employees to another firm, who is responsible for the quality of that employee's work product? The answer may be that you are, unless you take steps to insure that you have a complete understanding with the borrowing employer and your employee on the issue of responsibility.

The confusion in the state of the law on this point was highlighted in a recent case in Alaska. It seems that an employee of a drilling company was injured when a trench, dug by a backhoe operator borrowed from a construction company, caved in. The injured worker, unable to sue his own employer (who was protected under Workers' Compensation statutes), sued the construction company. He alleged that the construction company was negligent in allowing one of its employees to dig a ditch beyond a safe depth.

The construction company successfully moved for a summary judgment, but the injured workman appealed. The Alaska state supreme court reversed the judgment, holding that both employers may be liable for the employee's acts, calling into question the general rule in Alaska that liability shifts from the lending to the borrowing employer. The court concluded that, since both employers retain a significant amount of control and since both generally benefit from the employee's work, the question of liability for the employee's negligence should be determined based upon the principles of indemnity.

This decision follows a general pattern being set by the courts. They have consistently acted to facilitate the distribution of social costs to those most able to pay. What the decision means to architects and engineers is this: If you are considering loaning an employee to another firm, keep in mind that there are circumstances under which you may be held liable for that employee's negligence, even though you are not in a position to control the quality of the work. You can protect yourself against this liability if you loan employees only on the basis of a written agreement that the borrowing employer is assuming responsibility for the employee's work product.

This might best be accomplished through an indemnification provision, whereby the borrowing employer agrees to hold you harmless against all costs, including cost of defense, arising out of the negligence of the borrowed employee while working for, under the direction of, or under the control of the borrowing employer. A word of caution, however. Indemnification agreements must be carefully drafted, since the laws governing indemnification vary from state to state.

Nevertheless, the issue is important enough for you to take the time to draft a simple, standard agreement covering the lending of employees to other firms and to have that agreement carefully reviewed by competent local counsel. Once the form is drafted, take steps to see that it is consistently used throughout your firm.

Remember, too, that unless the borrowing firm is adequately protected against professional liability losses, it may not have the financial capability to stand behind its indemnification of you in the event of a loss. Where this is the case, it would not be unusual for an injured party to look to you for the resources which may be needed for compensation. Include insurance requirements in your lending agreement, and ask for (and be certain you obtain) certificates of insurance covering both the professional and general liability exposures of the borrowing firm.

If all this sounds as if it is asking too much, stop and think about it for a moment. The lending of employees is often in the nature of an accommodation to the borrowing firm. It is not unreasonable to ask that this accommodation be made on an equitable basis, one in which responsibility follows the control of professional performance.

POTPOURRI
Continued from page 12

Chapters Submit Names to LES for NSPE Scholarships

The LES chapters have submitted 84 scholarship applications to LES for consideration of the 1981 NSPE scholarship program. The LES scholarship committee met on January 16 in Pineville and selected 25 state winners from 11 different NSPE scholarships. These have been submitted to NSPE.

The NSPE scholarship committee will meet on February 19-20, 1981 in New Orleans to select winners for the 122 NSPE scholarships and grants.

What is a Practice Division?

A practice division is a subgroup of the Louisiana Engineering Society which studies and acts on programs of particular concern to the employment area which it represents, within boundaries set by the LES Board of Direction. Practice divisions elect their own officers, have their own operating rules and procedures (approved by LES), funds from voluntary contributions, and conduct their own programs and activities, in cooperation with other practice divisions and LES.

A practice division is not a separate or "splinter" organization. It is an inseparable arm of the Louisiana Engineering Society. Its purpose is to provide the minimum machinery necessary within the LES structure to systematically handle the problems and concerns of all fields of practice. LES has five practice divisions: private practice, government, industry, construction and education. Most all state societies have one or more practice divisions.

LES Missing Members

The LES staff needs your help. Eleven LES members are not receiving their mail, either because of wrong address or post office errors. If you know any of the members listed below, please ask them to write LES, P.O. Box 2683, Baton Rouge, LA 70821 or call (504) 344-4318:

Wilbert Argus, Jr., P.E.
P.O. Box 29345
New Orleans, La. 70129

Thomas R. Bourgeois
2426 19th St.
Lake Charles, La. 70601

John A. Crutti, P.E.
3800 Texas Dr. #218
New Orleans, La. 70114

Martin Cart
Martech International
P.O. Box 2964
Morgan City, La. 70380

Jeff J. Jackson
Santa Fe Engr. & Constr.
P.O. Box 2518
Houma, La. 70361

Russell T. Kracht, P.E.
11226 Flamingo
Baton Rouge, La. 70814

Robert C. O'Quinn
4280 Oxford
Baton Rouge, La. 70808

R. Gordon Smith, Jr.
Rt. 1, Box 157 A-5
Alexandria, La. 71301

Eric H. Weimers
2334 Audubon St.
New Orleans, La. 70118

Larry H. White, P.E.
4506 Tartan Dr.
Baton Rouge, La. 70816

Zbigniew S. Wyszynski, P.E.
Dept. of Pet. Engr. USL
Lafayette, La. 70503

LES Automobile Program

The LES Automobile Insurance Program is growing rapidly, serving more LES members all the time. Our recent mailing to the LES membership has resulted in many requests for comparative quotations. These members are finding out that they can save on their insurance premiums, just like the over 250 members currently enrolled in the program. Take advantage of this program to save yourself money on expensive car insurance. It only takes a moment to compare our rates. Simply call or write to: Employees Insurance.P. O. Box 14697,Baton Rouge, Louisiana 70898, (504) 926-0483.

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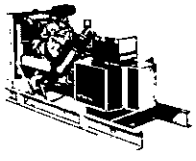

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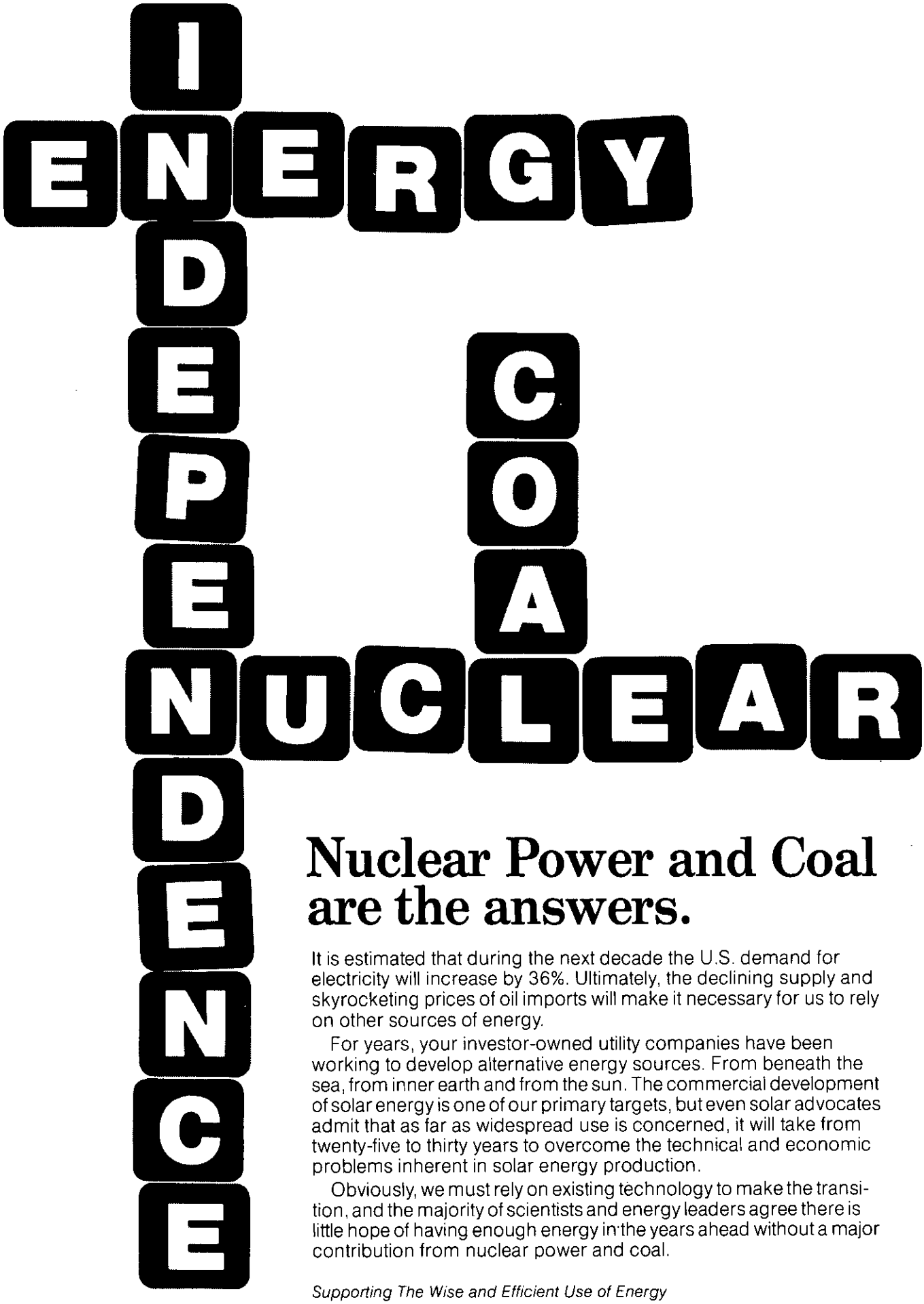

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Obviously, we must rely on existing technology to make the transition, and the majority of scientists and energy leaders agree there is little hope of having enough energy in the years ahead without a major contribution from nuclear power and coal.

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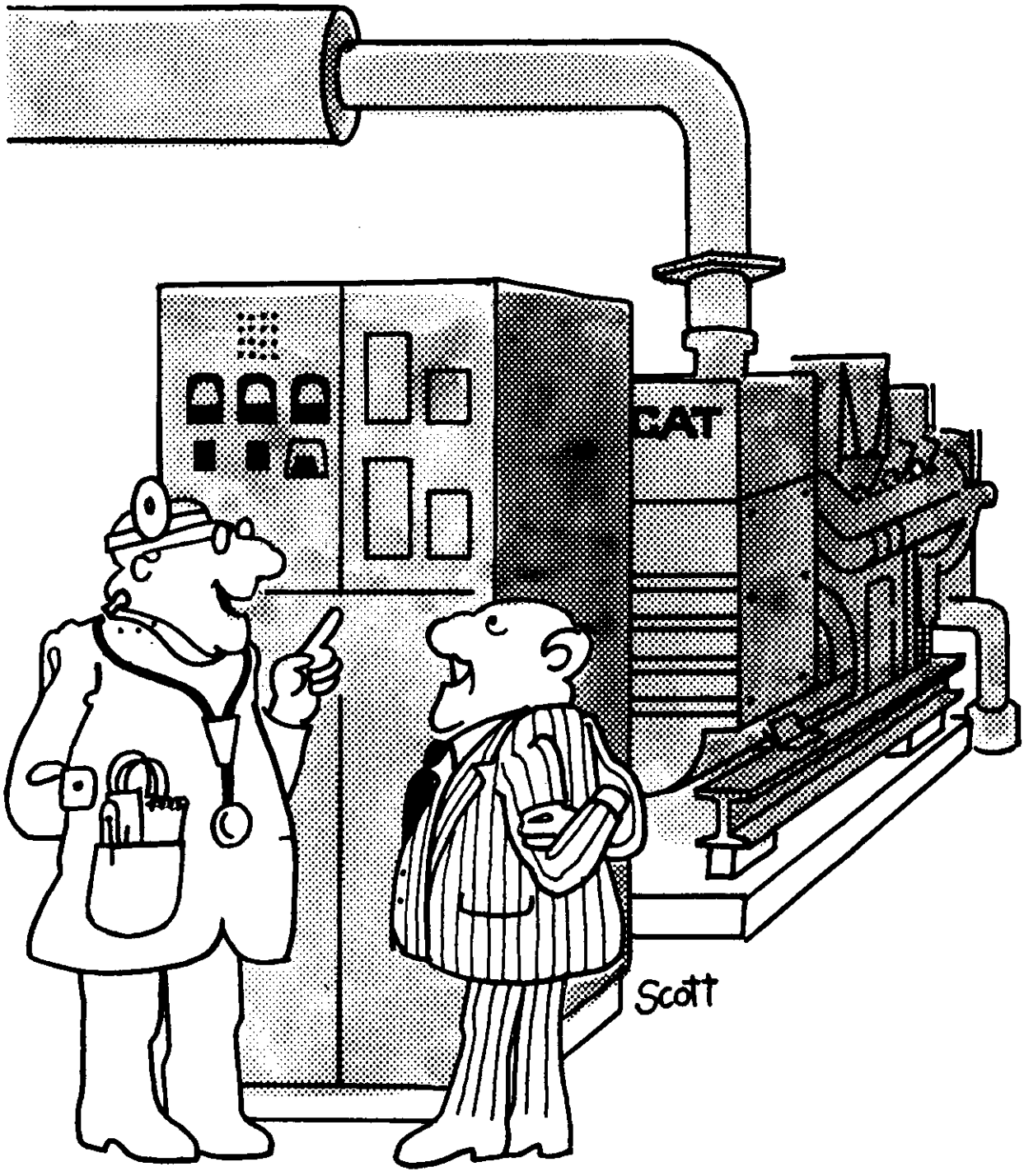

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EngiNEWS

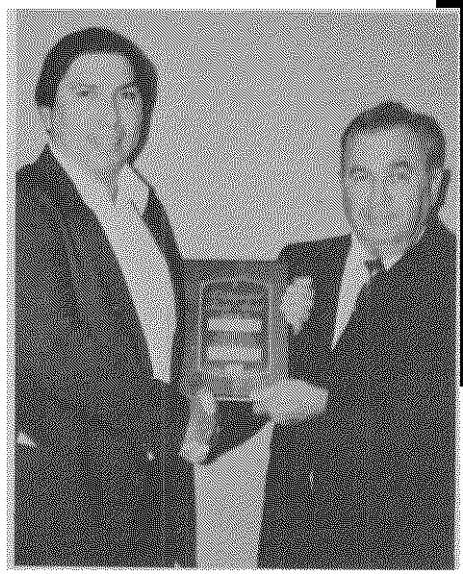
Distinguished Service Award Presented to Mr. George Bergeron, Jr.

An engraved bronze plaque in recognition and appreciation of his many contributions to the profession of land surveying was presented to Mr. George Bergeron, Jr. by representatives of District 2 Louisiana Land Surveyors Association at their annual Christmas dinner-dance held on Saturday, December 6, 1980, in Houma, Louisiana.

Arrangements for the dinner-dance were sponsored jointly by the Bayou Chapter of the Louisiana Engineering Society and District 2 of the Louisiana Land Surveyors Association.

Mr. Charles McDonald, District 2 Chairman, surprised Mr. Bergeron with the presentation of the award which had been unanimously approved at a prior district meeting.

Mr. Bergeron has been a registered Louisiana land surveyor since 1948. He was employed by Union Texas Petroleum Co. from 1946-1954. He resides in Thibodaux and has been self-employed as a professional land surveyor since 1954. Mr. Bergeron has been active in civic and professional organizations. He was chairman of the third district of the Louisiana Land Surveyors Association in 1971, and was president of the Bayou Chapter of the Louisiana Engineering Society in 1973-1974.



Charles McDonald, District 2 LLSA Chairman, presents plaque to George Bergeron.

IN MEMORIAM

Ardis D. Jackson, P.E.

With the death on November 24, 1980 of Ardis D. Jackson, the engineering profession and his many friends suffered a great loss.

Mr. Jackson was a native of Winnfield and a resident of Baton Rouge. He was employed at the office of Highways in 1929 and was an assistant director when he retired in 1971. He was appointed to the Louisiana State Board of Registration for Professional Engineers and Land Surveyors in 1950 and served until October 1972. He became a member of LES in 1939, dropped his membership during WWII, reinstated in 1951 and became a life member in 1976.

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

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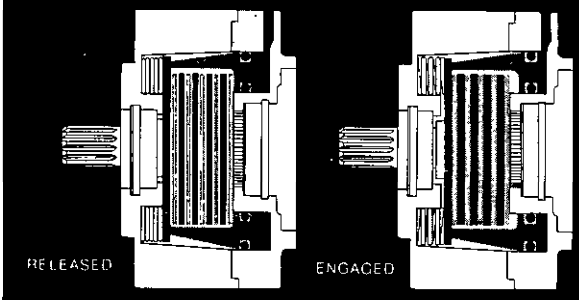

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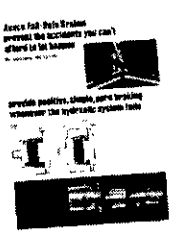

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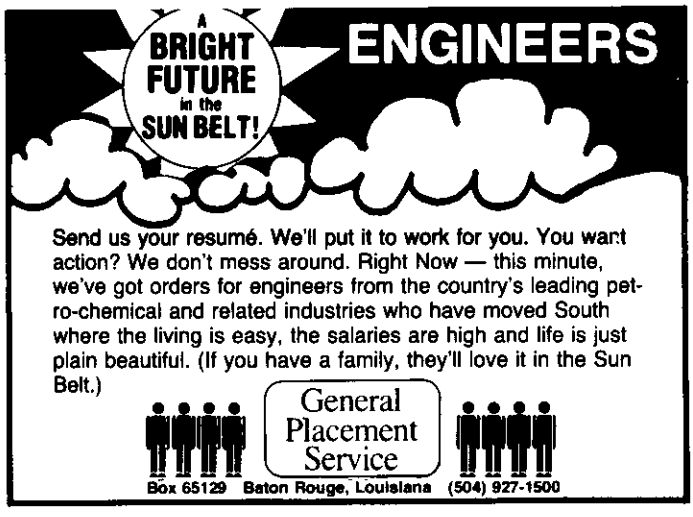

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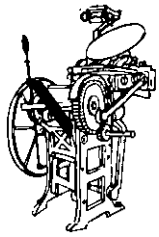

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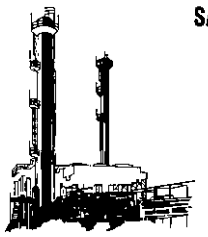

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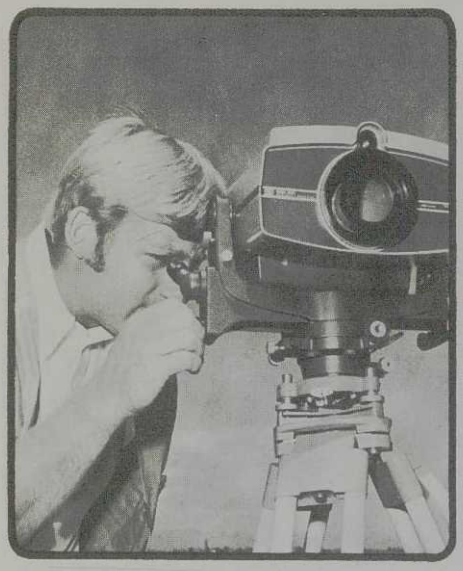

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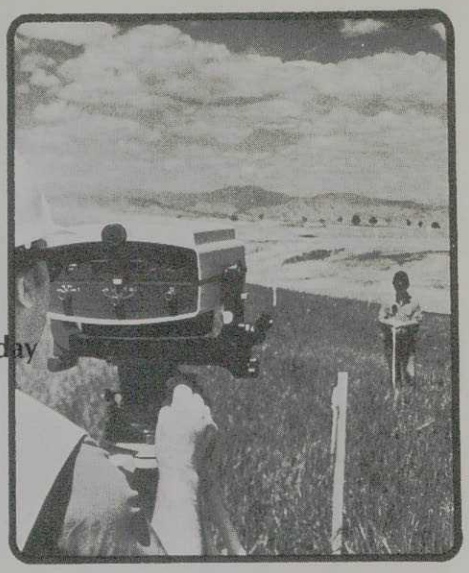

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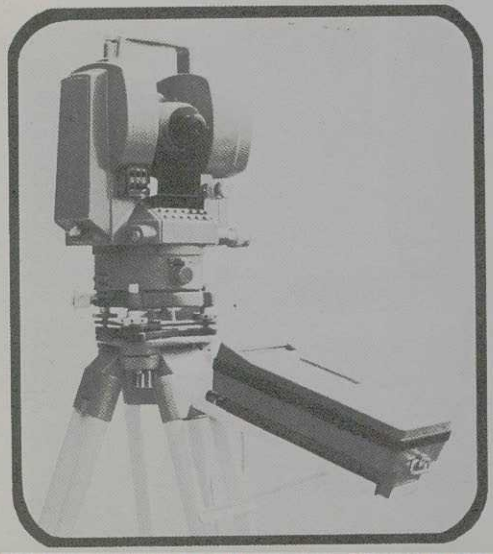

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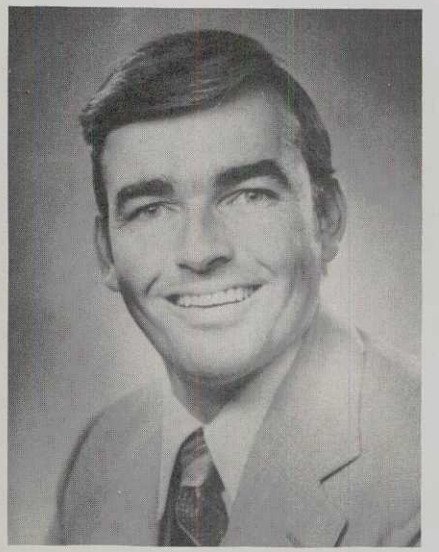

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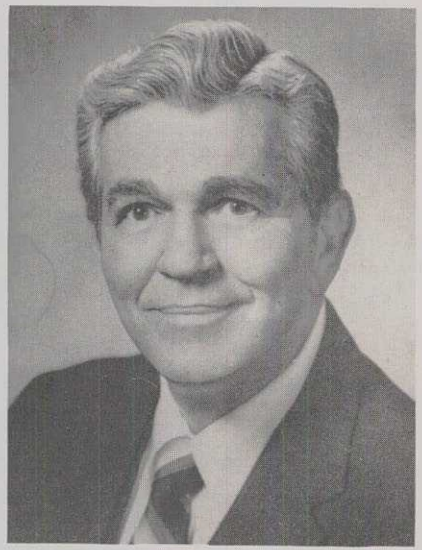

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About the Cover:

The Louisiana Engineer pays tribute to the five men who received the 1981 LES Awards. Their accomplishments are featured in this month's issue.

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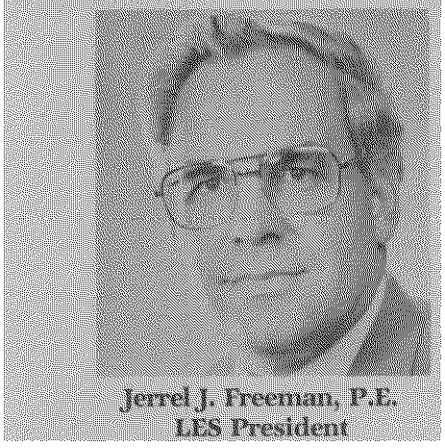

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Today, with the possible exception of our religious activities, virtually every aspect of our lives is directly affected by some level of government. City, parish, state and federal governments look after our health, safety and welfare. Although I have personal opinions regarding the role government should play in our lives, I will not argue them here; but rather I will take the situation as I perceive it to be and will present some thoughts on the interaction between government and the engineering profession.

Engineers must deal with all three branches of government - the administrative, the legislative and the judicial. The actions of each of these branches of government have a profound influence on the practice of engineering today. The legislative branches at all levels of government are constantly making changes in the laws affecting the way engineering projects are planned, funded and built. The administrative branches of government, through their various engineering offices, are exercising greater control over the manner in which engineers manage projects. No one can seriously question that the judiciary has increasingly affected engineering in the whole of America with rulings on codes of ethics and business practices as well as the legality of some major construction projects.

I believe that the engineering profession must find a way to have input into the rule making processes of all branches of government and must develop the will to participate in these processes to stop good intentions from being turned into bad regulations. Collectively and individually, engineers must be more aware of the rule-making bodies that govern us and the procedures they use to enact rules and laws. We must be willing to interact with these bodies, and we must be prepared to offer alternative solutions when appropriate. Legislators and administrators can make reasonable laws and rules when they have complete data with which to work. The engineering profession must make a more determined effort to see that all data are being considered by our representatives in all branches of government.

The processes by which the legislative bodies of this country pass laws are fairly well understood by engineers. Laws are proposed, hearings are held, and debates in legislative sessions lead up to the passage of a new law. NSPE and LES have worked in the past with national, state and local legislative bodies to help formulate proposed language for new laws, have participated in hearings, and have provided background information to legislators debating an issue of concern to engineers. I think the two biggest problems we have in dealing with legislative bodies are uninformed legislators and the reticence of engineers who fail to communicate their views to their representatives. Engineers have recently shown greater interest in their legislators, and we should expect to see improvements in our relationships with legislators.

Another somewhat indirect way of influencing the outcome of legislation is to affect the selection of individuals representing us in government. The emergence of the Political Action Committees (PACs) at the national and state levels are not only making engineers more aware of the various candidates seeking office, but are also creating mechanisms by which engineers can affect the election of these candidates.

The problems of engineers in dealing with the administrative branches of government are both internal and external. Engineers might be employed within a governmental agency, or they might be external to that agency and deal with it as a citizen or as a representative of another citizen. For example, an engineer might work for the Corps of Engineers as an employee, or he might work for the Corps as an outside consultant, or he may be working for a private concern trying to obtain a Corps of Engineers Construction Permit. Each of these situations pose a different set of problems for the individual engineer.

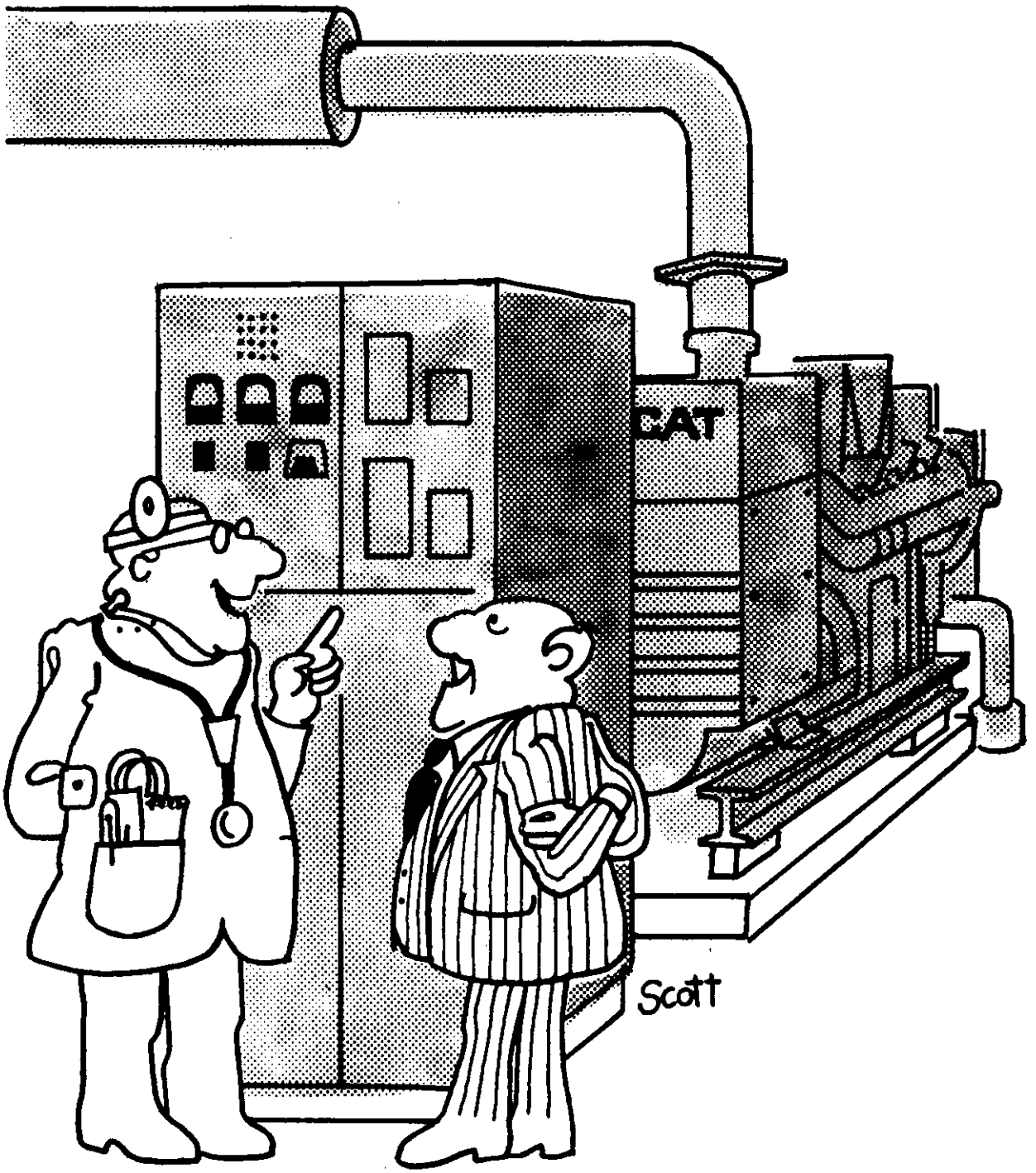
Engineers working within governmental agencies are being faced with problems of personal liability for professional work, problems of classification and, more recently, the likelihood of massive cutbacks in federal jobs and funding of projects. Consultants are faced with greater regulation of design and business practices; and anyone who has tried to have a design reviewed or obtain a permit from any government agency—federal, state or local—is painfully aware of the delays and expenses to be encountered.

There has been progress and improvement in the relationship between engineers and the administrative side of government. On the national level we have seen NSPE working with EPA, FHA, DOE and other federal agencies. On the state level we have had committees working with the Department of Transportation and the Office of Facilities and Planning. I believe that the engineering profession in Louisiana should continue these activities and, indeed, must broaden their scope if we are to fulfill our potential as a positive force in the affairs of government.

We have worked out procedures to have a dialogue with the various offices and agencies of the administrative and legislative branches of government, but we have not learned to effectively communicate with the judicial branch. Even though the first two branches have procedures for receipt of information through formal proceedings and hearings we can have an informal dialogue with the individuals working within the agencies involved. This dialogue has certainly aided in removing misconceptions and misunderstandings and has contributed towards improving the laws and rules under which the agencies create and administer engineering projects. There is no such dialogue with the individuals of the judiciary.

Engineers on the national, state and individual level have had to work with the courts as contestants in litigation, as expert witnesses and as friends of the court. These have been somewhat effective ways in which engineers have worked with the courts, but I cannot help but believe that more progress could be made if there were some less formal way of communicating with our courts to provide them with the specialized data they need when dealing with engineering matters.

I hope that my observations and comments have awakened an awareness in you of the relationships between our profession and our government and that this preception will prompt you to make yourself better prepared to help your country, your profession and yourself.



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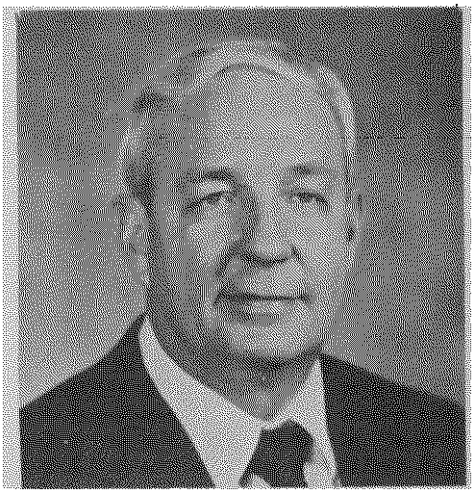
The Leo M. Odom Award, named after its first recipient in 1972, is given for distinguished service to the engineering profession in Louisiana by a registered professional engineer member of the Society who, over a period of long duration, has demonstrated leadership in technical societies and other professional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



James L. Meyer, P.E., president of Meyer, Meyer, LaCroix and Hixson, Inc., Alexandria, is a native of Alexandria. He was educated in the Rapides Parish school system, and in 1956, received his B.S. degree in chemical engineering from Louisiana Tech University. He was employed by Gulf Oil Corporation prior to serving three years in the U.S. Air Force. He returned to Louisiana Tech in 1963 as a graduate student and received his M.S. degree in civil engineering in 1965. Returning to Alexandria in 1966, he was employed by Louis J. Daigre & Associates. In 1968, he founded James L. Meyer and Associates, the parent organization of Meyer, Meyer, LaCroix and Hixson.

Mr. Meyer has extensive experience in the application of civil engineering, particularly in the fields of water, wastewater, drainage, and subdivision development. He is well acquainted with the financial aspects of public works, including the many loan and grant programs of the U.S. government.

He has been active in the Louisiana Engineering Society at the chapter and state levels for many years, having served in various offices of the Alexandria chapter and as LES membership committee chairman, state director, chairman of PEPP, secretary-treasurer, second vice president, first vice president and president of the Society in 1976-77. He was appointed to the Louisiana State Board of Registration for Professional Engineers and Land Surveyors for a 9-year term in July 1977 and served as chairman in 1978-79.

Mr. Meyer is a registered professional engineer in Louisiana in civil and chemical engineering. His memberships in professional and technical societies include: Louisiana Engineering Society, National Society of Professional Engineers, Consulting Engineers Council of Louisiana, American Water Works Association, Water Pollution Control Federation, National Council of Engineering Examiners, American Arbitration Association, Louisiana Engineering Foundation, Louisiana Tech Engineering Foundation, and Tau Beta Pi.

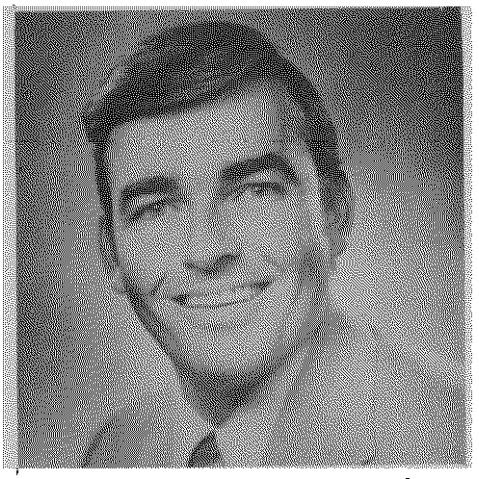
Active in community affairs, he was the 1979 co-chairman of the Rapides United Givers annual fund drive. He was a member of the Board of the Alexandria Chapter of the American Red Cross, is a member of the chamber of commerce, industrial development board and past president of the Alexandria Optimist Club. He is a member of St. Timothy's Episcopal Church, having served for many years on its Vestry and presently serves as church treasurer.

He is married to the former Joy Sumner, of Sumner, Mississippi and they have two children, a son and daughter.

Mr. Meyer's active participation in the Louisiana Engineering Society and the engineering profession are in keeping with the ideals of the Leo M. Odom Professional Service Award. The unselfish service and high ethical ideals of Mr. Meyer are an inspiration to all engineers.

F. Hugh Coughlin Young Engineer Award

This award is given to an engineer not over 35 years of age who has demostrated to a high degree capabilities in his chosen field. F. Hugh Coughlin was a member from 1944 until his death in 1979. 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.



Dale T. Hunn, P.E., a native of New Orleans, attended Tulane University and received a B.S. degree in civil engineering in 1972 and an M.E. degree in civil engineering in 1977. He is a registered professional engineer in Louisiana, Alabama and Mississippi.

Mr. Hunn began his career with the firm of Modjeski and Masters in 1972 as a civil engineer assigned to the structural department. He joined Waldemar S. Nelson and Company, Inc. of New Orleans in 1973 as a civil engineer and was named senior civil engineer in 1978. He is presently serving as a project engineer.

Mr. Hunn's involvement in engineering societies include: serving as second vice president of the New Orleans chapter of LES; 1980-81 LES membership committee chairman; past chairman of the LES public relations committee; past chairman of the New Orleans chapter publications committee and member of the New Orleans chapter scholarship committee. In 1978-79, he was director-at-large of the New Orleans Branch of the American Society of Civil Engineers and is serving as a member of the steering committee for the ASCE 1982 annual meeting. He is filling a second term as assistant secretary of the Society of Tulane Engineers. He has been active with the local Young Engineers Committee in organizing a student chapter of LES at Tulane.

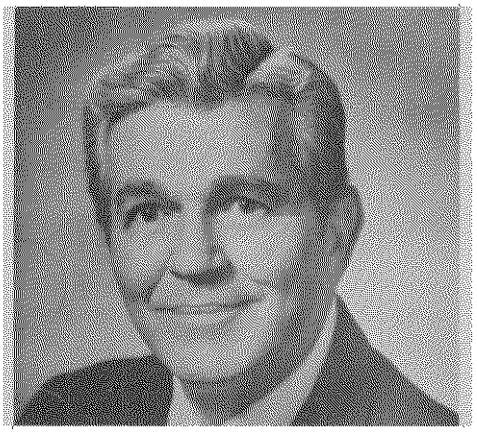
He is a member of the following organizations: LES, NSPE, ASCE, American Concrete Institute, Construction Specifications Institute, Tau Beta Pi, Society of Tulane Engineers and the American Public Works Association.

Mr. Hunn is married to the former Diane Pilgrim of Metairie. They have two children, Bridgette and Eric.

Mr. Hunn has demonstrated outstanding capabilities in his chosen field of engineering and has generated an enthusiastic approach toward professional achievement. His involvement and performance are in keeping with the ideals of the F. Hugh Coughlin Award of Merit for Young Engineers.

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.



Lamon L. Moody, Jr., P.E., a native of Bogalusa, is a graduate of the University of Southwestern Louisiana with a bachelor of science degree in civil engineering. He completed the business and management course at the Alexander Hamilton Institute.

Following graduation from USL, he was employed by African Petroleum Terminals, a subsidiary of the Texas Petroleum Company as chief engineer. He was employed by Kaiser Aluminum and Chemical Corporation, Baton Rouge, as project engineer, chief construction engineer and chief engineer from 1956 to 1963. In 1963 he was founder of the consulting engineering firm, Lamon L. Moody and Associates, which was later incorporated as Dyer & Moody, Inc. He is presently chairman of the board and president of the firm.

Mr. Moody holds a Fellows grade in the American Society of Civil Engineers and memberships in the Louisiana Engineering Society, National Society of Professional Engineers, Consulting Engineers Council of Louisiana, and Louisiana Land Surveyors Association. He is a registered civil engineer in Louisiana, Arkansas, Mississippi and Texas.

His achievement in engineering management is noteworthy. He received the Award for Excellency by the American Congress of Surveying and Mapping in 1972; was made a Fellow of the President's Council of the American Institute of Management in 1973; named the Outstanding Business Leader of the Year by the Baker Chamber of Commerce in 1975. In 1971, Mr. Moody was the recipient of the LES Charles M. Kerr Public Relations Award for his outstanding efforts in making the public aware of the profession's concern for public health and safety and in promoting public relations goals of LES and the profession.

Mr. Moody is married to the former Eve Thibodeaux and they have two sons and a daughter.

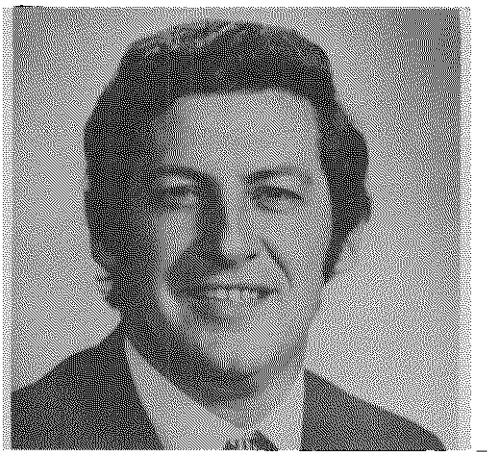
He has been active in the Louisiana Engineering Society, having served as chairman of many important committees. He was legislative committee chairman in 1970 and again in 1979-80 and 1980-81. Mr. Moody was responsible for coordinating the passage of the new registration law in the 1980 session of the legislature. He is serving as second vice president of the Society at the present time.

Mr. Moody has been listed for many years in Marquis Who's Who in America, Who's Who in Finance and Industry, Who's Who in the South and Southwest, and Who's Who in Engineering.

The engineering management accomplishments of Mr. Moody coupled with his active participation in LES and concern for the engineering profession make him a worthy recipient of the A.B. Paterson Medal for an engineer in management.

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 the LES from 1900 until his death in 1945.



Marion Joseph Chaney, P.E., is a partner in the firm of Barron, Heinberg & Brocato, Architects and Engineers, Alexandria. He attended Louisiana State University and graduated from Louisiana Tech University with a B.S. degree in mechanical engineering.

Mr. Chaney is a registered professional engineer in Louisiana and a member of the Louisiana Engineering Society and the National Society of Professional Engineers. His memberships and offices held in civic organizations include: president, Alexandria Lions Club, Alexandria Chapter of LES, Holy Savior Menard High School PTA, Alexandria Toastmasters, Our Lady of Prompt Succor School and Home Association, state secretary of Louisiana Jaycees; Central Louisiana Industrial Development Board, Alexandria-Pineville Chamber of Commerce, District Tourism Promotional Committee, 6th District Clearing House Review Board, Alexandria Building Code Board of Adjustment & Appeals, Alexandria Master Plumbers Board, Louisiana Lion's League for Crippled Children, Central Louisiana Little Theater, and Governor's Conference for Priorities in 1980.

He was elected an at-large councilman of the city of Alexandria and served as president of the city council for three years. He was elected to the Democratic State Central Committee and is presently serving his second four-year term. Some major community accomplishments during his tenure as president of the city council were: development of the industrial park and port; funding of a $30 million sewer project; funding of a major traffic synchronization program; and setting policy for long range energy sources including Louisiana Energy and Power Authority and hydroelectric.

His past and present activity in many organizations has resulted in the betterment of Alexandria and Rapides Parish.

Mr. Chaney is married to the former Jane Gremillion from Alexandria. They have six daughters.

Mr. Chaney's service to his community and profession are in keeping with the ideals of the Andrew M. Lockett medal. His civic involvement is an inspiration to the engineering profession.

James M. Todd Technological Accomplishment Medal

The Technological Accomplishment Medal is given for the 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.



J. Bres Eustis, P.E., Chairman of the Board and partner, Eustis Engineering Company, Metairie, is a native of New Orleans. He is married to the former Polly Street of Vicksburg, Mississippi and they have five children, three sons and two daughters.

Mr. Eustis received a B.E. degree in chemical engineering from Tulane University in 1934, he attended and completed a soil maintenance course at MIT in 1939 and received a B.S. degree in civil engineering from Harvard University in 1941.

He is a registered professional engineer in Mississippi, Texas, Alabama, Arkansas, Kentucky and Louisiana. Mr. Eustis' professional and technical society memberships include: Life Member, ASCE; Fellow, ACEC; member CEC/L, LES and the International Society of Soil Mechanics and Foundation Engineers.

Mr. Eustis began his engineering career with the U.S. Waterways Experiment Station, Vicksburg and remained there until June 1947 when he became president and partner of Eustis Engineering Company, founded in Vicksburg. The company moved to Metairie in 1950.

Mr. Eustis is a pioneer in the field of applied soil mechanics and the application of the theories and principles of soil behavior to the design and construction of civil engineer projects. During World War II, he directed several studies which resulted in the application of soil mechanics principles to permit rapid and economical construction of airbases and aircraft landing facilities in the U.S. and overseas. Shortly after WWII, Mr. Eustis resigned his position with the Corps of Engineers and started the first soil and foundation engineering consulting firm in the Southeastern U.S. Mr. Eustis can be credited with several specific achievements during his distinguished service in geotechnical engineering. One example is his formulation of a procedure to determine required pipe line densities to prevent flotation of oil pipe lines through marsh and swamp areas, as well as open bodies of water. In 1952, his research into the mass specific gravity of semi-liquid soils (suspensions) led to his establishment of this procedure whereby economical thicknesses of pipe coating can be selected for various reaches of a pipe line. Since adopted by others, the results of Mr. Eustis' research have been applied to many miles of pipe lines in the marshes and swamps and offshore areas.

Mr. Eustis is a worthy recipient of the James M. Todd Technological Accomplishment Award for his innovative application of the principles of soil mechanics which has significantly advanced the technology of civil and geotechnical engineering.

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Robot's Hand Grabs National Honors

By Diana Pinckley, Office Of University Relations, Tulane University, N.O.

It doesn't have the courage of an R2D2 or the personality of a C3PO. In fact, it doesn't even have a name.

But a Tulane University robot does have awards and recognition. And, thanks to its designer Jack Marsal, it earned top national honors in a November mechanical engineering competition in Chicago.

Marsal, who received a bachelor's degree in mechanical engineering from Tulane in May, developed the robot with the help of mechanical engineering faculty member Michael Lynch.

And for $115 in parts, not counting the computer it's hooked up to, he taught the robot to move its rubber-padded mechanical hand from side to side and up and down and to tighten and loosen its grip.

He succeeded so well that the robot, guided by a simple remote-control box in the hands of the operator, can delicately pick up an egg from the top of an empty film can, transfer it to another surface, put it down, pick it up again, and move it back to its original position with the egg remaining intact all the while.

The judges at the American Society for Mechanical Engineers "Old Guard" competition were impressed enough to give Marsal and his robot the top prize in a contest that included 14 participants presenting projects dealing with the drag of icebergs, the aerodynamic effects of tractor-trailer trucks, a wood-burning stove that performs at 100 percent efficiency, a new design for ball bearings, and the redesign of a bobsled to make it springier when it goes over bumps.

Marsal's device is one example of an industrial robot, a mechanical beast that usually has one or more arm-like projections and that can do factory work customarily performed by humans.

Although only about 3,500 industrial robots have been installed in the U.S. in the last two decades, they are widely used in Japanese industry. And Marsal agrees with many business forecasters that industrial robots are likely to be the wave of the future in the U.S.

"IBM told me that the robot industry now is like the calculator industry in 1965," said Marsal, pointing out that both IBM and Texas Instruments are involved in robot manufacture.

The machines are currently finding their most common uses on the assembly line in the automobile industry of performing tasks that present safety problems for humans— removing ingots from blast furnaces or repairing underwater equipment, the young engineer added.

The low cost of Marsal's robot and the ease with which it can be led through various tasks are points of which he is particularly proud.

"At $115, it's real unusual," points out the New Orleans native, noting that most actual industrial robots, including computer, cost about $300,000 or more. The robot uses bicycle-brake callipers as a rubber-padded metal "hand" on the end of a long arm which is, in turn, attached to a computer.

"The robot keeps asking its computer 'Where am I?' about a hundred times a second. It asks where it is now in relation to where it needs to be and turns to the right or the left or raises or lowers its hand in response. When the position is right, it stops."

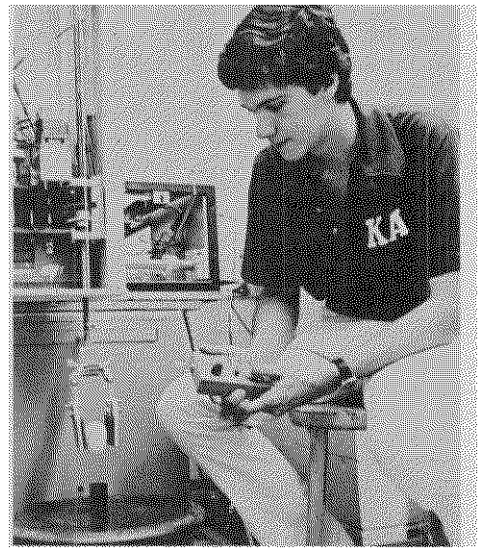
The robot is also easily teachable, Marsal says. "Anybody can teach it to make a particular set of moves and remember them in just a few minutes."

It's driven by a small remote-control box with three switches. One switch makes the hand go from side to side, another tells it to go up or down, and the third controls the grip of the robot, which can pick up objects that weigh as much as ten pounds.

Marsal says he can teach most people how to operate the robot in about five minutes.

Right now, industrial robot technology is not as precise as it would need to be to perform many factory functions. "Robots are not nearly precise enough to screw in a light bulb, for example," Marsal illustrates.

But the most economically feasible robot is the simplest one, he adds. "You can put three or four joints on it and see what you can do with that," the engineer observes, but anything more complicated is likely to bring about diminishing economic returns.



Tulane engineering graduate Jack Marsal and the robot hand he designed.

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The Status of Engineering Education

Professor Clarence E. Hall, Industrial Engineering Department
Louisiana State University in Baton Rouge, Louisiana

Throughout the history of public education in America, the guiding philosophy has been that of service to the individual as well as to the nation. This basic philosophy has given rise to new curricula when needed, and has caused other curricula to be deleted from all levels of education when retention could no longer be justified.

Perhaps one of the most significant programs that has ever been developed and introduced into institutions of higher learning is engineering education. With the establishment of our Land-Grant colleges and universities during the latter part of the 19th century, this fledgling nation introduced programs of applied science and mathematics, some of which have become the envy of the world. Our professional engineering programs have been imitated by other countries and today one finds hundreds, if not thousands, of international students studying engineering at our colleges and universities. Not only are these students studying engineering at our colleges and universities, but also there are other foreign personnel attending special technical programs being conducted by the industry of federal agencies.

Prior to the development of engineering education curricula, only the more ingenious craftsmen or individuals educated in disciplines of mathematics and science with a keen appreciation for the crafts became engineers. Circumstances of national magnitude arose during the early part of the Industrial Revolution some one hundred years ago which made it necessary that this nation find new methods to increase its internal supply of engineers. These needs resulted in the development of programs of applied mathematics and sciences by the newly organized Land-Grant colleges, many of which have become accredited engineering curricula.

Engineering schools along with their research programs have made unprecedented contributions in all areas of civilian and military affairs. Despite these outstanding contributions in all areas of engineering, our nation is evidencing indications that too many of its citizens, and especially recent high school graduates, are illiterates in the world of technology. This level of technical illiteracy continues to increase among high school graduates, even though the nation has expended millions of dollars to improve and/or enhance the study of mathematics and science at the pre-college level during the past two decades.

Our nation is facing a literacy crisis in our public school systems; for the first time in history students are being graduated each year who have less knowledge of their culture than the previous generation. Despite the fact that the overall grade point average for students currently enrolled in our publicly-supported secondary schools is at its highest value, the composite scores being posted by these same students on college entrance examinations continue to decline.

Another factor affecting the overall general operation of public secondary schools is the unusual number of teachers leaving their class room for other positions. Many are taking early retirement while others are seeking employment elsewhere. They are looking for better and safer working conditions as well as higher salaries. Those same classrooms will be occupied now by younger and less experienced teachers who will be more inclined to award higher grades for poorer performance than did the more experienced teachers.

This nation is now in its third generation of teachers, and many of those having less than ten years of teaching experience have little working experience as adults other than that of teaching. Many of these teachers are from middle class families and their individual college entrance scores are generally lower than that of students who chose to study preprofessional curricula. Therefore, it should come as no surprise to learn that individuals of this stereotype would have difficulty motivating students planning, and capable of pursuing, professional careers. If there is to be general upgrading of the educational process there must also be an upgrading of the calibre of prospective teachers, and there must be an improvement in the selection process of these same candidates. Certain changes should be made in teacher education programs whereby teachers would have to obtain a major in the discipline in which they plan to teach, and there should be an additional requirement for those teaching applied science and mathematics courses: spending a minimum of time in industry or in an appropriate laboratory where needed experience could be obtained. The engineering laboratories should serve the needs of these students well. If the engineering curricula supported by laboratory exercises have served the nation well during the past one hundred years, their use could very well aid in the present literacy crisis.

As early as 1965 when it became clear that fewer students were electing to study the disciplines of mathematics and science, the National Science Foundation initiated the development of its Engineering Concepts Curriculum Project (ECCP). Some two years earlier this writer had submitted the description of three engineering-oriented courses to General Eric Walker, formerly president of Pennsylvania State University, who was at that time serving as president of the American Society for Engineering Education (ASEE). I requested his support in getting these or similar courses introduced into the high school. General Walker, speaking before a world-wide assembly of engineering educators during the annual meeting of ASEE in Chicago in 1965, recommended that an appropriated engineering program be developed for use in the secondary schools. It seems that the National Science Foundation accepted his recommendation by its initiation of the ECCP project. The engineering-oriented curriculum resulting from this national thrust became known as "The Man-Made World." It has met with very little success during the past decade, and perhaps this can be attributed to the fact that it was heavily oriented toward the social sciences. Consequently, those students who were seriously interested in a more rigorous study of mathematics and science simply did not choose to become involved in another social studies course.

With the advent of modern systems of communication including television, video taping facilities, and computers with their interactive graphics display components there remains little reason to delay the teaching of engineering education courses at the secondary level. The need for these courses is evidenced by the increasing number of high school students enrolling during the summer months in special engineering programs, which are funded by industry and federal agencies and conducted by various minorities. Too, many colleges and universities have adopted early admission and/or concurrent enrollment policies to

Continued middle of page 16



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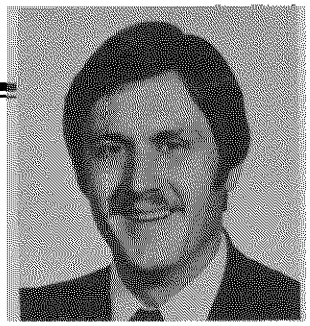

Warren J. Wilder
CEC/L Executive Director

New Member Recognition

Consulting Engineers Council of Louisiana, Inc. would like to recognize the following firms that became members during 1980:

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Gulf South Engineers, Inc., Houma
H. W. Herbst, Consulting Engineer, N. O.
Robert E. Jones & Associates, Inc., Shreveport
John J. Kelly, P.E., Consulting Engineer, Baton Rouge
Koonce Engineering Service, Baton Rouge
L. C. Leonard, N.O.
SJB Engineering, Inc., Baton Rouge
Spanish American Engineers, Inc., N. O.
Sullivan & Martin, N. O.
J. Richard Trinko, Consulting Engineer, Gretna

This represents a 15% increase in member firm growth in 1980.

Simple Ideas are Sometimes the Best

Shortcuts come about through experience, it is suggested by ACEC members. Mel Jones, Camp Dresser & McKee, Boston, offers this idea which may be of help to other consulting engineers: "Most engineers enjoy technical analyses, but do not enjoy writing. Consequently, technical report writing tends to be bunched up at the end of the project when the deadline is tight. A better approach is to write down thoughts while the job is proceeding when the ideas are fresh—one chapter at a time rather than all at one time."

From ACEC's *The Last Word*

Peat Bogs: A New U.S. Energy Source

With much attention being focused today on the rising cost of fuel and oil, one of our national members, Kidde Consultants, Inc., is becoming involved in what may prove to be the next energy frontier in the U.S. development of our many deposits of peat to supply future energy needs.

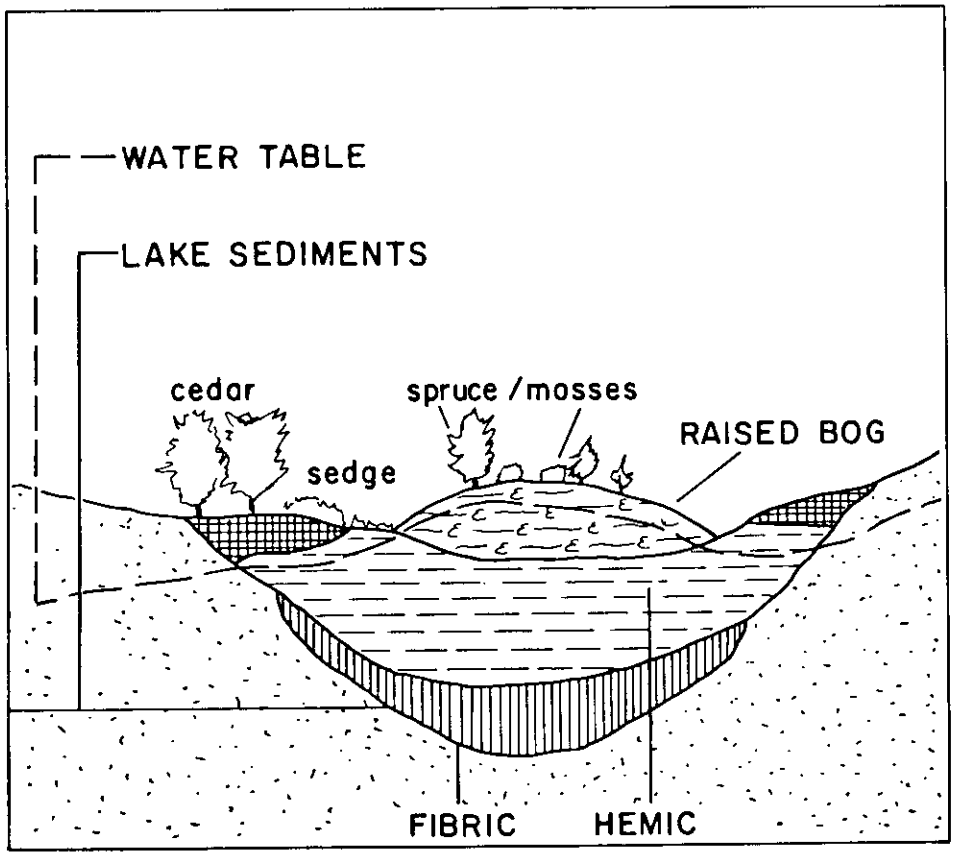
Second only to coal in proven available reserves, the energy value of U.S. peat is estimated to be 1433 Quads (10^{15} BTU). This is equivalent to 240 billion barrels of oil and is greater than the known reserves of uranium, shale oil, or the combined reserves of petroleum and natural gas.

While relatively untapped here, peat is being used commercially in the Soviet Union, Finland, and Ireland. The Soviet Union has 76 peat-fired electric power generating plants now in use, the largest with a capacity of 730 megawatts (MW). By comparison, the ill-fated Three Mile Island nuclear-power plant has a maximum capacity of 1600 MW. The city of Leningrad uses peat for 17 percent of its energy needs. Ireland uses peat for 25 percent of its electrical power generation in addition to domestic heat and light industrial use.

Peat, as we all know, is the brown fibrous substance sold in 50-pound bags at our local garden shops for use on lawns and in flowerbeds. The largest U.S. deposits occur in glaciated areas of New England and the Great Lakes and in the isolated coastal swamps of the Carolinas. It is significant that most deposits occur in areas which have no natural coal deposits. The regions without coal deposits can consider peat, if it is in their area, as a more economical energy source. This factor may lead to the full development of peat energy in the U.S.

At a recent three-day conference on energy uses of peat held in Washington, D.C., over 150 scientists and engineers from a dozen countries met and discussed methods of converting peat to energy. Peat, which is very wet in its natural state, can be dried and burned directly in a fluidized bed system similar to pulverized coal. It can also be converted to synthetic natural gas, mixed with oil and burned as a slurry or processed into a very hard, non-rewettable briquette which can be substituted for coal or firewood.

A 305,000 acre peat bog is being de-



After a basin is filled, peat can develop beyond the physical confines of the basin by retaining water and acting as a reservoir raising the groundwater table and promoting further peat formation. The raised bog can, with subsequent upward growth, coalesce with neighboring bogs.

veloped in North Carolina for fueling a 600 MW power plant. The KCI geotechnical section has evaluated five large peat bogs in New England for possible energy use. According to Project Engineer Bill Carnes, the total area of the bogs studied so far by KCI is over 2,000 acres. He said, "some of the deposits I have sampled are over 30 feet deep with pure peat. It's like walking on a 500-acre sponge." The studies involve extensive field sampling of the deposits and laboratory analysis of the samples for such things as caloric value, ash and sulfur content. The feasibility of harvesting the peat for energy use is then evaluated.

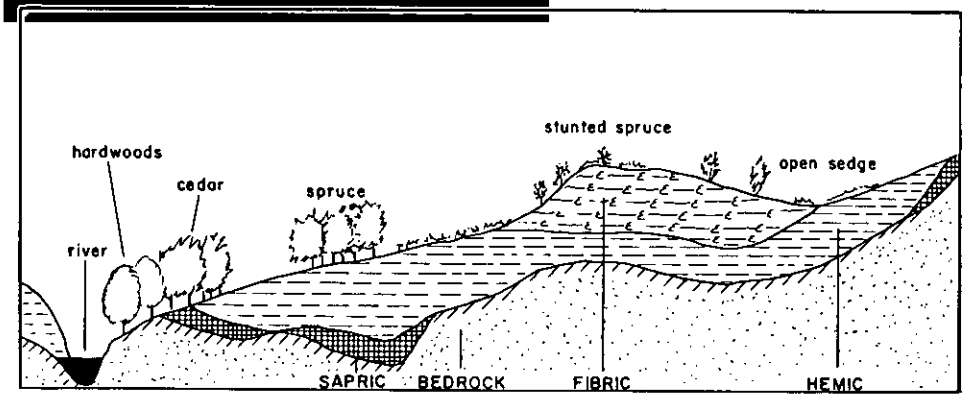
Carnes' clients include private investment groups and large corporations who see a definite future in this energy source. While new deposits of natural gas and petroleum will undoubtedly be found as deregulation continues, peat is a proven resource and the size of the deposits can be determined with a high degree of accuracy.

"The point of large scale development of these resources is drawing close," says Carnes. "The economics of mining peat for energy becomes more attractive with each Organization of Petroleum Exporting Countries' (OPEC) price increase and each step in deregulation of domestic fuels."

Another major consideration is the environmental impact of intense mining of peat. Carnes added, "One thing which was very noticeable during my many days working in these bogs is how devoid they are of wildlife. Also, the high acidity of the groundwater stunts the growth of vegetation to the point that a 12-year old spruce will only grow to a height of 8 inches with a diameter of ¼ inch." Another environmental aspect is the burning of peat itself. Peat is a smokeless fuel with low ash and sulfur content. It can be burned directly and meet EPA requirements without the need for costly emission scrubbers. A final consideration is land reclamation. After wholesale mining of these peat deposits, what will remain will be a huge pond, "exactly what existed before the peat deposits began collecting 10,000 years ago," noted Carnes.

While the widespread use of peat as a fuel may be in the more distant than near future, its potential along with larger use of domestic coal and more fuel efficient cars and buildings will help America realize its goal of energy independence. KCI feels this is an engineering as well as an economic and political challenge.

(Reprinted from *The Innovator*)



Peat-forming environments as in the swamps of northern Minnesota or the blanket peatlands on the north-western seaboard of Scotland, have poor relief and a cool, wet-humid climate that promotes peat growth above the physical limits of the ground water.

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POTPOURRI

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Executive Secretary

Louisiana Engineering Society

LES-PEPP & CEC/L Request Study

The LES-PEPP and CEC/L have requested the Department of Transportation & Development to join them in obtaining a qualified management consultant to assess the present DOTD method of contracting for engineering and surveying services.

After discussions with DOTD, an outline for the study was developed for forwarding to DOTD. The consultant would be asked to: (1) review and study DOTD's present method of compensating engineering consultants; (2) meet with LES and CEC/L firms to assess pros and cons of DOTD contracting procedures; (3) meet with DOTD representatives and assess pros and cons of present system; and (4) prepare specific recommendations if warranted.

Thomas W. Well Promoted

The Society congratulates Thomas W. Well, P.E., on his election to assistant vice president, Waldemar S. Nelson & Company, New Orleans.

Energy - Have We Faced the Real Truth?

An NSPE Energy Awareness Fund was adopted at the 1980 winter meeting in Atlanta. State societies, chapters and individuals have been requested to contribute money to assist in this most worthwhile program.

Switch to coal! Use natural gas! Get oil from shale! Make automobile engines more efficient! Install a woodburning stove! Are these real solutions to our energy problems?

Although we have grown up with the idea that our oil, coal, gas and wood supplies are unlimited, we are learning that we have been living a dream. The first three fuels are not renewable and the last cannot be renewed at a rate fast enough for it to be used as a replacement for the other three.

Coal is one reserve that does not face exhaustion in the near future, but it has a limit and will not replace itself. It creates serious pollution problems and is of great concern to the fishing industry because of the "acid" rain it causes.

Renewable energy sources, such as biomass, solar, thermal and wind are all being studied, but the Department of Energy is working toward a goal of twenty per cent from these sources by the year 2000. Fusion is forecast as being 40 years away. Nuclear energy provides ten percent of the U.S. electricity and could be rapidly expanded if licensing were greatly speeded up. It is politically unpopular.

Are we, as engineers, doing what we should to inform the public of the real energy problems? The NSPE Energy Awareness Program is a real step in the right direction. Give it your support by using the coupon below. Make checks payable to NSPE Energy Awareness Fund.

Energy Awareness Fund

I would like to support NSPE in carrying on this important public service - helping the nation overcome its energy problems. Attached is a check for $ _____

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Continued on page 16

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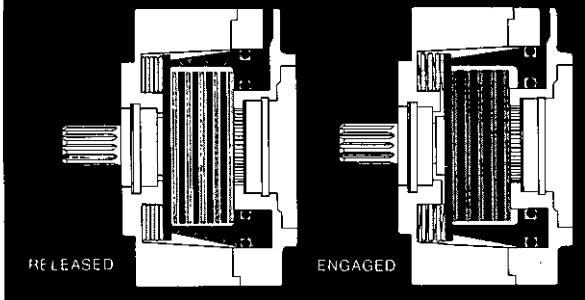

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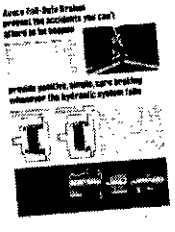

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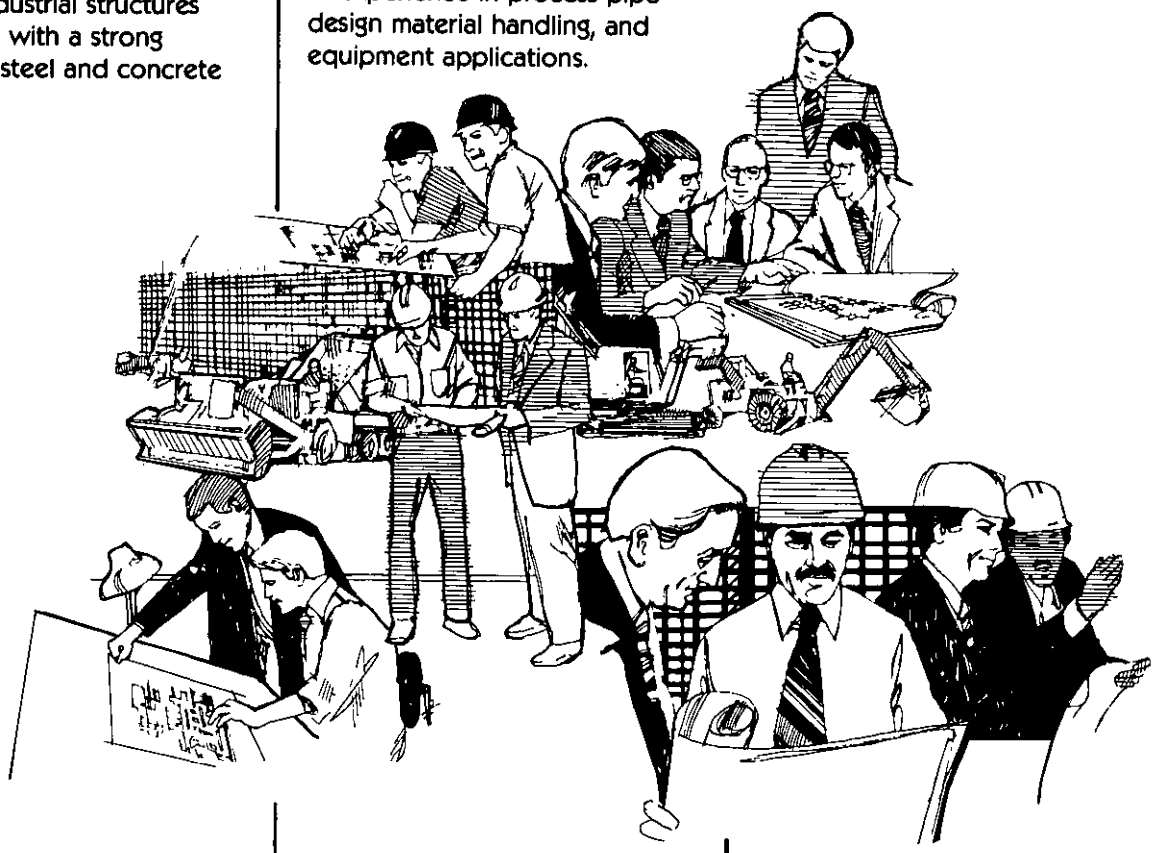

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VLIET'S VIEWS



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

Brown & Root, McDermott Reproved

On December 14, 1978, J. Ray McDermott and Co., Inc. and Brown and Root, Inc. pleaded nolo contendere to charges brought in federal court that they had conspired in restraint of trade and commerce, in violation of the Antitrust Laws of the United States.

Under the provisions of the law in effect at the time of the convictions, the Board had the power to reprove a registered corporation that was convicted of a felony. After a hearing convened by the Board on July 21, 1980, it was determined that J. Ray McDermott and Co., Inc. and Brown and Root, Inc. should be given a public reprove for their pleas of nolo contendere. Both corporations had argued that a plea of nolo contendere was not equivalent to a conviction. The Board, however, did not find merit in this contention.

In compliance with the order of the Board, the following reproof is entered into the pages of the *Louisiana Engineer*:

> J. Ray McDermott and Co., Inc. and Brown and Root, Inc. have each been found by the Board to have been convicted of a felony. In the cases of these corporations, their felony convictions did not relate directly to the practice of engineering. Nevertheless, conduct constituting the commission of a felony tends to disparage the engineering profession as a whole and subject it to ridicule. Conduct of this type cannot be tolerated and, accordingly, such conduct is hereby reproved.

ENGINEERING EDUCATION

Continued from page 10

accommodate these more able and highly motivated students.

Students may realize two distinct advantages from either the concurrent enrollment or early admission programs. Namely, they permit students to gain valuable educational experiences which are not available at regular high schools, and such programs may serve to reduce greatly the overall cost of obtaining the first college degree.

Perhaps the greatest deterrent to the introduction of the engineering education course into the secondary school program is the lack of qualified teachers. The fact that there are no certified teachers available to teach these courses should not be cause for complete abandonment of a much-needed program. Since this seems to be a nation-wide need, it should be given the same order of priority as that given new agricultural education programs following the enactment of the Smith-Hughes Act of 1917. With this level of national thrust there would be a standardization of curriculum and federal support for teachers' salaries.

An alternative to this approach could be the use of military engineers on special assignment detail to teach these courses until certified teachers become available. For those school systems located near engineering colleges, it might be possible to use members of engineering faculty as part-time teachers, as their schedules would permit.

The College of Engineering at Louisiana State University, Baton Rouge, Louisiana, has sponsored a rigorous engineering program at the Baton Rouge Magnet High School since it was opened in 1975. Full-time university faculty personnel from the College of Engineering have taught these courses. The program is well established with good attendance. In fact, consideration is now being given the suggestion that the program be introduced into other high schools of the parish.

POTPOURRI

Continued from page 14

NSPE Scholarship Meeting

The NSPE Educational Foundation scholarship committee reviewed 1,342 scholarship applications at a meeting held in New Orleans on February 19 & 20, 1981. The applications were ranked by 32 committee members, five of which were Louisiana engineers: Paul Hale, Bob Brossette, Butch Fuller, Neil Klock and Billy Moore. Out of the 1,342 applications, 122 students were chosen to receive scholarships.

Henry Markel and John Bergeron were most helpful in coordinating the meeting room, luncheon and hotel arrangements for the participants. New Orleans Public Service, Inc. was most gracious in furnishing the meeting room. The New Orleans chapter hosted a delicious seafood luncheon at the Engineers Club on Thursday.

Experience Credit for Construction Engineering

The resolution below was adopted by NSPE, which recommends, in part, that the state boards grant qualifying credit to applicants for experience in construction engineering. The LES-PEC chairman believes this information will be valuable to recent engineering graduates and also prompts them to join LES-PEC.

RESOLUTION 80-1

Recognition of the Professional Role of Engineers in Construction (approved by NSPE Board of Directors July 26, 1980)

WHEREAS, the National Society of Professional Engineers represents the professional interests of the total engineering profession; and

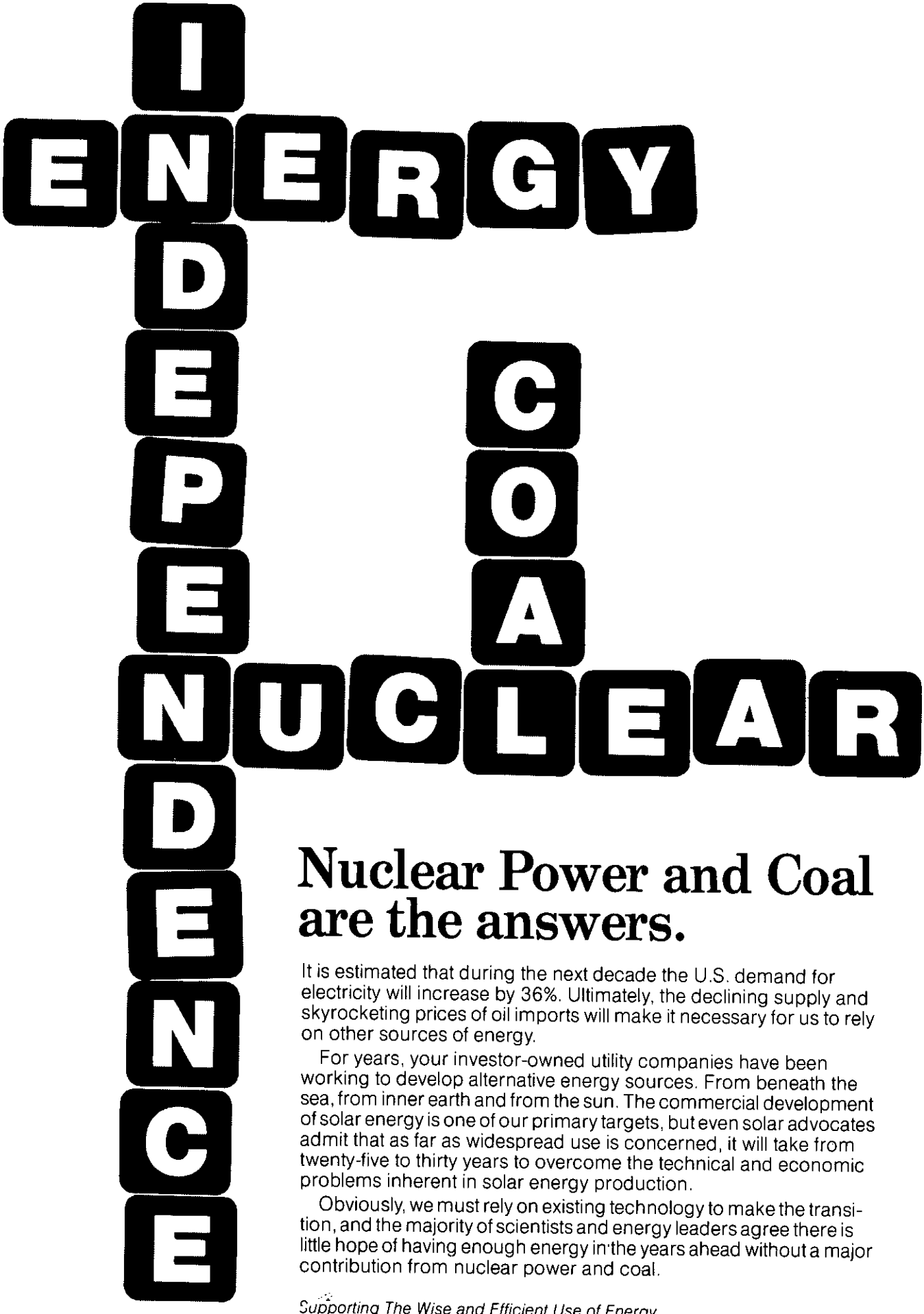
WHEREAS, by extending recognition of the professional role of engineers in construction, the aims of professional registration laws—to safeguard the life, health, property and welfare of the public—are furthered; and

WHEREAS, the current professional engineers examinations as promulgated by the National Council of Engineering Examiners do not include questions which are appropriate to construction engineering; for example, design of false-work, formwork, trench or excavation sheeting and bracing, or other construction related problems; and

WHEREAS, a goal of NSPE should be to ensure that professional registration is attainable by all qualified engineers;

BE IT THEREFORE RESOLVED, that the Board of Directors recommend to the National Council of Engineering Examiners that questions reflective of the construction industry be included in the Group I Principles and Practice of Engineering Examination.

FURTHER, BE IT RESOLVED, that the Board of Directors of NSPE recommend to the various individual state professional engineer and land surveyor registration boards that qualifying professional level credit be awarded to graduate engineers for experience in construction engineering.



Nuclear Power and Coal are the answers.

It is estimated that during the next decade the U.S. demand for electricity will increase by 36%. Ultimately, the declining supply and skyrocketing prices of oil imports will make it necessary for us to rely on other sources of energy.

For years, your investor-owned utility companies have been working to develop alternative energy sources. From beneath the sea, from inner earth and from the sun. The commercial development of solar energy is one of our primary targets, but even solar advocates admit that as far as widespread use is concerned, it will take from twenty-five to thirty years to overcome the technical and economic problems inherent in solar energy production.

Obviously, we must rely on existing technology to make the transition, and the majority of scientists and energy leaders agree there is little hope of having enough energy in the years ahead without a major contribution from nuclear power and coal.

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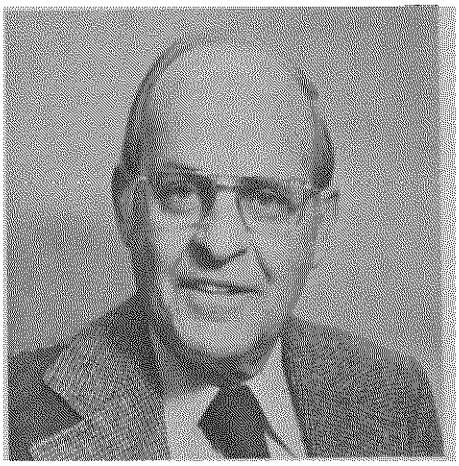

Louis J. Daigre, P.E.
MEMORIAM

Louis J. Daigre of Rigolette Road, Pineville, died on February 2, 1981 in an Alexandria hospital.

President of Daigre Engineers, Inc. of Alexandria, he was one of the leading consultants on public and private construction projects in the area.

Daigre was active in numerous professional organizations including the American Society of Civil Engineers, National Society of Professional Engineers, Engineers Joint Council and the American Concrete Institute. He was past president of the Louisiana Engineering Society. He was also a former member of the Rapides Area Planning Commission.

Daigre was educated at Louisiana College and Louisiana State University and during World War II worked in the Army Map Service. From 1944-46, he was hydraulic engineer with the U. S. Geological Survey's water resources branch.

Survivors include his wife, Mary Elizabeth Daigre of Pineville; two sons, Richard Daigre of Alexandria and Dewitt Daigre of Pineville; one daughter, Deborah Wetmore of Houston; one sister, Alice Thomas of Alexandria; and three grandchildren.

Floyd D. Richards, P.E.
MEMORIAM

Floyd D. Richards, P.E., a life member of the Louisiana Engineering Society, died March 2, 1981 in Baton Rouge. He was 63 and a resident of Baton Rouge. He was an Exxon Corporation chemical engineer for 33 years, a retired U. S. Army Reserve lieutenant colonel and veteran of World War II.

Mr. Richards joined the Louisiana Engineering Society in 1950. He held bachelor's and master's degrees in chemical engineering from Georgia Tech University.

The Louisiana Engineering Society extends its deepest sympathy to his wife, two daughters, a son and families.

Ballard Elected to Daigre Firm

Elizabeth K. Daigre, chairman of the Board of Directors of Daigre Engineers, Inc., Alexandria, Louisiana, announced recently the election of James R. Ballard to executive vice president and general manager of the firm.

Ballard, the firm's chief operating officer, has a bachelor of engineering science degree from Marshall University in Huntington, West Virginia and a master of decision sciences degree from Georgia State University in Atlanta. He is a registered professional engineer in 11 states and is a member of several professional and technical societies including the Louisiana Engineering Society.

He is a former officer of the Georgia Society of Professional Engineers and was honored by that society in 1980 as the Outstanding Engineer of the Year in Private Practice.

Mr. Ballard and his wife Mary relocated to the central Louisiana area in 1980 after 22 years of residence in Atlanta, Georgia. The couple have three children.

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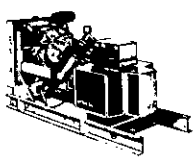

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2	Alexandria	Duck	12	14	116.7
3	New Orleans	Nelson	127	94	74.0
4	Baton Rouge	Zeretzke	69	54	78.3
5	Shreveport	Nesbitt	30	23	76.7
6	Monroe	Lazenby	21	12	57.1
7	Lafayette	Rivera	41	22	53.7
8	Lake Charles	Frohn	20	9	45.0
	STATEWIDE		333	244	73.3
	NON-RESIDENT			16	

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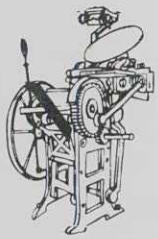

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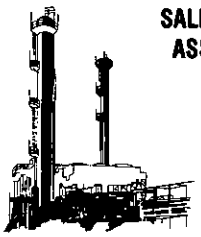

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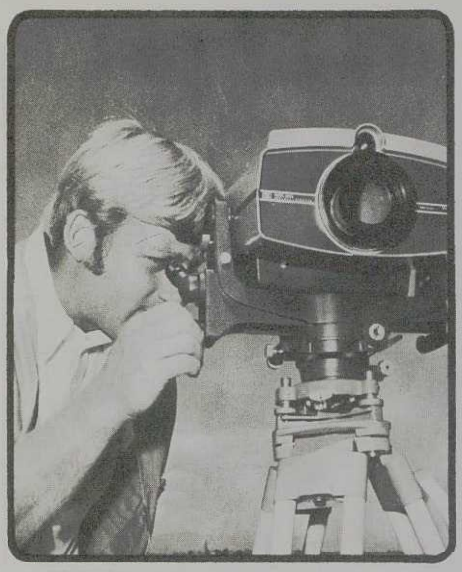

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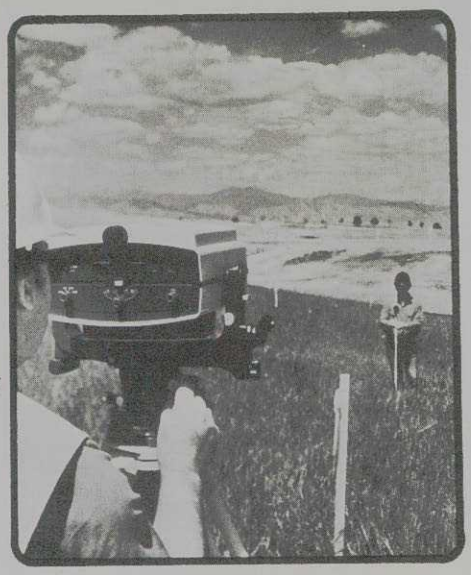

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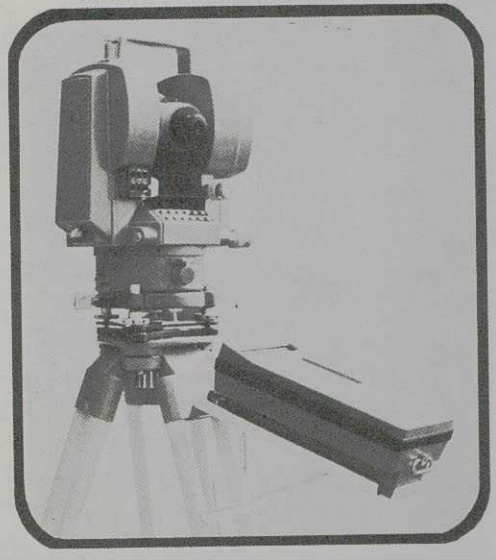

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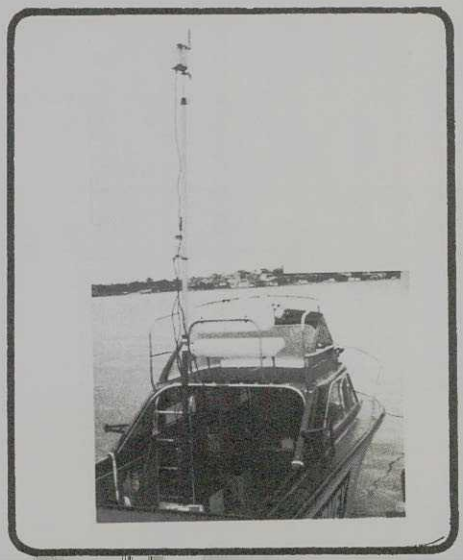

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About the Cover:

This issue's cover highlights the LES Spring Meeting in Houma held in April. Look on Page 8 for the related story.

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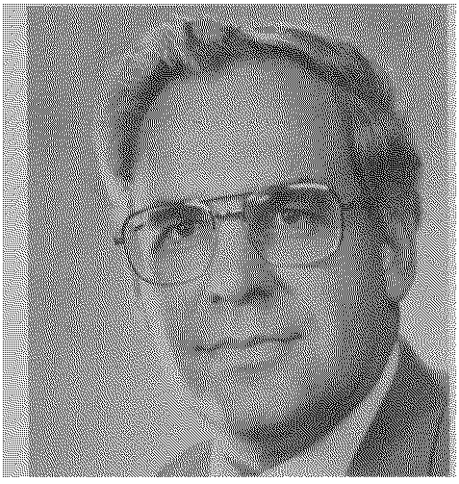


Jerrel J. Freeman, P.E.
LES President

The activities and actions of the LES are predominately governed by boards and committees instead of by the membership at large. Although these groups are comprised of members of the society, a few members who happen to be in the majority of a small committee can influence society policy and action out of proportion to their relative number with respect to the society as a whole. We must have committees; the nature of our society is such that it would be impracticable to rely on general membership meetings to accomplish the work of the LES. The constitution and by-laws of the LES were framed to provide for the formation of standing committees and to allow the formation of special ad hoc committees as the need would arise. As much as we need these committees, I believe that the practice of 'government by committee' has progressed to the point that individual members are beginning to feel estranged from the policy-making processes of the society.

At the general membership meeting in Houma, the meeting agenda was arranged to include the regular reports of the standing committees. The presentation of these reports, which have normally been presented to the Board of Directors, allowed the members present to be informed about the activities of each committee reporting and to have an opportunity to discuss the contents of these reports. Members present also had the opportunity to move for action of the society as they saw the need. The motions presented and the ensuing discussion allowed the officers of the society and the committee members present to develop a sense of the will of the membership.

The practice of having full committee reports at future general membership meetings is still in question. At the time of this writing I have not had the benefit of comments from very many of those present at the Houma meeting, but I believe the practice to be helpful and useful. Please let your chapter and state officers know your feelings on this matter. If you think this is a good practice, say so. If you think that these reports are impractical or are not the best way to use the limited time available at society meetings, please let someone on the state level know of your opinion.

I would like to talk about a different subject now. Earlier this year, on instructions from the Board of Direction, I named a committee to study and report on the formation of a Political Action Committee in Louisiana. Political Action Committees (PAC's) have been successful on the national level for many organizations, including NSPE, and are now being formed and operated with some success on the state level. I do not know if we will want to form a LES PAC , but I believe it is an idea worth investigating.

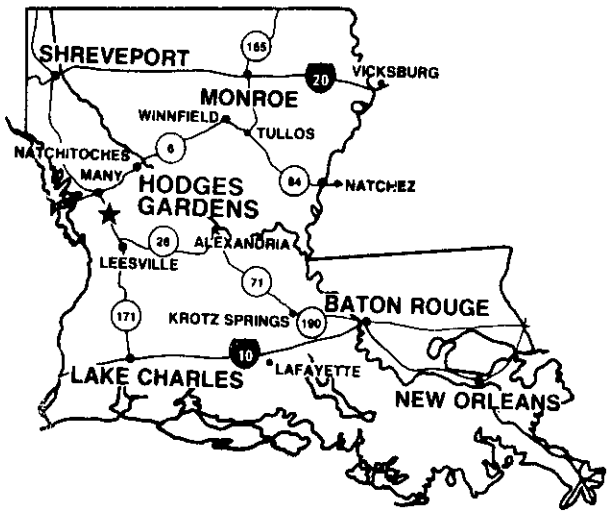
Our PAC Study Committee is presently gathering data and is expected to have at least an interim report ready by the July meeting. The committee is looking into the pro's and con's of an LES PAC as well as into the national and state laws that govern the formation and operation of PAC's. If you are knowledgeable about PAC's or are interested in having input into the decision as to whether or not to form a PAC in this state, then please offer your comments to the state office before July or better yet, be at the annual meeting at Toro Hills to participate in any discussion that takes place.

*****

In my first 'Presidential Privilege' I wrote of the continuity of the society and its activities. I pointed out that the affairs of the Society were continuous even though its officers served in cycles. It is hard to believe but we are ending another cycle. The chapters around the state are installing their new slates of officers, and the state level officers are beginning the process of transferring responsibilities to their successors.

This is the last opportunity I will have to communicate with you through the medium of the 'Privilege'. For me to list all those who have helped me and the society this year would be to risk offending someone by omitting a name from the list, but I feel that I must at least acknowledge collectively the people who have really made the society work this year. Heading my 'list of lists' has to be the people in the state office. They more than anyone else keep things going, working hard for you and for your society, as well as being very helpful in my activities. Next, I have to acknowledge my fellow officers and members of the Board of Direction. Individually and collectively they have labored conscientously in furthering the affairs of the society. Committee chairmen deserve recognition for the work they and their committees have done. A special group are my fellow employees at Waldemar S. Nelson and Company, who have been supportive of my efforts on behalf of LES and very understanding about my absences from my desk. A special thank you to Emma, my secretary, and to my wife, Marilyn, for, among many other things, helping to proofread and edit the 'Presidential Privilege.'

LES Annual Convention July 23 — 25, 1981
Toro Hills Hotel - Many



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TORO HILLS HOTEL, MANY - JULY 23-24-25, 1981

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P.O. Box 2683
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70821

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ROOMS ARE RESERVED UP TO JULY 10, 1981.

PROGRAM

Thursday, July 23

12-5 p.m.	REGISTRATION (Lobby)
1:00 p.m.	Golf Tournament, Toro Hills
1:30 p.m.	Tennis Tournament, Toro Hills
6:30 p.m.	Early Bird Cocktails Cash Bar, Pool Side
7:30 p.m.	Dinner on Your Own

Friday, July 24

7:00 a.m.	Breakfast On Your Own
8:30 a.m.-noon	REGISTRATION
8:30-11:15 a.m.	Work Session Tulip Room Legal Aspects of Engineering John C. Pickels, P.E. Pros and Con NSPE-PAC Lloyd Piper, P.E. Atchafalaya Basin Robert Schroeder, Corps of Engineers
11:30 a.m.	Luncheon
1:30 p.m.	COMMITTEE MEETINGS
1:30 p.m.	Council of Deans Meeting
3:15 p.m.	PRACTICE DIVISION MEETINGS
5:30 - 6:30 p.m.	Registration for Banquet
6:30 p.m.	Cocktails (cash bar)
7:30 p.m.	INSTALLATION BANQUET Herbert Koogle, P.E., Installing Officer

Saturday, July 25

7:30 a.m.	Breakfast
8:30 a.m.	Louisiana Engineering Foundation Meeting
9:30 a.m.	LES General Meeting
10:30 a.m.	LES Board of Direction Meeting

LADIES PROGRAM

The Ladies are free to tour Hodges Gardens on Thursday, Friday afternoon, and Saturday morning. A tour with lunch at Fort Polk is being arranged for Friday morning. A hospitality room will be available Friday and Saturday mornings with coffee and doughnuts. An auxiliary business meeting is scheduled for 10:00 a.m. Saturday morning.

The Relevancy of Engineering Education

Kenneth L. McManis, P.E.
Chairman, Engineering
Education Committee

INTRODUCTION

Engineering education should be as exciting as it is both dynamic and challenging, and its curricula must be updated periodically to keep abreast of modern developments in technology. While industry is the primary source of these developments, our engineering colleges serve as repositories of such advances in technology and have the responsibility for transmitting them to oncoming generations. Although many educators are involved with research, there remains much to do in the way of developing new classroom strategies and teaching methods to properly use instructional tools which industry has made available. Too, there remain those basic principles of science and mathematics upon which individuals build professional engineering careers.

In recent years the trend in engineering education development has moved closer to the scientific portion of the curricula which extends from the rather mundane material at one end to the highly theoretical aspects of technology at the other. Professional engineers in practice, administrators and industrial managers, many of whom are professional engineers, are aware of this apparent trend and some have voiced concern. The National Society of Professional Engineers, NSPE, has expressed its membership's concern regarding matters pertaining to the accreditation process and has suggested that industry's reputation on Accreditation Board for Engineering and Technology, ABET, accrediting committees be increased. In view of these circumstances, some industrial firms are re-evaluating their technical manpower needs and are reviewing certain job descriptions to determine whether or not these descriptions over-emphasize the degree of educational preparation required for the level of work described. Other firms are employing individuals with less technical educational preparation and up-grading them through on-the-job experience and continuing education programs.

There can be little doubt as to the importance of subject matter content and the application of well developed teaching strategies in any educational program, especially engineering since it is the art of applying principles of mathematics and science to effectively use natural resources to enhance society's standard of living. However, both subject matter content and teaching methods should be supported by teachers who are well prepared in theory and in practice. For without the ingredient of practical experience teachers may, and often do, encounter difficulty relating theory to practice. Engineering schools are presently evidencing a shortage of teachers who have practical or field experience with which to support their theoretical preparation and are having to employ, as teachers, young Ph.D. graduates to fill their instructional vacancies.

In view of the foregoing circumstances as they affect engineering education, the public, and especially the industrial community, should be concerned. In light of such occurrences the question of relevancy was raised. Does the present engineering curricula contain courses which are not relevant to undergraduate studies or are there other materials which should be included?

OBJECTIVE OF SURVEY

As previously observed, some engineers have voiced concern regarding these matters through their professional societies. In response to such concern from some of its members the Louisiana Engineering Society launched a survey in an attempt to obtain additional information pertaining to some of these matters. The primary objectives of the survey, entitled, "Relevancy of Engineering Education," were:

1. To obtain the reaction of engineers in business, industry and government as the fitness of their engineering curriculum to their areas of practice.
2. To determine the opinion of practicing engineers regarding the fitness of current engineering curricula to the needs of engineers in practice.
3. To obtain the sample group's opinion relative to the retention of engineering drawing in engineering curricula since this discipline treats the graphical language of industry.
4. To obtain the sample group's opinion as to the amount of surveying which should be retained in the civil engineering curriculum.

PROFILE OF RESPONDENTS

A total of 347 responses was received from engineers who indicated they had received the Bachelor of Science degree in one of the following engineering disciplines; Chemical, Civil, Electrical and Mechanical. A few additional responses were received from engineers who indicated they were graduated from other engineering disciplines, but the numbers were too small to be included in the analysis. Several questionnaires were incomplete and were discarded from the final number to be used in the analysis; consequently, a total of 310 completed questionnaires representing four engineering disciplines were included for this report as shown in Table A.

Even though these 310 professional engineers are registered to practice in Louisiana, less than one-half (48.5%) hold membership in the National Society for Professional Engineers (NSPE), Also, fewer than 2% of those participating in the study were females.

The mean average for the number of years of practice for this sample group was 17.5 years. Although the survey revealed a wide range in the number of years of practice among respondents within each discipline, there was little variation in the mean value for the four separate disciplines.

SURVEY RESPONSE

Approximately two thirds (65.6%) of the respondents rated the four-year curriculum (traditional B.S.) format as the most preferred type of program, with the five-year curriculum receiving the next highest rating. Some 63% rated the professional school (Professional doctors degree) the least preferable of the formats listed. When comparing these ratings in accordance with years of experience; i.e., from 0-5 years; 10-20 years; 15-20 years, etc., the four-year curriculum was rated as the most preferable among them all. The same result was obtained when comparisons were made between disciplines.

Approximately 80% of the sample group was of the opinion that the primary objective of engineering education should be to educate practicing engineers. While some respondents were of the opinion that the primary objective of engineering education should be to provide society with more research and development personnel, they were few in number.

Some 72% of the respondents preferred the curriculum under which they studied over the other educational methods suggested; however, the group's reaction to the use of special seminars and short courses was such as to indicate a greater use should be made of this method to keep engineers abreast of new developments. In response to the fitness

of the "current curriculum" to their needs, the participants rated it "fair" more often than good or excellent.

Despite the high percentage of responses favoring the curriculum under which the individual engineers had studied, all of the various educational methods listed received some good and excellent ratings.

In rating the fitness of "your engineering curriculum" to your professional needs at consecutive five-year periods of your practice, the trend in the ratings clearly indicates that most participants were of the opinion that their engineering studies adequately prepared them for the first ten to fifteen years of their practice. Whereas most of the respondents whose years of practice was greater than fifteen expressed the opinion that their immediate curriculum did not adequately prepare them for their present level of work. This was indicated by rating this item from "fair" to "poor."

Since engineering practice encompasses such a wide range of activities, one would expect to find certain areas of practice in which specific course materials would seldom be used. Therefore, it was not alarming to find a few individuals who felt that some of their engineering courses were of little value to their particular area of practice.

ENGINEERING DRAWING

In response to the statement as to whether or not engineering drawing courses should comprise a portion of engineering curricula, an overwhelming majority of respondents, 92.4 percent, were of the opinion that it should be retained. Chemical engineers were more prone to delete drawing from their curriculum. Ninety percent (90%) of those who had been graduated from engineering schools in Louisiana supported its retention in engineering education programs. Ninety-seven percent (97%) of those who had twenty or more years of practice replied yes regarding this matter. While eighty-seven percent (87%) were of the opinion that one or two drawing courses should be retained in engineering curricula, fifty-six percent

Continued on page 18

Table A

Discipline	No. Received	Percent of Total	Mean Years of Practice
Civil	135	43.5	18.9
Chemical	26	8.5	17.6
Electrical	77	24.8	16.7
Mechanical	72	23.2	15.1
TOTAL	310		

Fall 1981 Engineering Management Courses at LSU

FACULTY

The courses will be taught by regular faculty members of the LSU College of Business Administration and engineering or by able, qualified professors from other universities in the state.

CERTIFICATE

Upon completion of four acceptable courses and a certificate application form, the participant will be awarded a Certificate in Engineering Management by the Division of Continuing Education. An Advanced Certificate will be awarded to students who take a total of six courses.

COST

The registration fee per participant is $200 for each course and includes the cost of textbooks.

REGISTRATION

To insure that each student will have an opportunity to participate in discussion, enrollment in each section will be limited to 30 students.

Class sessions will be held in the University Medical Center at New Orleans, on the Baton Rouge campus, and in other cities throughout the state where there is adequate demand. To preregister for the classes complete the attached form and return with $10 preregistration fee. Fee is applicable toward the $200 total registration fee and will be refunded if class chosen is not offered.

Classes will be organized Monday, August 17, 1981 in Room 122A, LSU Medical Center, New Orleans - 7:30 PM and on Tuesday, August 18, 1981 in Room 3136 CEBA Bldg., LSU, Baton Rouge - 7:30 PM.

AVAILABLE COURSES

Course A — Project Management with CPM/PERT
Course B — Engineering Economy
Course C — Financial Decision Making
Course D — Operations Research for Engineers
Course E — Basic Engineering Statistics
Course F — Cost Estimating & Engineering and Management
Course G — Engineering Management and the Law
Course H — Federal Income Taxation

Please complete the following form and return it with the $10 preregistration fee to the address below if you are interested in the fall program. (Classes will begin during the week of Aug. 31, 1981).

Name _____

Address _____ Phone _____

City & State _____ Zip _____

MAIL FORM TO:
Dr. L. Mann
Industrial Engineering Dept., CEBA Bldg.
Louisiana State University
Baton Rouge, Louisiana 70803

I wish to preregister for the course indicated. (Please show your first choice with a 1, second with a 2, etc. Show a single location choice only.) I understand if my first choice is not offered, I can request a refund of the $10 preregistration fee. This condition also applies if the class is scheduled on a night I cannot attend.

COURSES OFFERED

( ) Project Management
( ) Engineering Economy
( ) Finance
( ) Operations Research
( ) Engineering Statistics
( ) Cost Estimation
( ) Engineering Management and the Law
( ) Federal Income Taxation

LOCATIONS

( ) Baton Rouge
( ) New Orleans
( ) Monroe

I cannot attend on the following nights:
M__T__W__Th__

Co-sponsored by the College of Business Administration, College of Engineering, LSU, and Louisiana Engineering Society.

LES SPRING MEETING IN HOUMA

The LES Spring meeting held April 9-10-11 at the Holiday Inn Holidome in Houma was attended by 86 engineers and 48 ladies.

Golf, tennis and horseshoe tournaments were held Thursday afternoon with small attendance: eleven golfers, eight tennis players and three horseshoe participants.

The early seafood dinner Thursday evening at Sheriff's camp was thoroughly enjoyed by over 120 ladies and men. The Bayou chapter with contributions from some 43 individuals and firms had enough oysters, crawfish and crabs for 250 people. Harold LeRay, P.E., chairman of this event, and his committee did an outstanding job cooking, serving and entertaining the group.

Engineering students from Louisiana Tech, Tulane, LSU, UNO, USL and Southern presented excellent papers at a session Friday morning. Ken McManis, P.E., engineering education committee chairman, moderated the session.

Committee meetings were held after the student paper presentations in the morning and the practice divisions, nominating committee, and the LEF Board of Directors met Friday afternoon.

Carl H. Thomas, P.E., chairman of the Honors and Awards committee, presided during the award presentation at the awards banquet Friday evening where 169 engineers and ladies attended. Five engineers were honored for their outstanding service to the society and the profession. (Photographs shown). Shepard Perrin, P.E., executive director Louisiana Offshore Terminal Authority, presented an interesting program with slides and words about the Louisiana superport, scheduled for completion in May.

Thirty-six ladies enjoyed the Bayou Petit Caillou tour with lunch at La Trouvaille. They held a state auxiliary meeting Saturday morning. The ladies discussed and exchanged information among the various chapter auxiliaries.

The joint breakfast Saturday morning was attended by 54 ladies and men. The golf, tennis and horseshoe prizes were awarded. The winners were: Charles Robards, P.E., Lloyd Hoover, P.E. and David Buck, P.E. won first, second and third in golf; Doc Spears and Marilyn Freeman won first in the men's and ladies tennis; and Don McCullough, P.E., Raymond Guidry, P.E., and Bill Wintz, P.E., were first, second and third in the horseshoe contest. Don Richardson, P.E., president of the Shreveport chapter, received the 1980 membership retention contest banner on behalf of the chapter from Jerrel J. Freeman, P.E., president.

The Society is indebted to James E. Goodwin, P.E., general chairman of the convention and Mrs. Dee McCullough, chairperson of the ladies' activities, and their committees for helping to make the meeting so successful and enjoyable.



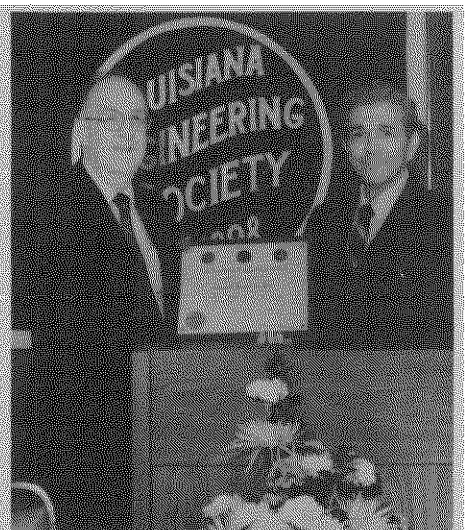
Marion Chaney, P.E., right, receiving the Andrew M. Lockett Award from Edward W. Midlam, P.E.



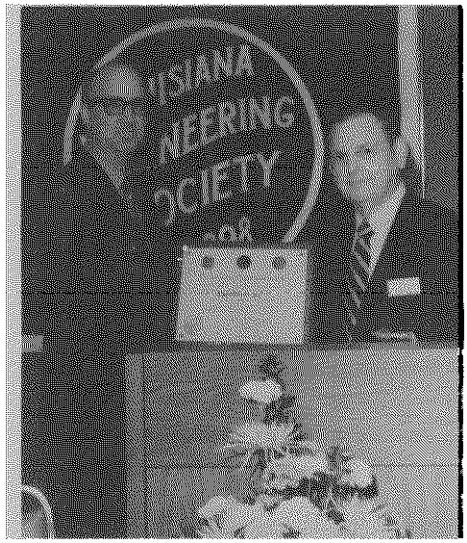
Dale T. Hunn, P.E., right, receiving the F. Hugh Coughlin Young Engineer Award from Kerry J. LaBauve, P.E.



James L. Meyer, P.E., right, receiving the Leo M. Odom Professional Services Award from David Johnson, P.E., left, and Leo M. Odom, P.E., center.



Lamon L. Moody, Jr., P.E., right, receiving the A. B. Paterson Award from Malcolm L. Hurstell, P.E.



J. Bres Eustis, P.E., right, receiving the James M. Todd Technological Accomplishment Award from Pierre A. Lapeyre, P.E.

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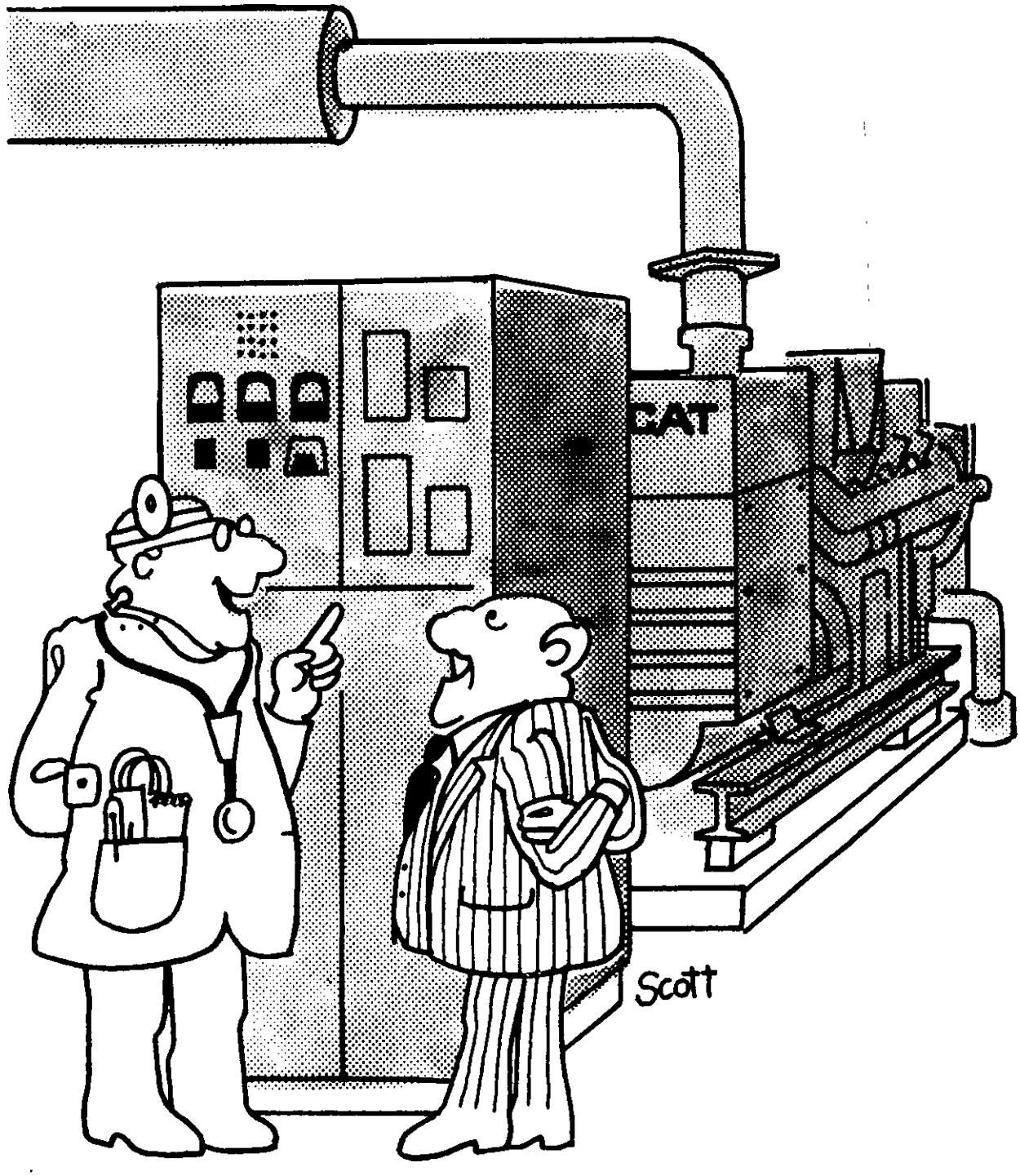

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Engineering and Progress

Leon J. Richelle, Chancellor
University of New Orleans

**Keynote speech, Louisiana Engineering Society's 1981 Engineers Week Joint Luncheon, The Saxony, 1717 Canal Street, Wed., Feb. 25, 1981, 12:00 noon.*

I am genuinely honored to be your guest today, and I appreciate this opportunity to say a few words to you. As engineers, and members of the Louisiana Engineering Society, you are among the important professionals of this community and state, and as such you are important citizens. Both as citizens and as professionals you have an interest in education and in educational institutions. This is an interest that you and I have in common.

Since all of you know a bit more about engineering than I do — my fields being biological sciences and medicine — I shall not bore you with my elementary concepts of your professional expertise. I shall try not to trespass too far onto your turf. However, in deference to your theme, I shall attack the subject of "Engineers Plus Opportunity Equal Progress." I presume this means that if given the opportunity engineers will insure that we make progress.

Certainly engineers may take credit for a very large portion of the progress the human race has made to date. The Ancient Egyptians would have starved had the engineers among them not designed and constructed floodgates and irrigation canals, and their glories might have been forgotten had they not learned to hoist the heavy blocks with which they built their Pyramids. We would have few of our modern marvels of technology were it not for our engineers. It is accurate to say, I suppose, that we would not even have the wheel.

Nevertheless, even while basking in the radiance of their successes, engineers sometimes feel the chill shadows of passing clouds. They have sometimes failed. Now and then a roof collapses under a snow load. Now and then a million or so automobiles must be called in because of some design deficiency. Once in a blue moon a bridge plunges into a bay. But this is not really what I am talking about. We all know that there are acts of God which nobody can foresee, and we know that human beings will always be guilty of occasional errors and omissions. Even medical doctors make mistakes. They therefore carry mal-practice insurance, like engineers. What I am talking about is the general public image of the profession. While engineers in general have usually enjoyed great prestige, they share with educators the distinction of having fairly recently been regarded by many citizens with what might well be called a jaundiced eye.

Just about twenty years ago, a West Coast journalist wrote in his column that while some of his best friends were engineers, he did not want his daughter to marry one. What brought this on was a civic battle over an elevated expressway, along the Embarcadero in San Francisco. I have heard that there was a similar battle here in New Orleans, during which a few of you might have come under fire. The preservationists and the environmentalists of the past two decades have often been vociferous in criticizing engineers. In their loudly proclaimed opinions, most engineers are barbarians who will drain our wetlands, dredge our scenic streams, destroy our fish and wildlife and level the Rocky Mountains, happily and willingly, if they can collect a fee for doing so.

As I indicated earlier, educators have had their bad press too. There has long been a widespread notion that they concern themselves so with teaching methodology that they never learn anything worth teaching. Businessmen also have had their ups and downs, sociologically as well as financially. There are many who see them as Sinclair Lewis saw Mr. George F. Babbitt. We have colleges of engineering, colleges of education, and colleges of business in most of our universities. I call this fact to your attention in order to lead into the essence of my remarks.

You know, and I know, that engineering is not one of the easiest of college curricula. It is, in fact, one of the most difficult and most demanding. In order to cope with it successfully, a student must have well above average intelligence and must be willing to work hard. Also, he must have sound academic preparation. The young man or woman who can earn a degree in engineering and successfully practice the profession could very likely achieve distinction in any of several other rewarding careers. In a word, engineers as a group or as individuals are among the most intellectually capable of our citizens.

They ought, therefore, to be among the best educated of our citizens and as such be among the leaders of our society. They should not be merely highly trained in their technological specialties. If an engineer is simply a highly trained technologist, he is likely to do much more following than leading. He may be an acknowledged master of doing a thing correctly, but the thing that he does might be the wrong thing to do. There is no right way to do a wrong thing, his critics have liked to say. What they mean is that progress can be backward as well as forward.

If we, as human beings and as citizens, are to agree on what constitutes backward progress and what constitutes forward progress for our society as a whole, and therefore ultimately for each of us as individuals, we must be able to reach some agreement on our goals. We must be able to agree on what is good for us, in general, and what is bad for us. In order to do this we must share a common viewpoint of our traditions, our culture, and the kind of world we wish to live in together in the future.

Therefore, we must share a common knowledge of our traditions and culture, and a common understanding of our opportunities. We must have in common certain elements of a basic education. Even though we must be specialists of different types in order to practice our various professions, we must be familiar with disciplines that lie outside our specialties, and with the methods of inquiry that distinguish those various disciplines. In the humanities, for example, the student learns to explore the realm of ideals and values. In the sciences, he focuses on description, measurement, and laboratory testing. The social sciences may combine both approaches. A student acquainted with various analytical styles through his general education curriculum will be better prepared to pursue his own continuing self education. This is the ultimate goal of what is called a liberal education.

In our universities today we face a serious problem in attempting to develop our students into liberally educated men and women while at the same time preparing them for particular professions. There is too little time, it seems, in the standard four-year undergraduate curriculum to do both these things very well. Lengthening the time to five years or to six years would help, of course, but for many this is too expensive a proposition. Since engineering is already a very demanding curriculum as far as time and effort are concerned, it is hardly feasible to impose on the engineering student an increased academic load.

Continued on page 14

POTPOURRI

R. C. "Doc" Spears

Executive Secretary

Louisiana Engineering Society

1981-1982 Ballot

A ballot for election of officers and approval or disapproval of a constitutional amendment to the constitution was mailed to all voting members on May 21. Please vote and return your ballot prior to June 25, 1981.

The nominating committee and Board of Direction slate of officers for 1981-82 are: Lamon L. Moody, P.E., first vice president; Dudley Hixson, P.E., second vice president; Henry E. Markel, P.E., secretary-treasurer; John W. Roach, P.E., state director; Ted J. Povinelli, P.E., state director; and E. E. "Buddy" Moncla, P.E., national director.

Officers remaining on the Board for 1981-82 are John E. Ritter, P.E., President; A. Andre Amy, P.E. and Charles S. Goodrich, P.E., state directors.

The proposed constitutional amendment requires more member and chapter representation on petitions to change the constitution. The old rule allows 15 voting members to present a petition. The proposal requires 60 members from at least four chapter areas to submit a petition.

Place your ballot in the plain unmarked envelope furnished. The unmarked envelope shall be placed in the preaddressed envelope, sealed and marked on the back with printed or typed name and signature. In the past, many ballots have been received without the name and signature on the back of the outer envelope and could not be counted.

AVIS Discounts Increased

NSPE has a new discount agreement with AVIS for car rentals. Society members are now eligible for a 40% discount from normal time and mileage rates. To qualify for the discount, members need only present their NSPE membership cards with the number A622400 written along the bottom.

NSPE Scholarship Program

This year, 122 students have been awarded engineering scholarships and grants by the National Society of Professional Engineers (NSPE). Recipients were selected from among 1,342 applicants and were judged from additional standard test scores, essays, transcripts and extra-curricular activities. Scholarships range from $1,000 for one year to four-year full tuition scholarships in excess of $15,000. This program, administered by the NSPE Educational Foundation, is the largest of its type in the U.S.

Patricia D. Elliott, Gretna, was offered a $1,000 NSPE-grant in the 1981 scholarship program, which she has accepted. Miss Elliott was one of LES's 25 state winners submitted to NSPE for consideration.

The NSPE Educational Foundation makes arrangements with the college or university Miss Elliott selects, then sends $1,000 to the school for crediting to her account. She is required to enroll in an engineering curriculum.

Faculty and Facilities Challenge Engineering Education

Declines in engineering faculty and teaching facilities, particularly laboratory equipment, have been cited by NSPE as the nation's two greatest challenges to engineering education.

In a recent letter to Congress and the Reagan administration, NSPE president William A. Cox, Jr., P.E., points out that faculty shortages result from non competitive salaries and insufficient numbers of students undertaking the graduate study required for teaching. Facilities suffer from lack of capital investment. Currently there are 1,800 unfilled faculty positions. Only 2,751 engineering doctoral degrees were awarded in 1980, a decrease of 1,023 from 1972.

To help correct these problems, NSPE supports federal funding for engineering fellowships or traineeships to increase the output of engineering doctorates. At the same time, federal assistance is needed to provide modern facilities and modern laboratory equipment for engineering schools.

New Orleans is Number One Port in 1979

The Port of New Orleans led the nation in waterborne commerce during 1979, according to statistics just compiled by the U.S. Army Corps of Engineers.

New Orleans handled some 167.1 million short tons, up about 6.5 million over the previous year. New York, at 163.6 million tons, relinquished the title of number one port to the Crescent City.

The Port of Baton Rouge gained over 2 million tons, with a total of 76.7 tons of shipping, while Lake Charles slipped slightly to 24.5 tons, down from 26.6 tons in 1978.

More detailed statistics of Louisiana's three major ports will be available to the public later this year in the Corps publication, *Waterborne Commerce of the United States, Calendar Year 1979, Part 2*, at a cost of $3.50. The volume also contains statistics on other Gulf Coast ports, waterways and the Mississippi river.

Engineer Selection Board

A special ballot was mailed to all registered professional engineers in the state on May 6 to elect two LES members and two CEC/L members to the Engineers Selection Board. Again this year, the LES and CEC/L ballots were mailed together. Principals of firms used both ballots and individual engineers used the LES ballot.

The nominees on the ballot were:

Term July 1, 1981 - June 30, 1982

Blaise Carriere, P.E., New Orleans LES

Vincent L. Goodman, P.E., Metairie CEC/L

Term January 1 - December 31, 1982

Kenneth A. Perret, P.E., Baton Rouge LES

Hugo A. Marrero, P.E., Baton Rouge CEC/L

Spaces for write-in candidates were available on the ballot. The return deadline was June 1, 1981.

Professional Liability Seminar

A one-day seminar on professional liability is planned for New Orleans on November 18, 1981.

Carefully selected topics will arm you with knowledge that could help your firm avoid professional liability claims and better defend against the claims that do occur. In fact, this course is so thorough in the areas of loss prevention and professional liability that it is approved by both NSPE and AIA for granting of CEUs. The seminar benefits engineers by making available charts, graphs and studies of professional liability claims and loss prevention information accumulated by Schinnerer since the organization of its Professional Liability Insurance program in 1957. They are updated constantly and contain the very latest and most vital information available. Each program also includes topics of specific interest to design professionals in their own region of the country.

Specific details will be coming later.

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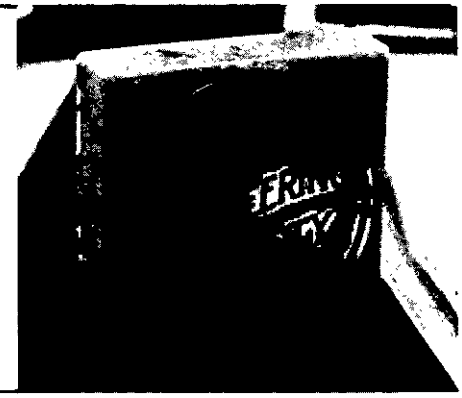

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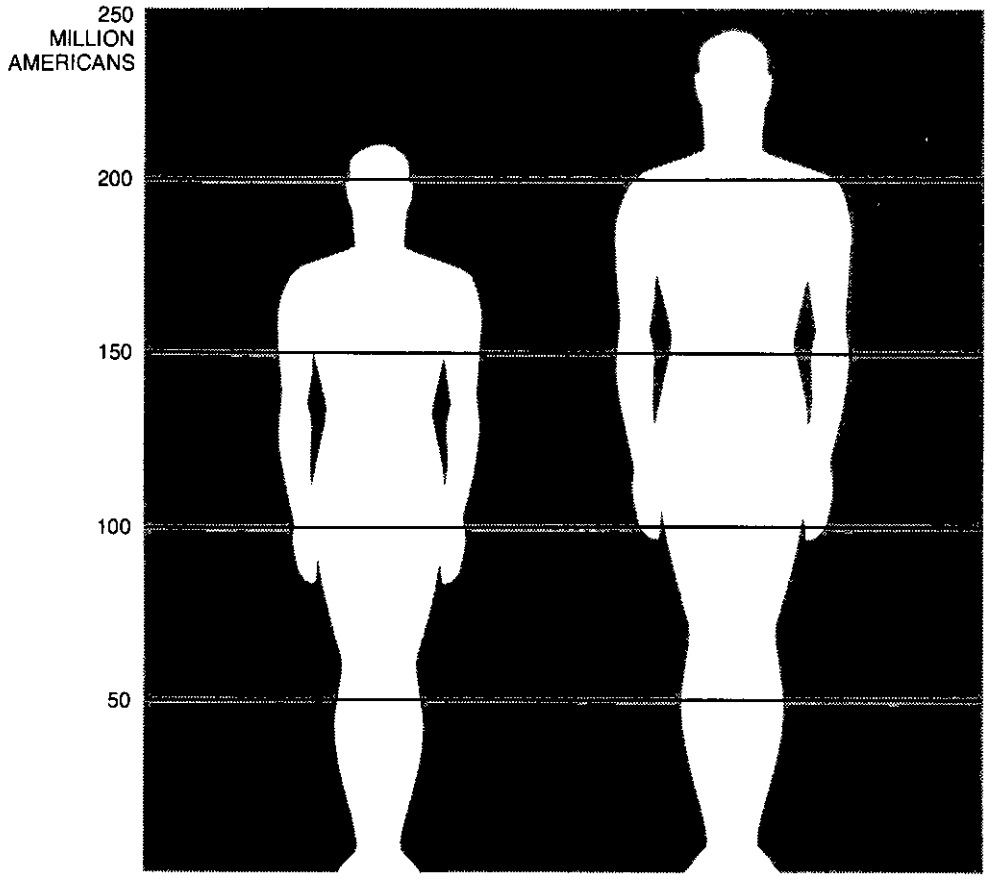

Where will the energy come from?

By the year 2000, there will be 40 million more Americans. That's 40 million more Americans who'll be needing more electric power for more jobs and more housing. Even if we work hard at conserving our energy sources, we'll still need at least twice as much electric power in twenty years as we do now. And if we don't conserve, we'll need three or four times as much. So, we'd better conserve what we have and we'd better make full use of every available energy source. And that includes nuclear power and coal.

Uranium and coal are our most abundant raw energy sources and can be easily utilized to generate electricity. And nuclear power is also one of our most economical energy sources. By 1985, it is estimated that it will cost the average Louisiana resident about five cents per kilowatt-hour for electricity generated with nuclear power as opposed to about ten cents per kilowatt-hour for electricity generated by fuel oil or natural gas. Coal is estimated to be in the range of seven cents per kilowatt-hour.

No single source of energy can possibly supply all the electric power we will need. Conservation and a balance of nuclear power and coal will be essential in meeting that need.

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VLIET'S VIEWS



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

Our new registration law has transitional provisions that will expire September 12, 1981. In particular, persons who apply for registration as professional engineers before that date are governed by the statutes and rules of the Board that were in effect on September 11, 1980. For some persons who are not graduates of engineering or engineering related science and technology curricular now may be their last opportunity to become a registered professional engineer in Louisiana. For others who are college graduates with many years of experience, it may be the last opportunity to become registered without taking the fundamentals of engineering examination.

The National Council of Engineering Examiners, NCEE, has announced that in April 1982 it will only provide examinations in the four major branches, chemical, civil, electrical, and mechanical engineering, and in the sub-branches of sanitary and structural engineering. In October 1982 all NCEE examinations will be offered. After that, examinations in the less popular engineering branches will only be offered once a year. Consequently, now is the time for a person who is qualified to apply for registration in one of the less popular branches if he is to be considered for examination October 31, 1981. Actually, there is no fixed deadline for filing the application; however, there is little hope an application can be processed in time to be considered for that examination if it is filed after September 1, 1981.

Many of you know I have been planning to retire from the Board so that I may devote more time to Tulane and other activities. I have enjoyed my almost sixteen years with the Board, and I am proud to have been its Executive Secretary. The Board conducted a nation-wide search for someone to replace me and received responses from many outstanding and well qualified engineers. From these, Paul L. Landry of Baton Rouge was selected. He is now a full-time employee of the Board and will assume all duties and responsibilities of the position on July 1, 1981.

PROGRESS

Continued from page 11

While not the only trouble spot in modern academia, our schools and colleges of engineering do cause us great concern. The demands of the professional accrediting agencies and the demands of the profession itself leave little room in the engineering curriculum for requirements or electives in non-technological or non-scientific fields. On the other hand, as educators, we on the faculties of the universities find it difficult to certify a total specialist, no matter how impressive his achievement, as a truly educated person. Somehow this problem must be solved, or as the demands and complexities of technology increase the engineer — like the accountant, the chemist, and the doctor of medicine — will be merely a highly trained illiterate when awarded his degree.

At the universities there now is a trend back towards general degree requirements and a basic, core curriculum for all undergraduate students, regardless of their chosen major fields. I think it is a very healthy trend. I would like to ask for your sympathy and understanding. It is you professionals, after all, who put pressure on the professional accrediting

Continued on page 19

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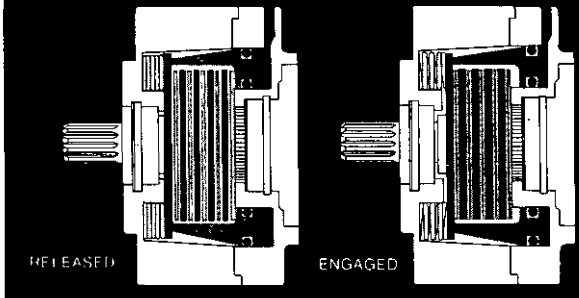

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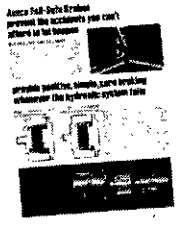

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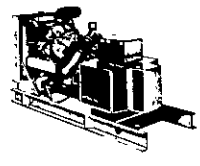

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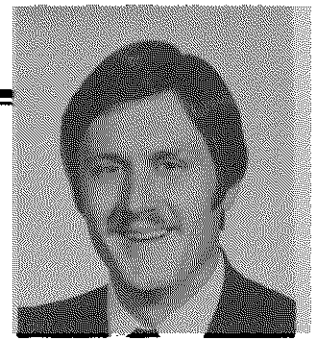
Warren J. Wilder
CEC/L Executive Director



ACEC Annual Meeting Highlights

The 1981 annual meeting of the American Consulting Engineers Council was held recently at Caesar's Palace, Las Vegas, Nevada. CEC/Louisiana was well represented with seven members and its Executive Director in attendance. The Board of Directors met the first two days to discuss and vote upon several items of business. One of the items that drew much debate was the decision whether or not ACEC should join the American Association of Engineering Societies (AAES). The AAES is an "umbrella" organization of engineering societies. However, it was pointed out that the society is oriented toward the technology of engineering, while ACEC is devoted to the business management of the engineering firm. It was also ascertained that one engineering society would have 40% of the total voting power of the AAES. The Board of Directors subsequently voted NOT to join the AAES.

In other business, the Board voted favorably on a proposed Public Relations Master Plan, which has been developed to respond to the problems faced by the consulting engineering profession in the most effective manner given the restraints of time and budget. The plan will involve consulting engineers' identity and image enhancement, public relations, via magazine and newspaper article placement, media tours, and information to the media. The plan will be studied as to its effectiveness. This will be done in various ways including surveying target audiences, surveying member organizations, tracking of business volume, and an analysis of inquiries generated by a referral system within the PR plan.

The Board then adopted an important energy policy. It is printed below in its entirety.

ENERGY COMMITTEE'S PROPOSED ENERGY POLICY of the American Consulting Engineers Council

Energy and its impact on the U.S. economy, productivity and social objectives is now and will continue to be a significant national issue.

Congress and the Executive Branch formulate legislation and regulation. The marketplace creates needs. The ultimate solutions, however, must be derived by the engineering professions.

An important first step toward energy independence must allow the free market economy to establish energy prices, thus encouraging conservation and stimulating development of alternative energies.

Engineers are disciplined objective professionals. Engineering firms accept the inflation-fighting responsibility for wise stewardship of their clients' capital and energy consumption. Value engineering and life-cycle cost analyses are tools engineers employ to arrive at sound decisions for their clients' energy needs.

American Consulting Engineers Council and its 3700-member engineering firms, with more than 100,000 engineers, scientists, and staff, are responsible for facility energy design. As such, they deal in their daily practice with those forces which impact energy consumption in our free enterprise system. If it's energy, it's engineering.

Based on their collective experience, ACEC believes that the government energy policies should, without further delay:

- Remove unnecessary regulatory and governmental constraints which frustrate accomplishment of vital energy needs and produce inflationary delays thereby accentuating the energy crisis and impacting adversely on a sound U.S. economy. Particularly targeted should be unsubstantiated environmental restrictions and exploration and development prohibitions on federal lands. Review time frames should be tightened and strictly enforced or defaulted.
- Proceed with concurrent construction of nuclear power plants and nuclear waste isolation facilities designed with appropriate controls for safety and accelerate the research and development of advanced nuclear technologies.
- Temper unproven environmental constraints which concurrently discourage use of our nation's abundance of coal by electric utilities and industry. Tailor controls to specific area concerns and coal qualities. Best Available Control Technology (BACT) is not necessarily BEST — especially when cost/benefit is analyzed.
- Remove Residential Conservation Service energy audit requirements and change limitations from the National Energy Conservation Policy Act Amendments of 1980 so that they can be performed without consumer-subsidized utility competition. Offset true costs with tax credits.
- Decontrol energy pricing to encourage investment of private capital for domestic exploration and development of oil and gas, and conversion of domestic oil shale or coal resources to gaseous or liquid fuels with due concern for water resource allocation.
- Motivate energy conservation in new and existing building construction concensus standards, specifically the latest ASHRAE standards with emphasis on the utilization of advanced engineering methodologies, including computer modeling to calculate energy demands and consumption.
- Expand federal incentives for research, development and demonstration projects of responsible energy conservation and alternative energy technologies, until they are deemed commercially viable in the private sector.
- Create cost effective energy efficient traffic control and mass transit systems.
- Channel capital investment into energy conservation retrofit of existing commercial and industrial buildings.
- Review tax laws and utility rate structures with the objective of expediting capital formation required for both energy conservation and development of alternative energy sources. All residences should be eligible, including vacation or investment properties.
- Increase public education for both energy conservation and energy supply — short and long-range — to eliminate the present consumer credibility gap.

The energy problem and its effect on the U.S. economy is detrimental to our nation's domestic and foreign relations. The ultimate solution must and should rest with the private sector. However, Federal policies — taxation, domestic trade regulation, environmental regulations, foreign relations, etc. — all impact on how the private sector implements the solution in the best interest of the public. Congress is obliged to establish policies which the private sector can rely upon.

With responsible Federal policies in place, the private sector and its engineering professions can confidently approach solving the problem.

In presenting these, our specific concerns, the American Consulting Engineers Council offers its experience, counsel, and support to government and the public toward establishing these much-needed energy policies.

Finally, the Board adopted the following policy on the Reagan Economic Recovery Program and is prepared to assist the administration in its objectives.

ACEC Policy on Reagan Economic Recovery Program

1. *Whereas* the American Consulting Engineers Council currently represents over 3,700 firms involved in the practice of engineering planning and design throughout the United States; and

2. *Whereas* through their involvement with federal funding programs, regulatory activities, contract management and procurement, the Council's members have both extensive experience in intergovernmental relations, grant administration and regulatory affairs and a keen sensitivity to the critical need for improvements in these and other areas; and

3. *Whereas* the Council's members, like business and professional persons in other economic sectors, are deeply concerned over the impacts of inflation, the substantial proliferation of federally-funded programs and services (with the attendant usurpation of state and local governments' decision-making role), the increasing burden of regulatory and paperwork requirements and the serious inequities in the present tax structure; and

4. *Whereas* the Council recognizes that a healthy national economy must take priority over special and parochial interests in this time of serious economic crisis; and

5. *Whereas* the Council understands that it is the Administration's intent to spread the impact of federal spending reductions across all interest areas as fairly and equitably as possible; and

6. *Whereas* the economic recovery plan proposed by President Reagan embodies the precepts of restraint in growth of government, reliance on the private enterprise system, consolidation of federal programs and other policies long supported by the Council,

Now therefore be it resolved that the American Consulting Engineers Council strongly supports the Administration Economic Recovery Plan, including federal spending and personnel reductions, personal and corporate tax relief, grant and regulatory reform and reliance on private enterprise; and

Be it further resolved that the Council further supports activities currently underway in the Congress of the United States that will complement and expedite the Administration's efforts to foster economy, efficiency and integrity in government; and

Be it further resolved that the Council and its members are prepared to actively assist the Administration in its objectives, through participation in advisory bodies, recommendation of grant and regulatory reform priorities and involvement in the activities of interassociation groups.

Aside from business, Consulting Engineers Council of Louisiana received the ACEC Membership Award for 1981 for having recruited the greatest number of new members for 1980-1981. Since this meeting marked the beginning of the Silver Anniversary of the formation of ACEC, CEC/L was honored with a silver plaque as one of the 10 founding member organizations. CEC/L was known then as the Gulf Institute of Consulting Engineers.

Everyone who attended had a wonderful time trying to beat "the system" in the various casinos. Others were able to see some of the greats such as Wayne Newton, Dolly Parton and Tom Jones.

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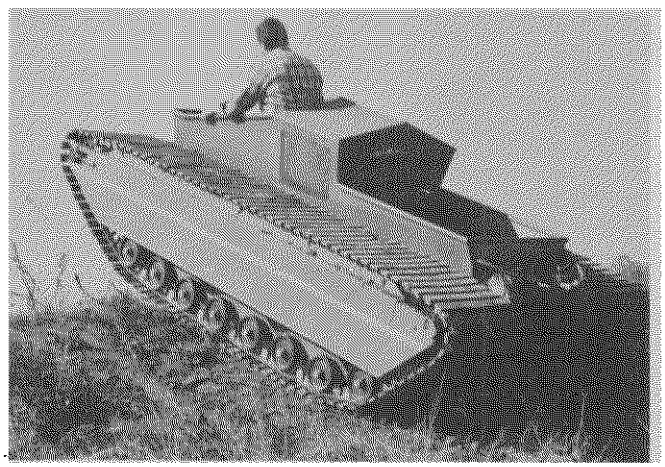

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RELEVANCY

continued from page 7

(56%) recommended a minimum of two courses of two semester credits each for the undergraduate program.

LAND SURVEYING

Some seventy-six percent (76%) of the respondents were of the opinion that surveying should remain in the civil engineering curriculum. Ninety-three percent (93%) of the civil engineers supported the retention of surveying in this curriculum. Fifty-seven percent (57%) recommended two three-semester hour courses while twenty-five percent (25%) recommended one or two courses and no one recommended three.

SUMMARY

In summary, the four objectives of the survey were achieved. The study confirmed the fact that most senior engineers in industry, business and government do not have as high a regard for current engineering education programs as they have for those which they studied. Many respondents expressed the opinion that their course work was more relevant to engineering practice than what is being taught today; they seemed to feel that they were better prepared for practice at the time of graduation than those who are being graduated from current programs. In view of these findings there seems to be a need for more participation on the part of practicing professional engineers in planning and developing engineering programs. This seems especially true at a time when technological changes are occurring so rapidly and when this nation is witnessing strong competition from abroad for engineering and related expertise. Perhaps one of the various means which might be developed between industry and education to maintain the desired level of relevancy in engineering education would be to establish a plan whereby engineers from industry would exchange work roles with those of education periodically.

A majority of the respondents were of the opinion that the primary purpose of the undergraduate degree program in engineering education should be to prepare one for practice. While admitting the desirability of introducing materials pertaining to recent technological developments and supporting methodologies into current engineering studies, they expressd concern relative to the amount of time which might be devoted to these topics in a four-year degree program.

The sample group expressed a very positive opinion regarding the significance of engineering drawing and its role in the professional preparation of engineers. Its significance as the universal language of industry and its use throughout the business world was frequently mentioned. For these reasons more than 90 percent of the respondents favored the retention of drawing as an integral part of the undergraduate program. An equally strong voice was expressed by civil engineers relative to the retention of surveying in their curriculum.

As members of managerial teams of industry and business, many senior engineers emphasized the importance of teaching basic engineering fundamentals which serve to equip one for professional practice. Despite this apparent level of concern regarding the relevancy of engineering education, their influence in such matters may be limited due to the fact that many of them are not as active as they should be in the national engineering organizations where decisions affecting education are often made.

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EngiNEWS

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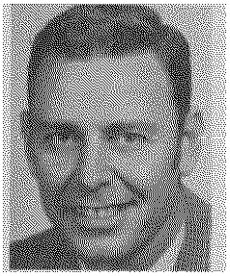

Robert G. Graves, P.E., longtime LES member, has assumed his duties as Director, Department of Public Works, Baton Rouge.

Graves is a native of Mississippi and attended high school in Hammond and attended Southeastern Louisiana College for two years prior to enrolling at LSU. He graduated from LSU with a B.S. degree in civil engineering in 1960. After graduation he started work with the Louisiana Department of Highways and was DOTD Director of Maintenance and Field Operations until his appointment by Mayor Screen to his present position.

William J. Dawson, Sr., P.E. IN MEMORIAM

The Society was saddened to hear of the death of William J. Dawson, Sr., P.E., age 56, on May 5, 1981 in Baton Rouge.

He was a civil engineer and president of Dawson Engineers, Baton Rouge. He was a native of Independence County, Arkansas and a resident of Baton Rouge for the past 38 years. Mr. Dawson was a U.S. Marine veteran of World War II.

He joined the Louisiana Engineering Society and National Society of Professional Engineers in 1975 and served on the Engineers Selection Board in 1977 on a Governor appointment.

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

Arthur C. Porter, P.E. IN MEMORIAM

The society is saddened to hear of the death of Arthur C. Porter, 64, non-resident Life Member from Forth Worth, Texas on March 27, 1981.

Mr. Porter was a graduate of Tulane University with a B.S. degree in mechanical engineering. He first joined LES in 1939 as a Tulane student member, was elected junior member in 1940, member in 1945 and Life Member in 1970.

He was employed by General Dynamics and was a member of the American Society of Lubrication Engineers.

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

Thurlow W. Parish, Jr., P.E. IN MEMORIAM

Thurlow W. Parish, Jr., 79, a resident of Baton Rouge since 1947, died on May 14, 1981.

He retired as chief of engineering for the Louisiana Office of Highways after 43 years of service. He was a past president of the Louisiana Highways Engineering Association, member of ASCE and was an honor graduate of the school of engineering, Louisiana Tech University. Mr. Parish was a registered civil engineer in Louisiana.

The State Board of Registration extends its deepest sympathy to his family.

PROGRESS

Continued from page 11

agencies, who in turn put pressure on the universities. I do not feel that we should be adversaries in this matter. My hope is that we shall unite in a common cause.

Our engineering students, as I have already observed, are among the most capable students who enroll in our universities. Engineers plus opportunity certainly should equal progress. Opportunity in this instance should include the opportunity for liberal higher education. If that can be provided bright students, I am confident that the progress will be forward, and that the engineering profession will enjoy the prestige it deserves.



Shown participating in the presentation of the *Engineers Week Proclamation* from the Mayor of the City of New Orleans are left to right Tom Hudson, P.E. (ASPE); Chuck Prewitt, P.E. (ASME); Professor R. Spronck from the College of Engineering of the University of Liege, Belgium; Don Preston, P.E. (ICEE); Dr. Leon Richelle, new Chancellor of UNO and featured speaker at the New Orleans Chapter's Engineers Week Luncheon; Bob Cook, P.E. (LES); Henry Markel, P.E. (LES); Col. Herbert Haar, P.E. (SME); Earl Cottrell, P.E. (ASCE); Paul Boriskie (SPE); and Roy Chauvin (IES).

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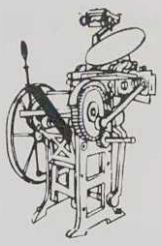

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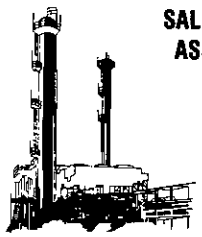

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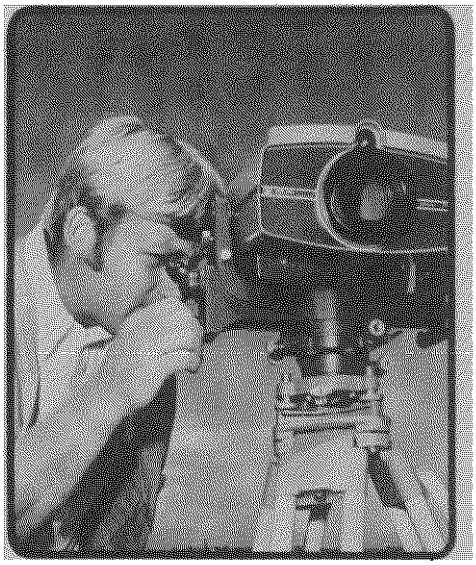

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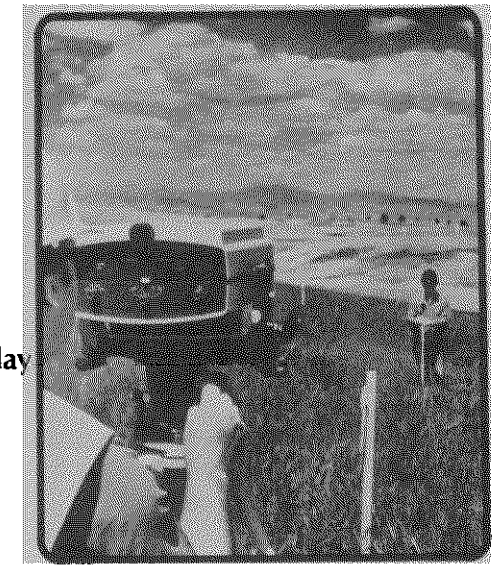

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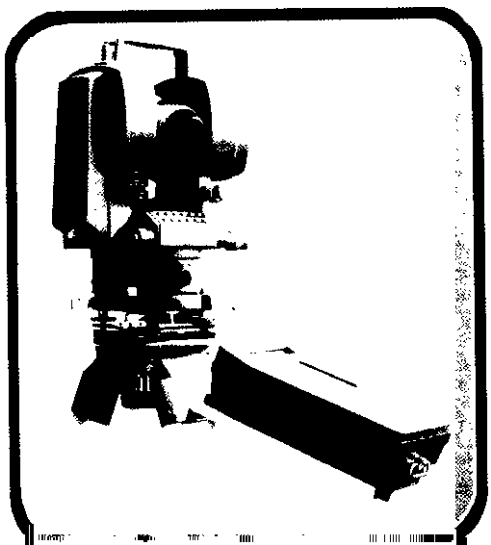

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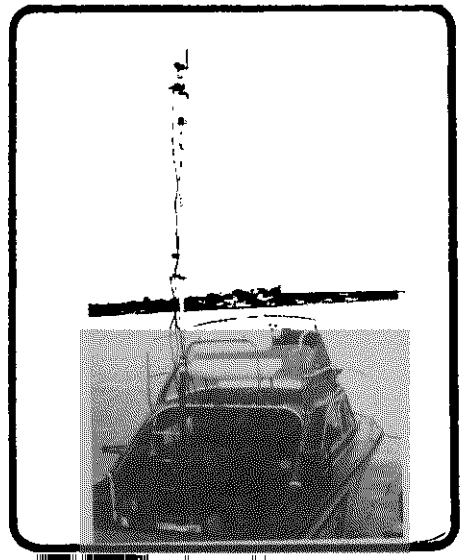

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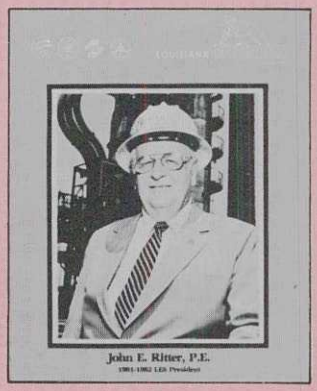

John E. Ritter, P.E.
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About the Cover:

Jack E. Ritter, P.E., is this year's LES president. (photo courtesy R. J. Lautner.) All new officers are pictured on pages 6-7.

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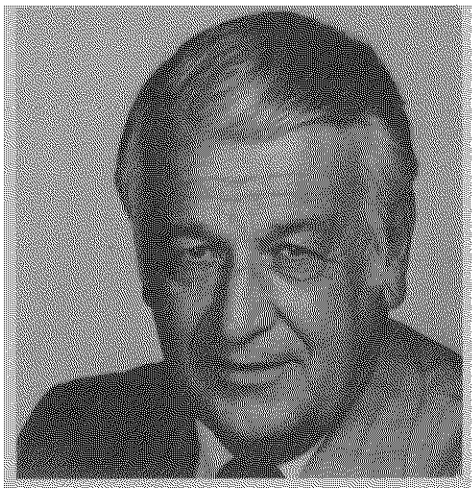
PRESIDENTIAL PRIVILEGE

The accomplishments and upward progress of the society during 1980-81 under the able leadership of Jerrel Freeman has left a great challenge for the incoming team.

We are in the best position ever in the most important area of members. Last year our total increased from 3,315 to 3,544, a net gain of 229 with Dale Hunn as State Chairman of the Membership Committee. Certainly membership development will continue to remain a must. The 1981-82 Membership Chairman, Mr. Edgar Rivera has set a target of at least 390 new members. From a financial standpoint, a net gain of only 140 is equivalent to a 5% increase in dues. Even more important, the sound of our voice on any issue and the potential for developing and completing projects is proportional to our membership total.

Our Legislative Program for the last two years under the guidance of Lamon Moody has reached peaks never before attained. The registration law was reused in almost its entirety, friends of court briefs were filed in several cases, and legislative acts affecting engineers or the profession were closely monitored with action success almost equalling 100%. The program, as large as it has become, must expand. It has primarily dealt with the liabilities of engineers, but now it must become concerned with other problems, such as adequate university faculty salaries, fellowship programs, and facilities to insure meeting the demand for engineering graduates.



John E. Ritter, P.E.
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Other ongoing projects that we need continued are public relations, the Scholarship Program, the resolvement of the engineering/technology interface, registration for all engineers, recognition programs including honors and awards, engineering education, professionalism, ethics, etc.

The thrust of this year's team will be greater emphasis on programs to help the individual member. The most important resource of any organization is the members. They know what their problems are and how to solve them. We need to make use of this untapped knowledge.

Two matters that are currently of great concern and need immediate addressing are the energy and engineering education crises.

Engineers are, and always have been, the leaders in technology, not the followers. We must continue to set the pace by becoming involved in the government decision-making process, especially in the formulation of energy policies. Our influence will grow when we take the time to inform the general public on energy affairs and encourage them in turn to write their government representatives. We must express our views by giving speeches, publishing articles, participating in radio and television talk shows and taking part in civic activities. It would be tragic if the United States went to war over 5½ MB/D of oil from the Persian Gulf, especially when we have the technology and resources to produce domestically the equivalent energy. We must remove the shroud of myth and misunderstanding together with the tons of paperwork that is delaying energy projects for as long as 15 years if we are going to ensure our economic prosperity and domestic security.

The development of nuclear power has been severely hindered and even stopped by environmentalists. Some maintain that it can be easily phased out since it represents only 3.5% of the total

Continued on page 23

John E. Ritter . . . A Brief Biography

John E. Ritter, P.E. a native of Beaumont, Texas, was installed as 1981-82 president of the Louisiana Engineering Society at the annual meeting held at Toro Hills Hotel, Many. He has held all offices of the Society, served on numerous committees and was president of the Baton Rouge Chapter in 1976-77.

Ritter is employed by Exxon Chemical Company & Exxon Company U.S.A., Baton Rouge Manufacturing Plants as a Coordination Associate.

He received an associate of arts degree from Lamar Junior College in 1933, a bachelor of science degree in electrical engineering at Louisiana State University in 1935, and has completed several post graduate courses in chemical engineering. He was valedictorian, LSU college of engineering. A member of Phi Kappa Phi Honor Society, and a charter member of the Tau Beta Pi Engineering Honor Society.

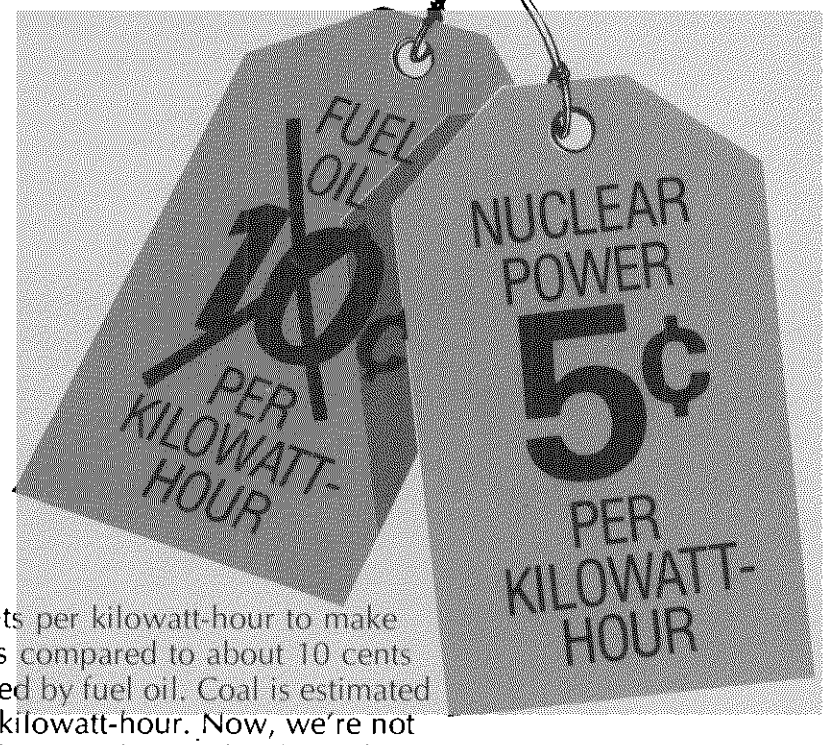
Ritter has been every active in Kiwanis at the local, district and international levels. He was governor of the Louisiana, Mississippi, West Tennessee district of Kiwanis in 1975-76 attaining distinguished honors. Other civic involvement includes: Louisiana Mental Health Foundation; Louisiana Kidney Foundation; Baton Rouge United Fund; Camp Fire Girls; Boy Scouts; YMCA Chapter fund drive; and American Legion Baseball.

He is a member of St. Thomas Moore Catholic church, Knights of Columbus, LSU Alumni Association, and has been statistician for LSU basketball and football since 1959.

He is married to the former Beatrice LaVigne of Baton Rouge. They have four sons.

SALE

ENERGY



By 1985 it will cost about 5 cents per kilowatt-hour to make electricity with nuclear power as compared to about 10 cents for electricity now being generated by fuel oil. Coal is estimated to be in the range of 7 cents per kilowatt-hour. Now, we're not saying that 5 cents per kilowatt-hour is cheap. The days of cheap electricity are gone. Forever. But it does make a difference.

For example, the 72 nuclear power plants operating in the U.S. generated more than 276 billion kilowatt-hours. Or about 13% of all commercial electricity. Furthermore, these nuclear plants produced a savings in generating costs of approximately 3 billion dollars. For the typical residential customer, the average savings on annual bills ranged from $11.70 to $106.44.*

No single source of energy can possibly supply all the electric power we will need. Conservation and a balance of nuclear power and coal will be essential in meeting that need.

*Figures obtained from Atomic Industrial Forum, Inc.

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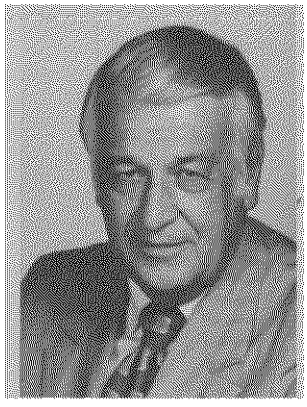

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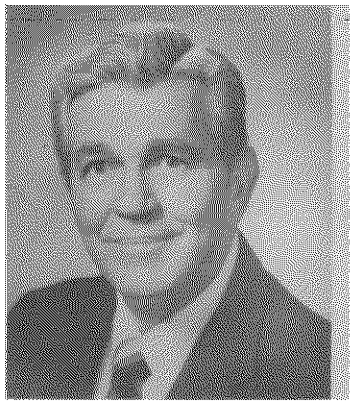

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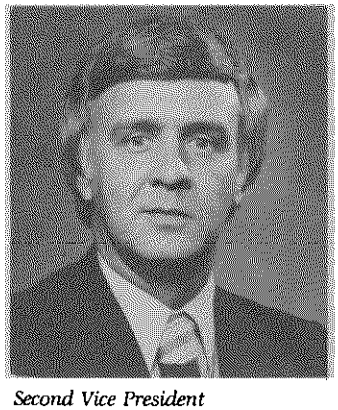

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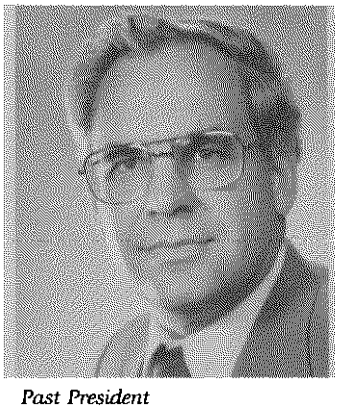

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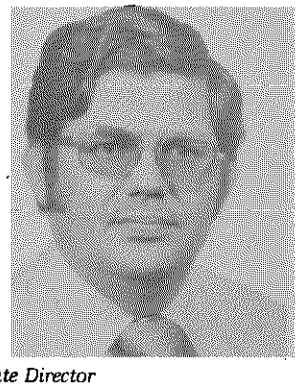

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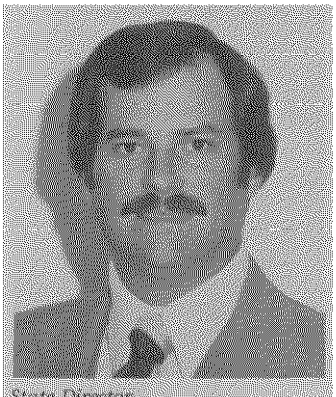

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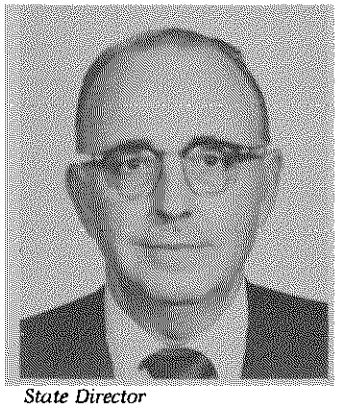

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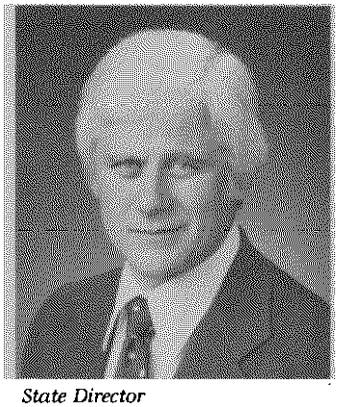

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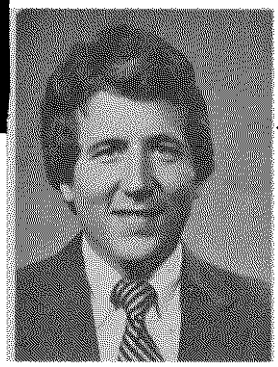
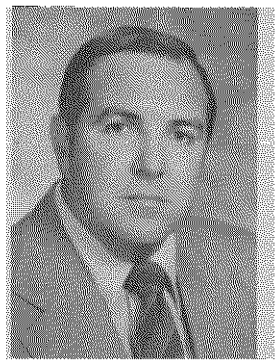
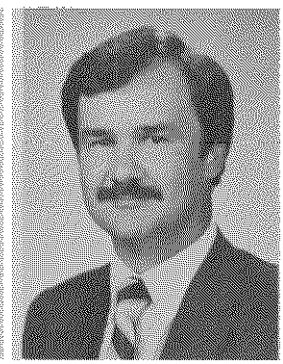
Chapters are the foundation of the Society's organization. Chapters are located at Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans, Shreveport and the Bayou serving Morgan City, Houma and Thibodaux areas.



Alexandria
Thomas C. David, Jr., P.E.
V.P. Pan American Engineers, Inc.
Alexandria



Baton Rouge
Robert Blanche, P.E.
Mgr. Projects Div.
Bovay Engineers
Baton Rouge



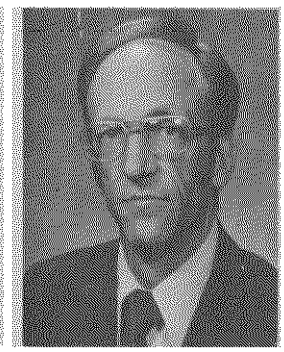
Bayou
Edgar P. Benoit, P.E.
Mgr. Engineering
South La. Electric Cooperative Assoc.
Houma



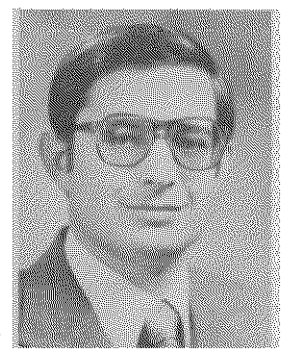
Lafayette
Alvin Dupuis, P.E.
Chief Utilities Engineer, City of Lafayette



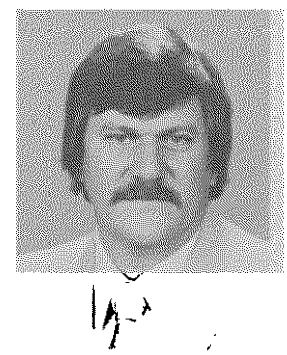
Lake Charles
W. J. Lechtenberg, Jr., P.E.
Dyle-Lechtenberg & Associates
Lake Charles



Monroe
Joe R. English P.E.
V.P., Ford, Bacon & Davis Const. Corp.
Monroe



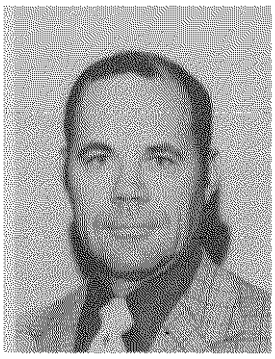
New Orleans
John J. Bergeron, P.E.
Sr. Electrical Engineer, NOPSI
New Orleans



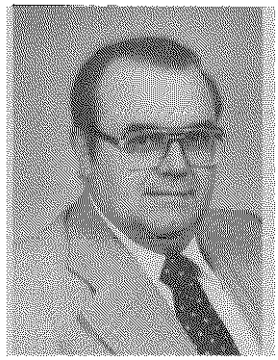
Shreveport
Lloyd G. Hoover, P.E.
Louisiana Manager, Southwestern Laboratories
Shreveport

Chairmen, Practice Divisions

LES has five practice divisions, which provide the means for engineers to develop professional relationships with others in the same field of employment.



Construction
Edward Lanier, P.E.
V.P., Petro-Chemical Construction Corp.
Sulphur



Education
Walter Vodrazka, P.E.
Professor, Head, Civil Engineering Dept. USL
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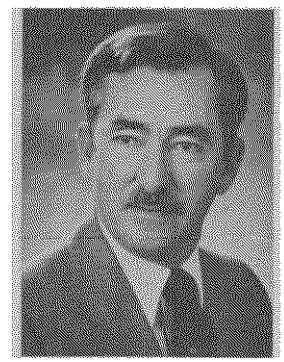
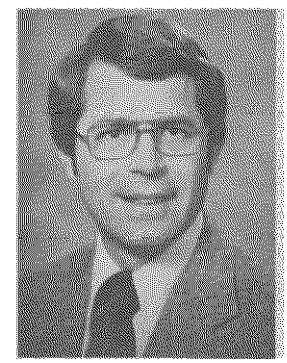
Government
Kenneth A. Perret, P.E.
Proj. Dev. Engineer
U.S. Federal Highway Administration
Baton Rouge



Industry
Billy Rentrop, P.E.
Project Manager, Cities Service Company,
Lake Charles



Private Practice
Tyrone A. Riley, P.E.
President, Riley Company of Louisiana, Inc.
Ruston

1981 Regular Session of The Louisiana Legislature

Lamon L. Moody, Jr. P.E.
Chairman, Legislative Committee

This is the Final Report on the LES Legislative Program for the 1981 Regular Session of the Louisiana Legislature. Based upon the "LEGISLATIVE ALERTS" sent out to all LES Members you are aware that we had no legislation we were sponsoring during the session, however, we were deeply involved on forty (40) Senate Bills and sixty-seven (67) House Bills that were introduced during the session having impact upon the Engineering Profession.

In the legislative process it is necessary to not only lobby with the Senators and Representatives but with other lobby groups and their Representatives to put forth our position. The LES Legislative Committee is extremely grateful for the responsiveness of those LES Members when called upon to talk with their individual Senator or Representative asking them to vote our position on any given legislation.

During the legislative process, amendments can be placed on a Bill during a House or Senate Committee hearing, or on the Floor of the House or Senate when the Bill is for final passage by either the full Senate or the full House memberships. It is therefore evident that we must "man the legislature" every single day they are in session!!!. The following is a brief description of Bills impacting on the Engineering Profession during the past session. Senate and House Bills are shown with the last name of the Senator or Representative who is the Lead Author of the Bill.

SENATE BILLS

S.B. 269 - NELSON - Would give registration as Professional Engineer to "Safety Engineers" by legislation rather than compliance with the Registration Law. Due to heavy lobbying by our Members and Members of our STATE Board of Registration, Senator Nelson gave your Legislative Committee Chairman a written statement that he would not schedule this Bill for hearing, and it therefore died.

S.B.296 - OSTERBERGER - Gave Land Surveyors a ten year Statute of Limitations for all surveying activities. We **supported** and lobbied for this Bill to assist the Louisiana Land Surveyors Association and it was passed, and signed into law by Governor Treen, and is now Act 163 of the 1981 Regular Session of the Louisiana Legislature.

S.B. 306 - BRINKHAUS - Would have abolished the Louisiana Architects Selection Board - we **opposed** this Bill on the basis that it could easily be amended to abolish the Engineers Selection Board, and the fact that we believe in the Selective Board process. This Bill died - see also S.B. 819 by SEVARIO.

S.B. 410 - BRINKHAUS - Would increase the minimum amounts required for bidding by local governments on public works to thirty thousand dollars for labor and materials, and five thousand dollars for purchases and materials and supplies. This Bill died in the House.

S.B. 412 - BRINKHAUS - Would provide for a ten year prescriptive period for contractors on public works - it was withdrawn from the files of the Senate on June 11.

S.B. 418 - BRINKHAUS - Would provide that local governments would use their own regular maintenance employees for labor and construction or extension of publicly owned utilities or other public property, including roads and bridges - failed to pass.

S.B. 460 - SEVARIO - Concerned the misapplication of payments by Contractors and Sub-contractors - failed to pass.

S.B. 483 - BRINKHAUS - Concerned the Public Bid Law, to increase the amount of public work contracts that must be let for public bids - similar to S.B. 410 above - failed to pass.

S.B. 578 - BARES - Required that the Louisiana Office of Highways reimburse local governments where they are forced to relocate utilities in conjunction with highway improvements - failed to pass.

S.B. 611 - CASEY - Would adopt the Life Safety Code, Standard 101 of 1976 by the State Fire Marshall. Failed to pass.

S.B. 619 - CASEY - Would modernize the Louisiana State Sanitary Code - this bill was withdrawn from the files of the Senate.

S.B. 638 - LAURICELLA - Concerned the regulation of construction and maintenance of existing and future dams - this Bill was not moved since it was decided to move an identical House Bill in the House of Representatives - see House Bill 1116 by Representative Baker.

S.B. 681 - CASEY - Provided for a Board of Review of the State Fire Marshall, one of the Members of which would be a Professional Engineer - there was never any action on this Bill and it therefore died.

S.B. 684 - CASEY - Provided for a fifty year prescriptive period (Statute of Limitations) "on all actions unless a shorter prescriptive period is provided by law" - it was later amended reducing the period of time to thirty years. It failed to pass.

S.B. 716 - RICHEY - Concerned lobbying and would prohibit the use of public funds for private purposes - it failed to pass.

S.B. 738 - RANDOLPH - Created the State Archives and Records Service - we **supported** this Bill and it was passed and signed into law by Governor Treen.

S.S. 740 - RANDOLPH - Provided that public works contracts shall include provisions for arbitration - the Bill was withdrawn from the files of the Senate on June 17.

S.B 741 - RANDOLPH - Would mandate compulsory arbitration of claims and disputes - no action was taken on this Bill and it died.

S.B. 742 - RANDOLPH - Also dealt with compulsory arbitration of public works contracts - no action was taken on this Bill and it died.

S.B. 748 - LAURICELLA - Concerned the Public Bid Law and closed specifications - we worked out amendments to this Bill with Representatives of Architects and other Engineers to improve this Bill with such amendments adopted in the Senate Committee - however, the Bill failed to pass.

S.B. 765 - BRINKHAUS - Provided that buildings under $150,000 do not require a licensed architect - was amended to lower the amount to $80,000 and passed the Senate but died in the House for lack of action during the final hours of the Legislative Session which ended on July 13.

S.B. 783 - BRINKHAUS - Declared as invalid indemnification agreements relative to expiration and development of sources of energy - this Bill was passed and signed into law by Governor Treen.

S.B. 794 - SAUNDERS - Provided for an exemption from the provisions licensing and regulating the profession of Architecture, required that the State Division of Administration supply Architectural services to local governments, and provided that the State Division of Administration shall not contract for services of any Architect who is not an employee of the Division. We **opposed** this Bill - it failed to pass.

S.B. 805 - NELSON - Provided for expropriation for movable property by municipalities where the property is to be used for street or drainage projects - no action was taken on this Bill and it died.

S.B. 819 - SEVARIO - Would abolish the Louisiana Architects Selection Board and the Louisiana Landscape Architects Selection Board and authorize the Louisiana DOTD to employ full-time Architects and Landscape Architects. We **opposed** this Bill and Senator Sevario withdrew the Bill on June 17 in favor of a legislative resolution to have a legislative study committee study this matter with the anticipation that any ultimate legislation as a result of this study would be ready for the 1982 legislative session. Senate Concurrent Resolution No. 197 was passed and there will be a study committee appointed.

S.B. 862 - GUARISCO - Would require Senate confirmation on all appointments by the Governor to Licensing Boards and Commissions, etc. The Bill passed the Senate but failed in the House.

S.B. 878 - McLEOD - Provided authority for the State Board of Architectural Examiners to employ outside services (Attorney's, etc.) to be paid from the Board's own funds - the Bill also included antiquated language that would have superceded the Louisiana Administrative Procedures Act. We **supported** the Bill and worked with the Architects and amended the Bill to eliminate the antiquated language. The Bill failed to pass due to lack of time.

S.B. 899 - CASEY - Would provide for limitation of liability for local governments and their employees - we **supported** this Bill, however, no action was taken and the bill died.

S.B. 903 - NUNEZ - Provided for transferring of administration of ground water resources from DOTD to the DNR - no action was taken on this bill and it therefore died.

S.B. 939 - OSTERBERGER - Would define in public contracts "maintenance," "public work," and "major project." No action was taken on this bill and it died.

S.B 991 - RANDOLPH - Would transfer our State Board Registration from the Louisiana DOTD to a new licensing regulatory body under the Department of Commerce, and make other changes to our procedures. We lobbied hard against the part of the Bill that would have moved our Board of Registration to the Department of Commerce, and prepared amendments which would have striked out our Board from the Bill, and were prepared, along with representatives of our State Board of Registration, to testify before the Senate Committee, but the committee gave the entire Bill an unfavorable report and it was ultimately withdrawn from the files of the Senate.

S.B. 1004 - GUARISCO - Would require registration and reporting for organizations that engage in lobbying and set forth restricted activities for lobbyists - no action was taken on this bill and it died.

S.B. 1015 - SAUNDERS - Concerned a surety's liability written contract and bond - this Bill died in the Senate.

S.B. 1016 - SAUNDERS - Would provide that local government authorities and school boards may request the services and assistance of the State Facility Planning and Control Section for Architectural Services - we opposed this Bill and lobbied for amendments - the Bill, with amendments, passed the Senate but failed in the House for lack of time during the session.

S.B. 1032 - GUARISCO - Was relative to the right to advertise professional services and required that every licensing board "shall" regulate the format and content of such advertisement and all other matter pertaining to such advertisement except the price, fee, etc. We were successful in having the word "shall" changed to the permissive word "may." However, the bill failed to pass due to lack of time during the session.

S.B. 1034 - GUARISCO - Provided for the Governor to appoint lay people as members of professional and occupational Boards. This would have provided two lay people to our Board of Registration - this is the same legislation proposed by Senator Guarisco over the past five years - we strongly opposed this Bill and it was killed on the Floor of the Senate by a vote of nine for and twenty-seven against.

S.B. 1054 - NUNEZ - Would have created a new executive department of the state government to be designated as the Department of Environmental Affairs. No action was taken on this bill and it died.

S.B. 1060 - NUNEZ - Concerned the powers and duties of the Environmental Control Commission - no action was taken on this Bill and it died.

S.B. 1088 - CASEY - Would exempt engineers engaged in sales from the occupational license tax. We **supported** this Bill, however, no action was taken and the Bill died.

HOUSE BILLS

H.B. 34, 36 & 37 - REPRESENTATIVE WEAVER - All three Bills would have changed weight limits on axles of vehicles on highways - we **opposed** these Bills - all three Bills failed to pass.

H.B. 65 - REILEY - Concerned depositing of funds in the State Treasury, could have affected our Board of Registration's funds - no action was taken on this Bill and it died.

H.B. 277 - BAKER - Would have created a statewide drainage program by the Louisiana DOTD - this Bill was withdrawn from the files of the House.

H.B. 292 - FERNANDEZ - Relative to the powers of the Office of Environmental Affairs and the Environmental Control Commission of the DNR - passed the House and Senate and was signed into law by Governor Treen.

H.B. 306 -GAUDIN - Would enact the Freedom of Private Enterprise Act, to prohibit state competition with private businesses - no action was taken on this Bill and it died.

H.B. 377 - TURNLEY - Relative to the Louisiana Procurement Code, to provide regulations to the procurement of goods and services by governmental bodies. We **opposed** this Bill since it would affect established procedures for awarding engineering contracts. No action was taken on this Bill and it died.

H.B. 511 - McVEA - Relative to criminal trespass on private property - this has been a most controversial Bill with people from all over the state being heard for the legislative committees both, for and against. We were successful in amending the Bill to exempt Registered Land Surveyors, and their personnel, when they are engaged in the practice of surveying - this Bill was heavily amended and was finally passed by both the Senate and the House and sent to the Governor for signature with our amendment intact. This became Act 78 of the 1981 Legislative Session. House Concurrent Resolution No. 241 made some changes to this legislation to make it acceptable to all affected parties and there will be another legislative study committee that will probably oppose amendments in the 1982 Legislative Session.

H.B. 517 - DIMOS - This Bill was sponsored by the Louisiana Land Surveyors Association to give the same ten year Statute of Limitations to Registered Land Surveyors for all land surveying activities. It is the same identical legislation as Senate Bill 296 above by Senator Osterberger. Since S.B. 296 was passed into law this House Bill 617 was not moved.

H.B. 644 - SIMONEAUX - Provided for arbitration procedures and public works contracts - no action was taken on this Bill and it died.

H.B. 647 - DOUCET - Relative to methods of source selection of the State Procurement Code and provides that in state contracts awarded by competitive sealed bidding, resident businesses shall be preferred to non-resident businesses. This Bill was passed by the House and Senate.

H.B. 685 - DEIZ - Provided for a ten year prescriptive period for Contractors engaged in public works. This Bill failed to pass.

H.B. 710 - BELLA - Relative to building codes and fire prevention codes and would adopt latest revisions of the Southern Building Code - no action was taken on this Bill and it died.

H.B. 715, 716 & 717 - M. THOMPSON - All three of these Bills concerned invalidating indemnity, or "hold harmless" agreements, affecting construction work in the private sector - no action was taken on any one of these three Bills because Representative Thompson decided to move his H.B. 915 concerning the same subject matter but only affecting the companies and contractors engaged in oil and gas drilling and production operations. The Bill was withdrawn from the files of the House.

H.B. 767 - GUNTER - Concerned occupational license taxes - no action was taken on this Bill and it died.

H.B. 791 - CHISSON - Would have authorized local governments to enter into agreements for creation, development and financing of industrial parks - we **supported** this Bill. The Bill passed the House and Senate and has been signed into law by Governor Treen.

H.B. 797 - GEE - Concerned the public bid law concerning clerical errors on bids. No action was taken on this Bill and it died.

H.B. 894 - DOWNER - Would amend the present public bid law relative to closed specifications - no action was taken on this Bill and it died.

H.B. 900 - SIMONEAUX - Provided for privileges on immovables and personal claims against the owner and contractor to secure the price of work performed by certain listed persons - this Bill is a result of a study of Louisiana Law Institute and does not basically change any existing laws concerning liens. Our Attorney thoroughly reviewed this legislation and will recommend some amendments to the law to be filed in the 1982 legislative session. The Bill passed the House and Senate and Governor Treen has signed it into law.

H.B. 909 - GEE - Would establish a Board of Review of the Louisiana State Fire Marshall. No action was taken on this Bill and it died.

H.B. 915 - M. THOMPSON - Referred to H.B. 715, 716, & 717 above.

H.B. 1008 - BRUNEAU - Provided for the exemption of certain occupations from law relating to eligibility of persons with criminal records to practice professions, etc., which require a state license. This Bill passed the House and Senate and was sent to Governor Treen for approval.

H.B. 1015 - BAKER - Concerned public works contract and defined "maintenance", "public works", and "major projects", no action was taken on this Bill and it died.

H.B. 1116 - BAKER - Provided for the regulation of construction, operation and maintenance of existing and future dams, both federal and non-federal, within the State. We **supported** this Bill. The Bill passed the House and Senate and Governor Treen has signed it into law.

H.B. 1118 - BAKER - Concerned the Louisiana DOTD, provided with respect to the composition of the Department, powers and duties of the Secretary, etc. It passed the House and Senate and Governor Treen has signed it into law.

H.B. 1138 - JACKSON - Concerned truth in testing, providing for rules, regulations and requirements concerning privacy of test scores, etc. We **opposed** this Bill. The Bill was withdrawn from the files of the House.

H.B. 1179 - LaBorde - Concerned occupational license taxes - we **opposed** this Bill. No action was taken on the Bill and it died.

H.B. 1223 - DOWNER - Concerned the public bid law, to provide for closed specifications - no action was taken on this Bill and it died.

H.B. 1232 - SIMONEAUX - Concerned exemptions for certain persons from requirements that they be registered and licensed Architects, also provided that persons acting as designers for certain pre-engineered buildings shall be exempted from such requirements - we **opposed** this Bill. No action was taken on the Bill and it died.

H.B. 1269 - LOWENTHAL - Concerned occupational taxes - we **opposed** this Bill. No action was taken on the Bill and it died.

H.B. 1305 - GRISBAUM - Provided that the Louisiana Building Code shall consist of the latest addition of the Life Safety Code - no action was taken on this Bill and it died.

H.B. 1335 - GRISBAUM - Concerned the relation of utility lines within highway rights-of-way, and provided that the Louisiana Office of Highways would pay for the relocation of municipally owned lines. The Bill failed to pass for lack of time in the session.

H.B. 1347 - SIMONEAUX - Concerned the Resources Recovery and Development and Authority and would allow competitive negotiations for engineering services - it was amended to subject all contracts under the RRDA to be subject to the statutes concerning contracts awarded through the Engineers Selection Board. The Final version passed the House and Senate.

H.B. 1398 - SIMONEAUX - Concerned the letting of public works contracts and providing for arbitration of all claims, etc. No action was taken on this Bill and it died.

H.B. 1415 - BAJOIE - Provided that the Life Safety Code shall apply to all residential structures housing more than four families. We **supported** this Bill. It failed to pass due to limited time in the legislative session.

H.B. 1426 - BAKER - Concerned the public bid law, defining "maintenance," "public works," and "major project," etc. We **supported** this Bill. It passed the House but died in the Senate due to a lack of time in the session.

H.B. 1465 - DOWNER - Concerned unfair methods of competition and unfair and deceptive practices in trade and commerce - we **supported** this Bill. It passed the House and Senate.

H.B. 1472 - LeBLEU - Provided for private ownership rights in lands abutting the sea which are lost by erosion. We **supported** this Bill. It failed to pass due to the lack of time in the session.

H.B. 1504 - WEAVER - Proposed the creation of the Louisiana State Planning and Development Assistance Act of 1981 - we **supported** this Bill. It passed the House but died in the Senate due to lack of time in the session.

H.B. 1511 - SIMONEAUX - Concerned the Contractors Licensing Law - we **supported** this Bill. It passed the House and the Senate and was signed into law by Governor Treen.

H.B. 1525 - LaBORDE - Concerned the Louisiana Procurement Code, authorizing in-state vendor preference - we **supported** this Bill. It passed the House and Senate and was signed into law by Governor Treen.

H.B. 1527 - LaBORDE - Concerned the Louisiana Procurement Code and provided that any type of contract, including brand name and multiple award contracts, which will promote the best interest of the State may be used, provided that the chief procurement officer must make a written determination justifying the type of contract used. We **supported** this Bill. It passed the House and Senate and Governor Treen has signed it into law.

H.B. 1545 - DASTUGUE - Would enact the Private Enterprise including provisions to prohibit government agencies from conducting any commercial or industrial activity unless authorized by law, and to decrease government competition with private businesses by prohibiting state and local agencies from providing certain goods and services - we **supported** this Bill. It failed to pass due to lack of time in the session.

Continued on page 24

Proposed
Rules of Professional Conduct
Louisiana State Board of Registration for Professional Engineers and Land Surveyors

November 1980

A copy of the Proposed Rules of Professional Conduct is presented below. The State Board of Registration for Professional Engineers and Land Surveyors accepted this draft on May 26 as complete and they are now proceeding with the promulgation of the rules through the Administrative Practices Act. The rules are for the protection of the public.

Preamble

In order to safeguard life, health and property, to promote the public welfare, and to establish and maintain a high standard of integrity and practice, the following Rules of Professional Conduct shall be binding on every REGISTRANT. These Rules of Professional Conduct deal primarily with the relationship between REGISTRANTS and the public, and should not be construed as a substitute for codes of ethics of the various professional and technical societies.

All REGISTRANTS under Louisiana Revised Statute 37:681 through 37:703 as amended by Act 568 of 1980 are charged with having knowledge of the existence of these Rules of Professional Conduct, and shall be deemed to be familiar with their provisions and to understand them.

In these Rules of Professional Conduct, the word "REGISTRANT" shall mean any engineer, land surveyor, engineer-in-training, land surveyor-in-training, domestic or foreign corporation holding a license or certificate issued by this Board.

I. REGISTRANTS shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.

   a. REGISTRANTS shall at all times recognize that their primary obligation is to protect the safety, health, property and welfare of the public. If their professional judgment is overruled by non-technical authority, they will clearly point out the consequences, notifying the proper authority of any observed conditions which endanger public safety and health.

   b. REGISTRANTS shall approve and seal only those design documents and surveys which are safe for public health, property and welfare; which are complete and accurate, in conformity with accepted engineering and land surveying standards or practice; and which conform to applicable laws and ordinances.

II. REGISTRANTS shall perform services only in the area of their competence.

   a. REGISTRANTS shall undertake assignments only when qualified by education or experience in the specific technical fields of engineering or land surveying involved.

   b. REGISTRANTS shall not affix their signatures or seals to any plans or documents dealing with subject matter in which they lack competence, nor to any such plan or document not prepared under their direction and control.

   c. REGISTRANTS may accept an assignment outside of their fields of competence to the extent that their services are restricted to those phases of the project in which they are qualified, and to the extent that they are satisfied that all other phases of such project will be performed or supervised by registered, qualified associates, consultants, or employees, in which case they may then sign and seal the documents for the total project.

   d. In the event a question arises as to the competence of a REGISTRANT in a specific technical field which cannot be otherwise resolved to the State Board's satisfaction; the State Board, either upon request of the REGISTRANT or on it own volition, shall admit the REGISTRANT to an appropriate examination.

III. REGISTRANTS, if in compliance with Article I, shall further act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest.

   a. REGISTRANTS shall disclose all known or potential conflicts of interest to their employers or clients by promptly informing them of any business association, interest, or other circumstances which could influence their professional judgment or the quality of their professional services.

   b. REGISTRANTS shall not accept compensation, financial or otherwise, from more than one party for professional services on the same project, or for professional services pertaining to the same project, unless the circumstances are fully disclosed to, and agreed to, by all interested parties.

   c. REGISTRANTS shall not solicit or accept, directly or indirectly, benefits of any substantial nature,[1] or significant gratuity[1], from any supplier of materials or equipment, or from contractors, their agents, servants or employees, or from any other party dealing with the REGISTRANT'S client or employer in connection with any project on which the REGISTRANT is performing or has contracted to perform engineering or land surveying services.

   d. When in public service as a member, advisor or employee of a governmental body or agency, or under contract to provide consultation, advice, technical reviews and recommendations to a governmental body or agency, REGISTRANTS shall not participate in considerations or actions with respect to professional services provided by them or their organization to that governmental body or agency.

e. REGISTRANTS shall not solicit or accept an engineering and/or surveying contract from a governmental body of which a principal, or officer of the REGISTRANT'S organization, serves as a member, except upon public disclosure of all pertinent facts and circumstances and consent of appropriate public authority.

IV. REGISTRANTS shall avoid improper solicitation of professional employment.

a. REGISTRANTS shall not falsify or permit misrepresentation of the REGISTRANT'S or any associate's academic or professional qualifications; the misrepresentation or exaggeration of the REGISTRANT'S degree of responsibility in or for the subject matter of prior assignments or the misrepresentation of pertinent facts concerning employers, employees, associates, joint ventures, of the REGISTRANT'S or their organization's past accomplishments with the intent and purpose of enhancing their qualifications and their work.

b. REGISTRANTS shall not pay or offer to pay, directly or indirectly, any commission, or gift, or other valuable consideration in order to secure work, except under the following circumstances:

(1) An individual REGISTRANT securing salaried positions through employment agencies.

(2) A bona fide employee, or a bona fide established commercial or marketing agency retained by them.

[1] The phrases "benefits of any substantial nature" and "significant gratuity" are defined to mean any acts, articles, money or other material possessions which are of such value or proportion that their acceptance could reasonably be expected to create an obligation on the part of the receivers, or otherwise compromise their ability to exercise their own judgement, without regard to such benefit or gratuity.

Silver Anniversary of Training Sessions

The 25th annual chapter officers' training and state planning conference will be held on September 17-18-19, 1981 at the Sheraton Alexandria.

The conference is a must for 1981-82 chapter officers, committee and practice division members to attend. It is the time and place for all of you members who have accepted positions in state/chapter committees and practice divisions to learn about LES, its rules, involvement and goals.

This year for the first time, there will be recreation, golf at 1:00 p.m. and tennis on Thursday afternoon, September 17. Friday, September 18 will have scheduled committee and practice division meetings along with other sessions to orient you with LES.

Very special plans have been made for the ladies to celebrate our 25th LES Planning Conference!

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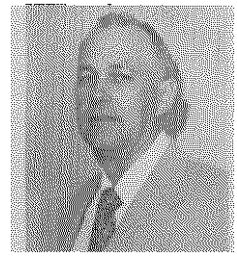
NÔTRE MÉTIER

Paul L. Landry, P.E., Executive Secretary Louisiana State Board of Registration for Professional Engineers & Land Surveyors.



Dr. Vliet mentioned in the last issue of the Louisiana Engineer that I had been selected to replace him. I feel most fortunate to have been appointed by the Board.

Dr. Vliet has been working with me since the appointment and continues to be but a phone call away, ready to help. In the sixteen years he has served the Board many changes took place in the registration laws of the state and *Nôtre Métier*. Not too many years ago only Civil Engineers could be registered in Louisiana—no examinations were required and a college degree was not mandatory. In the very near future a college degree will be absolutely necessary and an examination in the fundamentals and in the principles and practice of engineering will be required for anyone to become registered in Louisiana.

Nôtre Métier has evolved tremendously in the past two decades because *we* made it take place. No one outside of our profession can take credit for this evolution. Before I lose your attention completely I should explain this term Nôtre Métier.

Nôtre Métier to *me* means *Our Profession*. The emphasis is on Nôtre—OUR. Some French scholars may argue with me and point out that Métier really means *craft* and not *profession*. I'm a Cajun so let them argue, because to me Notre Metier means—this is *Our* Profession, *we* are responsible for it, *we* decide our destiny, *we* seek the advice of other professionals, but the bottom line is—shame on *us* if *we* do not guide it in the right direction because it is Nôtre Métier.

In the future I will be discussing Nôtre Métier with you, passing along what the Board is doing and which direction we may be going. First, let me tell you something about Paul L. Landry, P.E. and what he believes in. I believe in our country, our state, in a strong America—I'm a flag waver. My ancestors were in Louisiana before America was born, they disliked the English, refused to learn the language and my home town still celebrates the 14th of July instead of the 4th—you guessed it, I'm Cajun (Acadian to be more precise).

When I left Louisiana to serve our country shortly after WWII, the term "Coon Ass" to a Cajun was like waving a red flag to a fired-up bull, and not a form of endearment. In fact, the use of that term by a non-Cajun was an immediate call to arms by all Cajuns within sight. When I returned to Louisiana about ten years ago, all that had changed. Cajun-Power was on the air waves and the term "Coon Ass" was on bumper stickers. I'm still having trouble accepting that term but since there are more pluses to being one than not, I'll put up with "Red Necks" calling me one.

The United States Air Force was a continuing experience for me. I was surveyor, draftsman, clerk, aircraft controller, weapons controller, project manager of space simulation facilities and director of the research and development exchange program in West Germany. In the mid 50s I served in Europe in the NATO facilities development program in

Continued on page 15

NCEE Program

The National Council of Engineering Examiners have a program called "NCEE Records Program." Records regarding education, working experience, examinations taken in other states in which registration is maintained for the purpose of reciprocity, etc. This is a master record held in confidence and released at the individual's request. Use the inserted self address envelope to participate in the program.

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The knowledge business

NÔTRE MÉTIER

Continued from page 13

France, Italy, Greece and Turkey. It was a very busy twenty-four years.

Since I retired from the USAF I've been a member of the Louisiana State Guard. In the event of a national emergency this organization is prepared to mobilize and fill the void the Louisiana National Guard leaves behind. This may be news to you, but if you're a citizen of the State of Louisiana and between the ages of seventeen and sixty-five the Governor has, under emergency conditions, the authority to direct you into state military service. This power was exercised in World War II.

I have worked for consulting engineering firms as a resident engineer, project engineer, engineering manager and manager of business development. I've also worked as a job-shopper in the petro-chemical industry. I've enjoyed all these assignments. However, when the opportunity for the Executive Secretary position to the Board became available, I knew that this was the role I wanted. In the role of Executive Secretary I serve the Board members who in turn are the executors of the registration law for engineers and land surveyors of the State of Louisiana.

In this column I will express the views of the Board regarding *Nôtre Métier* as we all strive to safeguard life, health, and property, and promote the public welfare of all citizens in Nôtre Louisiane.

P.S. I'm also a Texas Aggie (that should seal my fate—"this guy has all the odds against him"—I Love You All!)

Examination Notice

The next examinations for Engineer-In-Training, Professional Engineer, Land Surveyor-In-Training and the Principles and Practice of Land Surveying will be given on October 31, 1981. The Laws and Procedures of Land Surveying is offered only in the spring, and therefore it will be the spring of 1982 before this is offered.

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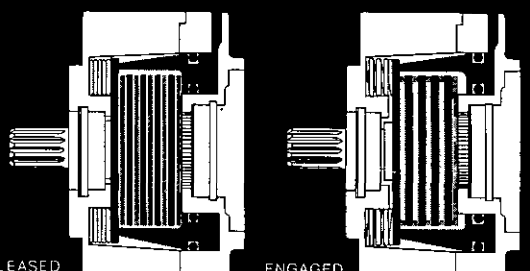

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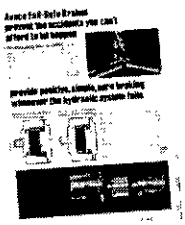

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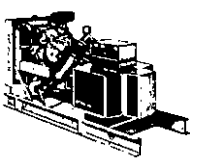

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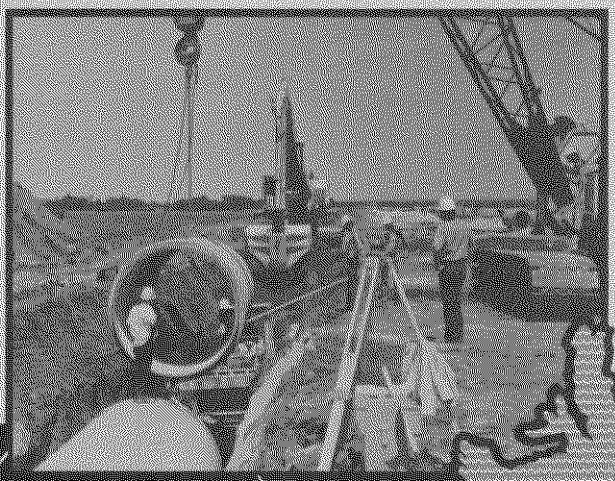

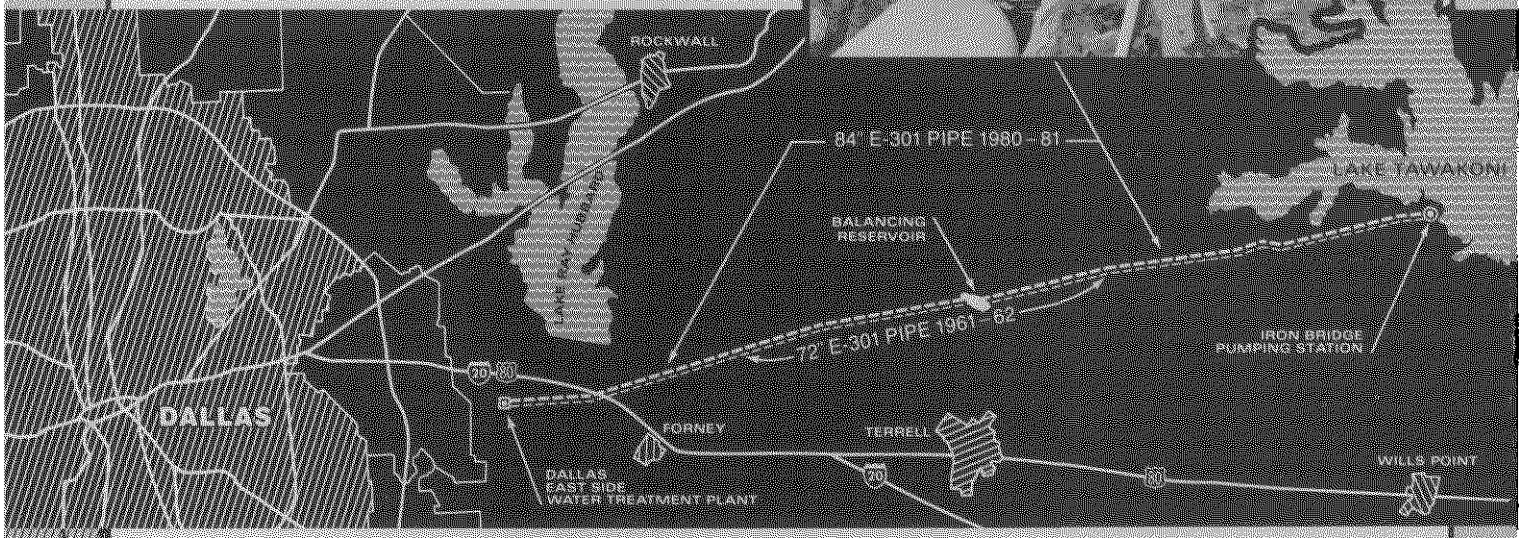

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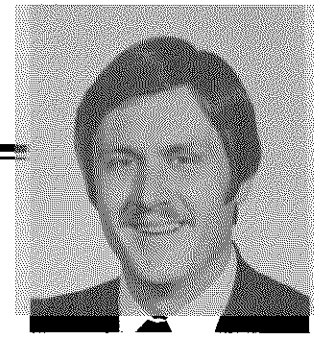

Warren J. Wilder
CEC/L Executive Director

Frivilous Law Suits: The Design Professional's Nightmare

Professional engineers and architects are being unfairly, although albeit legally, harassed constantly as prime party and third party defendants in civil action suits by unfounded allegations of design negligence, in which suits there is usually little or no justification whatsoever for the action. These suits, sometimes referred to as "shotgun suits", are brought by plaintiffs' attorneys, often times as undisguised attempts to extort cash "settlements" in order that the defendants may avoid costly defense actions wherein they would, without doubt, find legal relief, but at a much higher cost in time and money. Such considerations discourage the participation of design professionals in some projects whose very character promises a more frequent occurrence of such suits.

Several states already have laws which dicourage the filing of a frivilous complaint. The state of California presently has a very interesting law, Assembly Bill No. 357, which was signed by the Governor and filed with the Secretary of State on September 22, 1979. Prior to the passage of AB 357, California had an existing law that prohibits the filing of a complaint in a civil action relating to the malpractice of a physician and surgeon or dentist unless it (the complaint) is accompanied by a certificate under oath by the plaintiff's attorney that he has reviewed the case, has consulted with a physician and surgeon or dentist whom he reasonably believes is knowledgeable in the revelant specialty, and has concluded there is reasonable and substantial cause for filing the action. AB 357 sought to enact a similar requirement relating to an action for damages against an architect, professional engineer, or land surveyor. Reprinted below is Assembly Bill No. 357, along with the Legislative Counsel's digest. Let me reiterate, this bill passed successfully through the California Legislature and is a law.

Assembly Bill No. 357
CHAPTER 973

An act to amend Section 430.10 of, and to add and repeal Section 411.35 of, the Code of Civil Procedure, relating to civil actions.

(Approved by Governor September 22, 1979. Filed with Secretary of State September 22, 1979.)

LEGISLATIVE COUNSEL'S DIGEST

AB 357, Greene. Civil action.

Existing law prohibits the filing of a complaint in a civil action relating to the malpractice of a physician and surgeon or dentist unless it is accompanied by a certificate under oath by the plaintiff's attorney that he has reviewed the case, has consulted with a physician and surgeon or dentist whom he reasonably believes is knowledgeable in the relevant specialty, and has concluded there is reasonable and substantial meritorious cause for filing the action.

This bill would enact a similar requirement relating to an action for damages against an architect, professional engineer, or land surveyor. The bill would provide that if consultation with an architect, professional engineer, or land surveyor could not be obtained because of a statute of limitations problem, the attorney may file such certificate stating such problem and would be required to file such certificate involving such a consultation within 60 days after filing or the complaint shall be dismissed.

The bill would provide that consultation between the attorney and architect, professional engineer, or land surveyor is privileged.

A violation of the bill's provisions may constitute unprofessional conduct and be grounds for disciplinary action against the attorney, as specified, and would be grounds for the filing of an objection to the complaint by means of a demurrer or answer.

The people of the State of California do enact as follows:

SECTION 1. Section 411.35 is added to the Code of Civil Procedure, to read:

411.35. (a) In any action for damages arising out of the professional negligence of a person holding a valid architect's certificate issued pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, or of a person holding a valid registration as a professional engineer issued pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, or a person holding a valid land surveyor's license issued pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code on or before the date of service of the complaint on any defendant, the plaintiff's attorney shall file the certificate specified in subdivision (b).

(b) A certificate shall be executed by the attorney for the plaintiff declaring one of the following:

(1) That the attorney has reviewed the facts of the case, that the attorney has consulted with at least one architect, professional engineer, or land surveyor who is licensed to practice and practices in this state or any other state or teaches at an accredited college or university and who the attorney reasonably believes is knowledgeable in the relevant issues involved in the particular action, and that the attorney has concluded on the basis of such review and consultation that there is reasonable and meritorious cause for the filing of such action.

(2) That the attorney was unable to obtain the consultation required by paragraph (1) because a statute of limitations would impair the action and that the certificate required by paragraph (1) could not be obtained before the impairment of the action. If a certificate is executed pursuant to this paragraph, the certificate required by paragraph (1) shall be filed within 60 days after filing the complaint.

(3) That the attorney was unable to obtain the consultation required by paragraph (1) because the attorney had made three separate good faith attempts with three separate architects, professional engineers, or land surveyors to obtain such consultation and none of those contacted would agree to such a consultation.

(c) Where a certificate is required pursuant to this section, only one such certificate shall be filed notwithstand-

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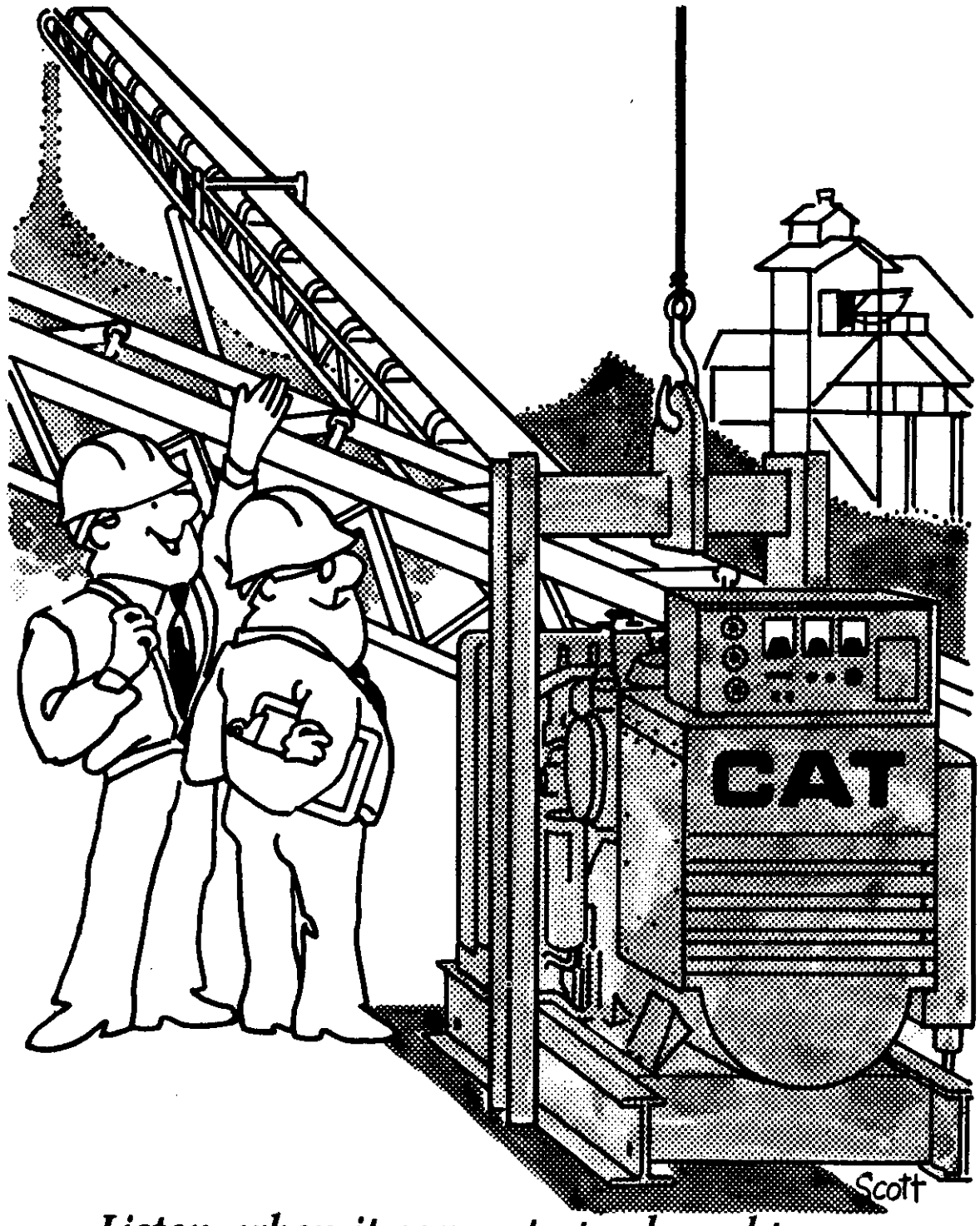

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ing that multiple defendants have been named in the complaint or may be named at a later time.

(d) Where the attorney intends to rely solely on the doctrine of "res ipsa loquitur," as defined in Section 646 of the Evidence Code, or exclusively on a failure to inform of the consequences of a procedure, or both, this section shall be inapplicable. The attorney shall certify upon filing of the complaint that the attorney is solely relying on the doctrines of "res ipsa loquitur," or failure to inform of the consequences of a procedure or both, and for that reason is not filing a certificate required by this section.

(e) For purposes of this section, and subject to Section 912 of the Evidence Code, an attorney who submits a certificate as required by paragraph (1) or (2) of subdivision (b) has a privilege to refuse to disclose the identity of the architect, professional engineer, or land surveyor consulted and the contents of such consultation. Such privilege shall also be held by the architect, professional engineer, or land surveyor so consulted, provided when the attorney makes a claim under paragraph (3) of subdivision (b) that he was unable to obtain the required consultation with the architect, professional engineer, or land surveyor, the court may require the attorney to divulge the names of architects, professional engineer, or land surveyors refusing such consultation.

(f) A violation of the provisions of this section may constitute unprofessional conduct and be grounds for discipline against the attorney, except that the failure to file the certificate required by paragraph (1) of subdivision (b), within 60 days after filing the complaint and certificate provided for by paragraph (2) of subdivision (b), shall not be grounds for discipline against the attorney.

(g) The failure to file a certificate required by this section shall be grounds for a demurrer pursuant to Section 430.10.

(h) This section shall be operative until January 1, 1984, and on such date is repealed.

SECTION 2. Section 430.10 of the Code of Civil Procedure is amended to read:

430.10. The party against whom a complaint or cross-complaint has been filed may object, by demurrer or answer as provided in Section 430.30, to the pleading on any one or more of the following grounds:

(a) The court has no jurisdiction of the subject of the cause of action alleged in the pleading.

(b) The person who filed the pleading does not have the legal capacity to sue.

(c) There is another action pending between the same parties on the same cause of action.

(d) There is a defect or misjoinder of parties.

(e) The pleading does not state facts sufficient to constitute a cause of action.

(f) The pleading is uncertain. As used in this subdivision, "uncertain" includes ambiguous and unintelligible.

(g) In an action founded upon a contract, it cannot be ascertained from the pleading whether the contract is written or oral.

(h) The complaint was not accompanied by the certificate required by Section 411.35.

Consulting Engineers Council of Louisiana, Inc. is giving serious consideration to sponsoring a piece of legislation in the 1982 Louisiana Legislature similar to the California law to provide some relief to its engineers and other design professionals. The proposed legislation may include other professionals, such as physicians, surgeons, dentists, veterinarians, lawyers, and CPA's.

One of CEC/L's members, Milton Williams, P.E., Williams Engineering, Inc., New Orleans, Louisiana, has provided CEC/L and other engineering organizations with details for proposed legislation, the result of extensive personal research.

Digest of Proposed Law

A law to prevent the filing of lawsuits without significant merit and to prevent abuse of the legal process and malicious prosecution.

This bill would enact a law prohibiting the filing of a complaint against a Professional Engineer, Land Surveyor or Architect as a civil action relating to violations of provisions of the law for Registration of Professional Engineers, Land Surveyors, or Architects, or to breach of professional contract, or to design negligence unless it were accompanied by a Certificate of Merit made under oath by the plaintiff's attorney that he had personally reviewed the case, had consulted with a Professional Engineer, Land Surveyor, or Architect and had concluded that there was reasonable and substantial merit to justify filing the action.

Details

The Certificate of Merit would be required to be filed with a copy to the defendant prior to or coincident with the filing of the complaint unless statute of limitation considerations conflict, in which event, the required Certificate could be filed within 60 days after filing of the complaint. In this event, the defendant would have 75 days in which to answer the complaint. If the Certificate were not filed within 60 days, the complaint would be automatically dismissed.

Upon receiving a Certificate of Merit the court would be required to verify the authorship and content of the Report by requiring the Consultant to respond directly to the court as to whether both the content of the report and his signature were correct as submitted by the attorney as part of his Certificate.

The Certificate would have a true copy of the Consultant's Report attached as part of the Certificate. Defendant's copy would have the Consultant's identity removed.

The Consultant's Report would consist of two parts: (a) The allegations of the plaintiff which were stated to the Consultant which would need to be the same ones to be contained in the complaint; and (2) the Consultant's statement respecting each allegation separately with supporting discussions, calculations, drawings and the like as to whether or not, there was a reasonable and meritorious basis, within professional and technical considerations, for the attorney to file such an action. It would be required that his Report be signed and "sealed".

It would be required that the Consultant be substantially equally qualified professionally as the defendant respecting both discipline and character of current endeavor or practice and be registered in accordance with the Louisiana Registration Law for such professionals.

In the event that the plaintiff's attorney had made at least three good faith attempts to obtain a Consultant's Report, but unsuccessfully because they would not agree to furnish same, then the attorney could file the complaint along with a Certificate stating such inability. In such an event, the attorney would be required to furnish, as part of his Certificate, the names and addresses of the Consultants who had declined the engagement with true copies of his requests and the Consultant's refusals. In the event of a filing with Certificate of Merit without a Consultant's Report, the attorney would be

Continued on page 21

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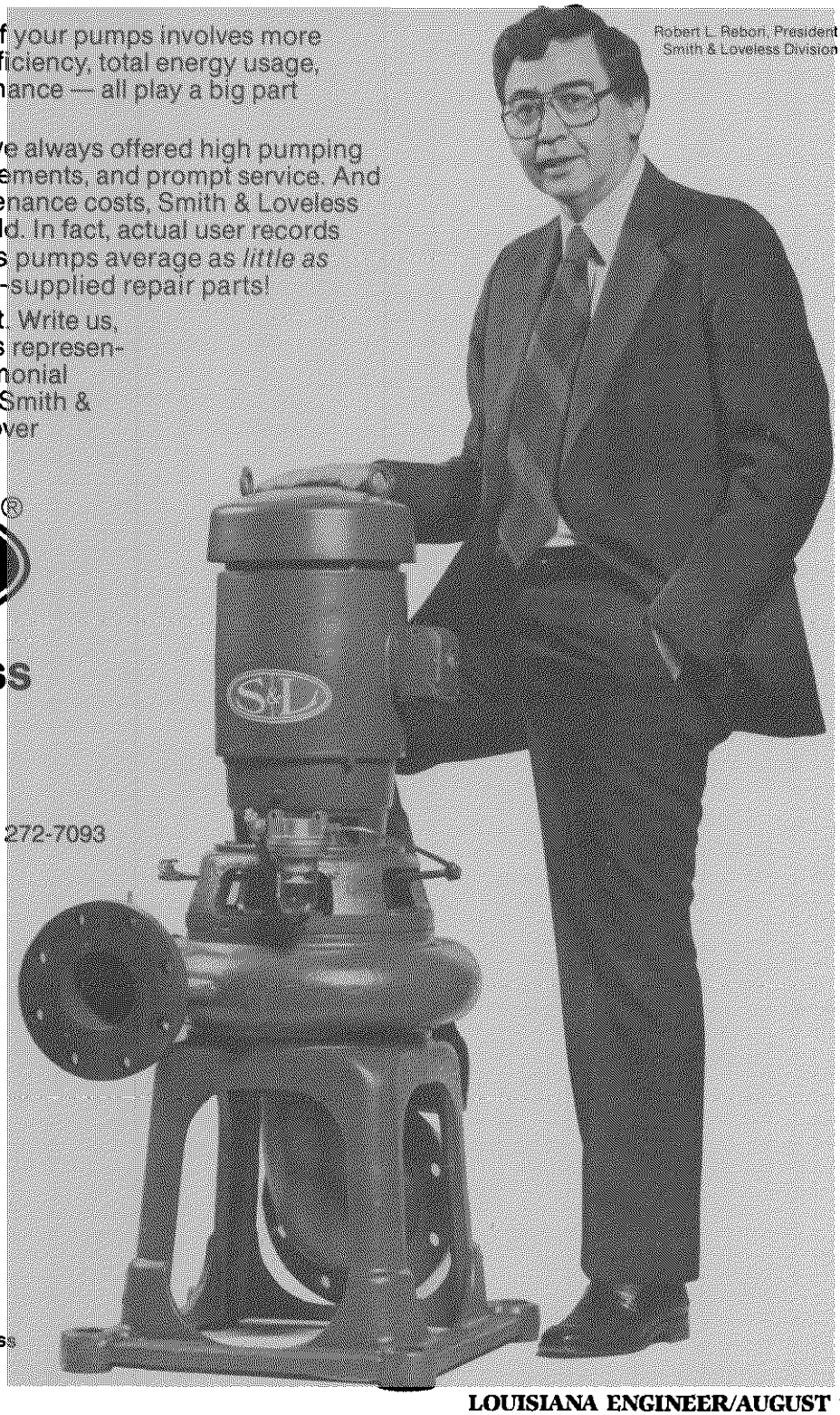

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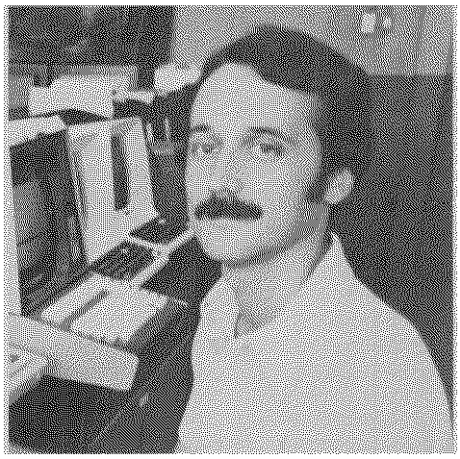

USL Graduate Named Nation's Top E.E. Student

Gary Sonnier, who won virtually every honor a student can win at the University of Southwestern Louisiana, has been named the top electrical engineering student in the United States.

The honor comes from Eta Kappa Nu, the national electrical engineering honor society. A jury of six nationally prominent professional engineers considered applicants from across the country, and named Sonnier the winner. Sonnier will fly to Los Angeles this month to receive the Alton B. Zerby Outstanding Electrical Engineering Award, a cash prize, at an Eta Kappa Nu banquet in his honor.

Eta Kappa Nu has chapters in over 150 universities in the U.S. No one from a Louisiana university has ever won the Alton B. Zerby Award.

Sonnier was graduated in May with a bachelor's degree in both electrical engineering and computer science. He was named the outstanding senior in electrical engineering, the outstanding student in the USL College of Science, the Outstanding Male Graduate, and the Louisiana Scholar of the Year by the Consulting Engineers Council of Louisiana.

He finished his five-year program of study with a perfect 4.0 average. In doing so, he broke the record for the highest grade point average compiled by an electrical engineering student — a record set by his brother Carl.

In evaluating applicants for the Zerby Award, the Eta Kappa Nu panel of judges also considers students' service to their community and university. In this area, Sonnier held stong credentials. He was a founding member and 1980 exhibit coordinator for USL's Louisiana Computer Exposition. He helped set up a computer program for compiling records of USL electrical engineering alumni, and worked on a project to connect computer terminals in the USL engineering building to the main campus computer via a single cable.

Gary was a member or officer in nine different honor or service organizations at USL. He held four different scholarships and won numerous other academic distinctions. He worked as a student researcher for Bell Laboratories in 1979 and 1980, and for Oak Ridge National Laboratories in 1978.

Sonnier will attend Stanford University, in computer engineering, in August, with funding from Bell Laboratories. He is the son of Mr. and Mrs. Curtis Sonnier of Lafayette.

IN MEMORIAM

Mrs. Opal Miller Nelson

Members of the Louisiana Engineering Society were saddened by the death on June 23, 1981 of Opal Miller Nelson, wife of Waldemar S. Nelson, P.E.

Mrs. Nelson was an active engineer's wife, understanding of the demands which the profession puts on those who follow it and on their families. She and Mr. Nelson met in 1940 immediately prior to World War II when both were employed by the W. Horace Williams Company on construction of Camp Claiborne near Alexandria, she as secretary to the project manager and he as assistant to the Chief Engineer of the project.

She participated enthusiastically in professional engineering society activities, serving two years as president of the Woman's Auxiliary of LES and frequently accompanying Mr. Nelson to national meetings of the National Society of Professional Engineers, the National Council of Engineering Examiners, the American Society of Mechanical Engineers, the American Society of Civil Engineers,

Continued on page 23

SPEC SHEET

Continued from page 19

required to include a detailed explanation of precisely what he had done to determine the facts to verify the beliefs upon which he relied to justify the allegations. His beliefs would need be substantially predicated upon facts which the attorney had personally verified as opposed to mere "information and belief" or assumptions. The court would be required to verify the truth of the attorney's Certificate. The plaintiff could then still file a complaint if a cash "Merit Bond" were posted simultaneously in the amount of $5,000, which would be forfeited to the defendant in the event, on the court's initiative or on defendant's motion, that the suit were to be judged by the court to have lacked sufficient merit or justification to have been filed. The plaintiff would be required to pay all court costs, reasonable fees of defendant's attorney, and all the defendant's non-legal but directly related costs of defense or collection including a reasonable value for defendant's and his staff's time.

If the court were to find on its own initiative or on defendant's motion that the facts in the attorney's Certificate of Merit had been substantially misrepresented, the complaint would be dismissed and the plaintiff would be required to pay all court costs, reasonable fees of defendant's attorney, and all the defendant's non-legal but directly related costs of defense or collection including a reasonable value for defendant's and his staff's time. In addition, such misrepresentation would be considered an act of contempt of the court by the attorney himself, who would then be fined by the court at least $5,000 but no more than $20,000, and such action would be reported to the State Bar Association. If any attorney were to be guilty of such misrepresentation twice, it would be required that he be suspended from the practice of law for two years. Thereafter, a third violation would automatically require a permanent disbarment. This law would also provide in these circumstances that the defendant would have the right to a civil action "Abuse of Process" complaint against the plaintiff's attorney himself to recover punitive or exemplary damages in an amount as the court or a jury may consider proper but at least $5,000 and no more than $20,000.

The law would provide that the identity of the consultant could not be divulged by the plaintiff's attorney or the court to any other party without the Consultant's written authority. Should the plaintiff's attorney do so, he would be held in contempt of court with a mandatory fine of $5,000. The law would also provide that the Consultant could not be sued by the defendant for any of his actions in rendering his report to plaintiff's attorney.

CEC/L presently has its legal counsel reviewing this proposal and is awaiting his report.

Irregardless, the design professional is in dire need of legal relief from the harassment that frequently permeates his practice. He must be allowed to practice his profession without fear of losing all he has gained through conscientious conduct because of an irresponsible frivilous whim.

Walk, Haydel & Associates opportunities for career success

At Walk, Haydel & Associates, one of the nation's leading engineering consultant and design firms, our past progress and future prospects put us in the perfect position for continued success. Imagine your career enhanced by our vast experience and challenged by our diversified projects. If you would like to be positioned for a more rewarding future, consider these excellent opportunities available now:

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Mechanical Engineers- 3+ years of experience in process pipe design material handling, and equipment applications.

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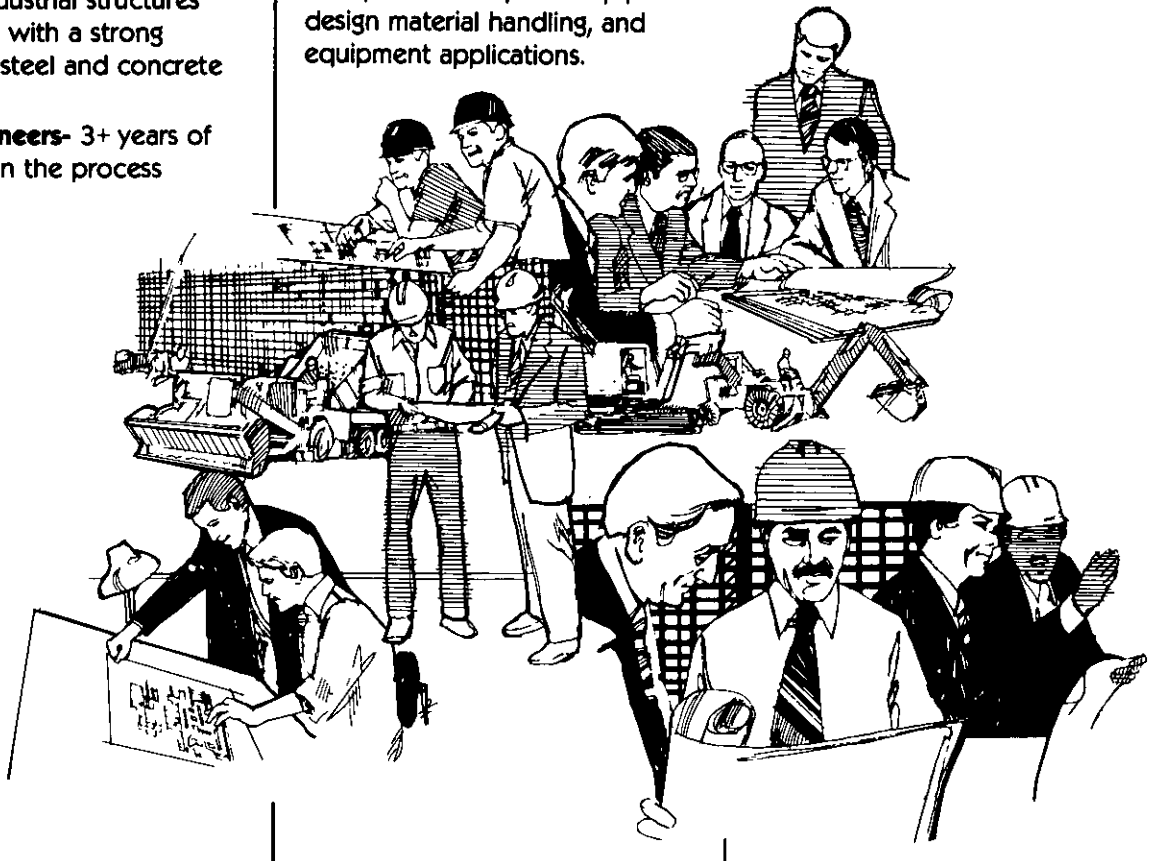
In addition to Walk, Haydel's outstanding salaries and employee benefits package, you'll also enjoy working with the best in a company that takes genuine interest in you and your work. Get into position today!



WALK, HAYDEL & ASSOCIATES
600 Carondelet Street
New Orleans, Louisiana 70130
(504) 586-8111

ENGINEWS
Continued from page 21

and other associations in which Waldemar was active.

Mrs. Nelson was a warm, cheerful and loving mother of five children, each of whom worked for the company during summer vacations, with two of her sons now members of the Waldemar S. Nelson Company. She encouraged them to take pride in work well done, to learn the value of friendships and to have a positive and cheerful approach to life and its demands. She had seven grandchildren, the last born three months before her death. She will be missed, but her spirit lives on in the family she raised, in the hearts of her many friends, and in the Louisiana Engineering Society.

IN MEMORIAM

Joseph C. Cleveland, P.E.

Joseph C. Cleveland died on June 16, 1981 after a brief illness. He was a native of Dallas, Texas and a resident of Metairie for the past 13 years.

He was a registered professional engineer in Louisiana and Texas. Mr. Cleveland worked for the U.S. Army Corps of Engineers for about 13 years. His last assignment was Chief of the Specifications Unit of the Government Estimates and Specification Section, Engineering Division, at the New Orleans District of the Corps. He was a well known expert in the preparation of construction specifications and the review of plans for civil works projects of all sizes.

Mr. Cleveland's untimely death was a great loss to the Corps of Engineers and the Construction Industry in general.

IN MEMORIAM

Aubrey G. Code, P.E.

The Society was saddened to hear of the death of Aubrey G. Code, P.E., age 71 on June 14, 1981 in New Orleans.

He was a Civil Engineer who worked for the Army Corps of Engineers and Walk-Haydel and Associates, New Orleans. He was a lifelong resident of New Orleans who graduated from Tulane University in 1931. He was a life member of the Louisiana Engineering Society and was registered in the branches of Civil, Electrical, and Mechanical Engineering.

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

IN MEMORIAM

Jack P. Miller, P.E.

Jack P. Miller, a graduate of Louisiana Tech, died on June 24, 1981 in Baton Rouge. He was 55, a resident of Baton Rouge and a native of Marshall, Texas.

Mr. Miller was employed by R.J. Tricon Company, a licensed mechanical engineer and a member of the Louisiana Engineering Society since 1978. He was a navy veteran of World War II.

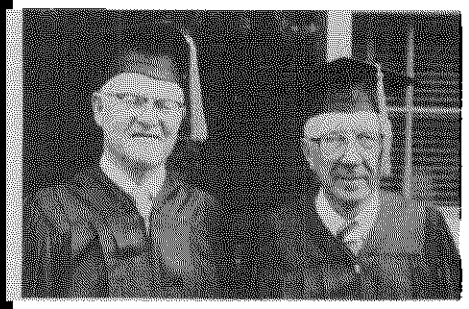
The Louisiana Engineering Society extends its deepest sympathy to his wife, three daughters, son and mother.

Economic Future of the Central Gulf South

A conference will be held in New Orleans on September 2-4, 1981 sponsored by the UNO College of Business Administration, Arthur Young and Company, and 20 area Chambers of Commerce. It will be held at the Fairmont Hotel.

The program will cover an Economic Overview of the Central Gulf South in the 1980s; Tourism Trends in the 80s; The Gulf Ports, Transportation and Material Handling; Petrochemical and Marine Construction; and Energy and Environment. The petrochemical and marine construction session will be chaired by Frank Walk, P.E. and the main speaker, Waldemar S. Nelson, P.E.

More information and/or registration forms are available by calling Dr. Caroline Fisher at (504) 286-6270 or Mrs. Diane Jolivette at (504) 286-6663.



Time Marches On

Two past presidents of the Louisiana Engineering Society recently received certificates commemorating the fiftieth anniversary of the awarding of their Bachelor of Civil Engineering Degrees. James S. Janssen, left, and Frank MacDonald graduated together from Tulane University in 1931. Janssen was president of LES in 1962 and MacDonald was president in 1954.

ASME Centennial Medallion Recipients

In celebration of the American Society of Mechanical Engineer's 100th anniversary special medallions were presented to ASME members and others in recognition of service to the Society through the application of the technologies and skills of mechanical engineering to solve the problems of mankind.

A partial list of LES members receiving medallions:

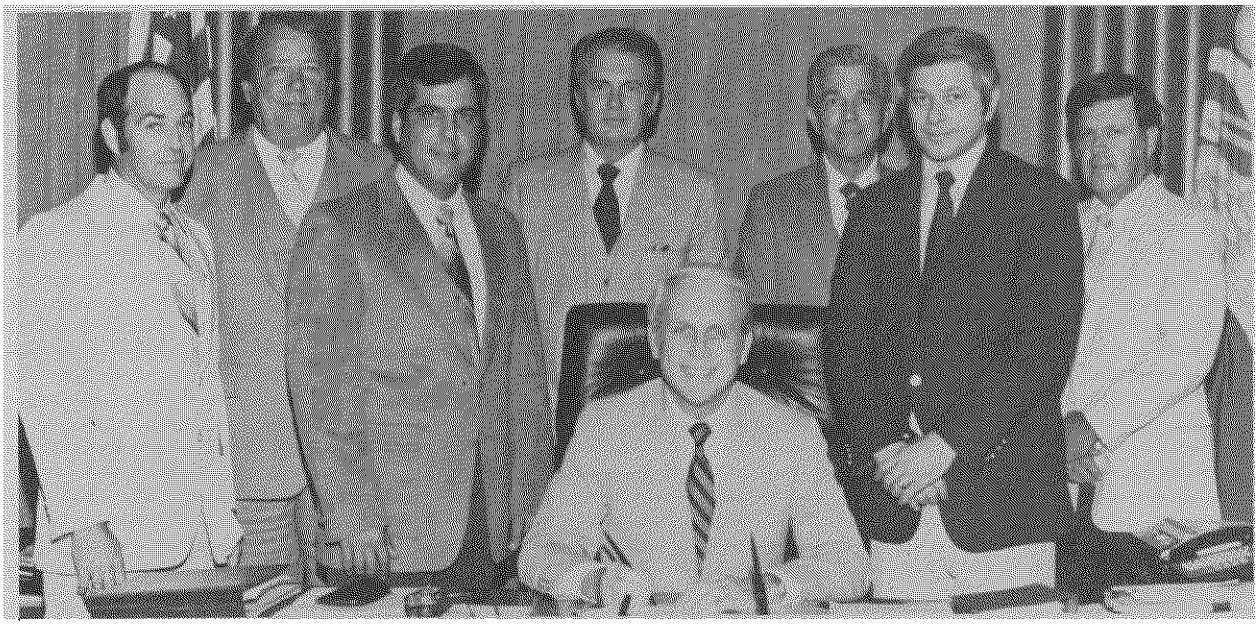
M. Q. Burrell, Jr. P.E. Ted C. Heil, P.E.
John C. Copes, P.E. Jack Thigpen, P.E.
Louis B. Gaudin, P.E. Frank H. Walk, P.E.

PRESIDENTIAL
Continued from page 4

energy budget. Regional contributions, however, are impressive. Nuclear power provides 30% of the electricity in Wisconsin, Maryland, South Carolina, and Arkansas; 50% in Nebraska and Connecticut; 65% in Maine and 79% in Vermont. Other countries, particularly France, Japan, and the Soviet Union, are moving ahead rapidly to develop nuclear power and the breeder-reactor system. The French are building a super 1200 megawatt Phoenix system. Evidently, other countries are not as concerned over nuclear proliferation possibilities as we are. The current session of Congress is considering funding work on the breeder reactor. Help your congressman arrive at the correct decision.

The engineering education crisis is no less important than that of energy. The critical shortage of qualified faculty, the lack of resources necessary to prepare future faculty, and the absence of modern equipment and facilities, if not corrected rapidly, will result in erosion of the United States' position among the industrial powers of the world. The recruitment and retention of faculty is extremely difficult with starting salaries of graduating engineers, in some cases, in excess of those paid experienced faculty. Although engineering colleges have increased their production of baccalaureate degrees by almost 54% in the past five years, the doctorate degrees, the pipeline for faculties, has decreased by 13% over the same period. Worse yet, industry and others are enticing most of the PhD's by offering double the salary that can be provided by universities. Statistics in 1980 show that 58,742 bachelor degrees were awarded of which 8.3% were foreign nationals. The same numbers for doctorates were an alarming low 2,751 and high 35.7%, respectively. It is essential that prompt action be taken to resolve the crisis in engineering education.

In closing, I would like to express my appreciation to the members of the society for providing me the privilege of serving as your President for this year. I pledge to contribute the necessary time and whatever skills and creativity I have to advance the society in the direction of maximum potential.



Governor Dave Treen signed into law, on July 11, 1981, Senate Bill No. 296 by Senator Ken Osterberger of Baton Rouge. Now Act No. 163 of the 1981 regular session of the Legislature, the bill provides for a 10-year statute of limitations for all land surveying activities. It was sponsored by the Louisiana Land Surveyors Association. Shown at the signing are, from left to right - Mr. Frank Messinger, vice-president LLSA; Mr. George Koester, chairman, New Orleans district LLSA; Mr. Frank Fontcuberta, president LLSA; Senator Ken Osterberger; Governor Treen; Mr. Lamon Moody chairman, legislative committee LLSA; Representative Jimmy Dimos of Monroe who handled the bill on the floor of the House of Representatives; and Mr. Sammie Craft, immediate past president, LLSA.

LEGISLATIVE

Continued from page 10

H.B. 1550 - FERNANDEZ - Would create a new executive department of the government of the State to be designated as the Department of Environmental Affairs. No action was taken on this Bill and it died.

H.B. 1567 - SCOTT - Concerned the Office of Contractural Review and the Procurement of Professional, and other Services. This Bill passed the House and Senate and has been signed into law by Governor Treen.

H.B. 1569 - SCOTT - Concerned professional services contracts, and provides that all such contracts in excess of $1,000 and less than $75,000 shall require a statement of justification - this Bill passed the House and Senate and has been signed into law by Governor Treen.

H.B. 1587 - WEAVER - Concerned the Louisiana State Planning and Development Assistance Act of 1981 - no action was taken on this Bill and it died.

H.B. 1559 - GRISBAUM - Would modernize the Louisiana State Sanitary Code - this Bill was withdrawn from the files of the House.

H.B. 1601 - ATKINS - Concerned local Outlay Projects, would create the Rural Roads and Drainage Fund - we **supported** this Bill. The Bill failed to pass due to lack of time in the session.

H.B. 1623 - ALARIO - Would authorize the Louisiana DOTD Office of Public Works, to loan monies to local governments for improvement projects. We **supported** this Bill. The Bill failed to pass due to lack of time in the session.

H.B. 1704 - LaBORDE - Would transfer certain licensing boards to the Department of Commerce - We **opposed** this Bill. It failed to pass.

H.B. 1705 - LaBORDE - Provided for the continued reorganization of the executive branch of government, including provisions to place certain agencies and department under the DNR. This Bill passed the House and Senate.

H.B. 1707 - LaBORDE - Concerned boiler inspection and regulation, and transfers jurisdiction from the Department of Labor to the State Fire Marshall. This Bill was passed by the House, but indefinitely postponed in the Senate, and therefore died in this session.

H.B. 1721 - SIRACUSA - Concerned abolishing the acquisitive prescription "adverse possession" of thirty years. No action was taken on this Bill and it died.

H.B. 1739 - DOUCET - Would establish a Local Government Outlay Fund - this bill failed to pass due to lack of time in the session.

H.B. 1758 - BAKER - Concerned the size, weight and load of vehicles on state highways - no action was taken on this Bill and it died.

H.B. 1793 - ULLO - Would repeal the state occupational license tax and authorize local governmental subdivisions to levy and collect occupational license tax - we **opposed** this Bill. The Bill failed to pass.

H.B. 1804 - ALARIO - Provided that the Louisiana Exposition Authority could select Engineers and Architects to design buildings for them without going through the Selection Board Procedure - we lobbied against this Bill and proposed amendments. The Bill failed to pass.

H.B. 1809 - ATKINS - Required approval of building plans and specifications by the State Fire Marshall - would make changes undesirable to the Engineering Profession - we **opposed** this Bill. It died on the Calendar.

H.B. 1815 - THOMPSON - Concerned occupational license tax allowing local governmental bodies to levy and collect occupational license taxes on any business or profession, etc. We **opposed** this Bill. It failed to pass.

H.B. 1827 - GRISBAUM - Will change the Louisiana Sanitary Code - this Bill was withdrawn from the files of the House.

Should any Professional Engineer or Registered Land Surveyor, whether a Member of the LES, or not, have any questions concerning the LES Legislative Program please contact Mr. R. C. "Doc" Spears, Executive Director at the LES State Office at P.O. Box 2863, Baton Rouge, Louisiana 70821, telephone number (504) 344-4318.

The LES Board of Direction and the Legislative Committee are deeply grateful to the LES Members, and Professional Engineers and Registered Land Surveyors who are not Members of the LES, for assisting in our legislative program by talking with your Senator and Representative. It is through these efforts that the Engineering and Land Surveying Professions have strong voice in the Louisiana Legislature.

Our legislative program costs a great deal of money for legal fees, printing, mailing, telephoning, etc., not to mention the time and effort spent by the LES Headquarters Staff and the Legislative Committee. We would therefore deeply appreciate your making a donation to the "LES Legislative Fund - 1981" and mailing such contributions, in any amount, to the LES State Office.

POTPOURRI

R. C. "Doc" Spears
Executive Secretary



Blaise Carriere, P.E.



Ken Perret, P.E.

Carriere and Perret Elected to Engineers Selection Board

Blaise Carriere, P.E., New Orleans, and Ken A. Perret, Baton Rouge, have been elected to the Engineering Selection Board. Carriere will serve from July 1, 1981 to June 30, 1982. Perret will serve from January 1 to December 31, 1982.

Carriere has a B.S. degree in civil engineering from LSU. He was president of the New Orleans chapter in 1979-80. He replaced T. J. Hogue, P.E., Baton Rouge, on the Board.

Perret has a B.S. degree in civil engineering from USL. He is chairman of the LES-PEG practice division in 1981-82. He will replace Ara Arman, P.E., on the Board.

The two engineers elected by CEC/L on the Board were: Vincent L. Goodman, P.E., Metairie, July 1, 1981 to June 30, 1982 and Hugo A. Marrero, P.E., Baton Rouge, January 1 to December 31, 1982.



1981-82 Bayou Chapter Officers

The 1981-82 officers for the Bayou Chapter of LES were installed June 11, 1981, in Thibodaux by Jerrel J. Freeman, P.E. L to R: Charles Robard, P.E., secretary-treasurer; Mike Lane, P.E., 3rd vice president; Dale Thompson, P.E., 2nd vice president; Greg Broussard, P.E., 1st vice president; and Edgar Benoit, P.E., president.



1981-82 New Orleans Chapter And Auxiliary Officers

New Orleans Chapter Officers and Auxiliary Officers for 1981-82 are, seated from left, Lorraine (Mrs. Joseph) Hogan, Jeannette (Mrs. Walter) Herrmann, JoEva (Mrs. Harold) Flettrich, and Lorraine (Mrs. Abraham) Stabinsky. Standing from left, Mr. Charles E. Prewitt, P.E., Mr. Dale T. Hunn, P.E., Mr. Frederick J. Brown, P.E., Mr. George N. Bischoff, P.E., Laura (Mrs. Urban) Pfefferlie, Janie (Mrs. M. F.) Lang, Mr. Marvin L. Firmin, P.E., and Mr. John J. Bergeron, P.E.

New Appointment for Douglas L. Haley, P.E.

Douglas L. Haley has been appointed Manager of Business Development for the Jacobs Engineering Group, Inc., Chemicals Division, Baton Rouge. In the position, Haley will be responsible for the development of new clients and potential projects in the Baton Rouge area and in other strategic locations in the southeastern U.S.

Haley has held positions with several engineering, construction and industrial firms. Most recently he held the position of District Manager of Business Development at Ford, Bacon & Davis.

He is a member of the Louisiana Engineering Society, the Technical Association of Pulp and Paper and the Baton Rouge Geological Society.

LES Membership Growth for Ten Years

The Louisiana Engineering Society had 2,434 members in 1971-72 and 3,544 in 1980-81, a growth of 1,110 members for a 31% gain. These figures are taken from the July membership audits from each year.

In the past ten years every chapter gained except Shreveport, who lost 10 members over the 10 year period. The Lafayette chapter was the top gainer for the 10 years with 61%; Bayou - 50%; Lake Charles - 34%; New Orleans averaged the state gain with 31%; Baton Rouge - 30%; Alexandria - 16% and Monroe - 7%.

For the same ten year period NSPE membership in LES has increased from 810 members in 1971-72 to 1,733 members in 1980-81 or a 53% gain.

Direct Notifications Available From DOTD

The Louisiana Department of Transportation and Development will afford engineering firms interested in performing engineering and/or land surveying services for the Department the option of receiving direct notification of each project in lieu of reliance on newspaper advertisements. This option will be available after August 1, 1981, and will cost each firm $24 annually. Firms interested, write: Joseph L. Wax, Project Control Engineer at P.O. Box 44245, Capitol Station, Baton Rouge 70804. Furnish the name and address to which these notices are to be mailed. Such notice must be accompanied by a check in the amount of $24 made payable to DOTD. The list will be renewable annually on August 1.

Short Courses & Conferences — LSU

The office of Short Courses and Conferences at LSU is currently developing its fall brochure. This brochure consists of courses in four general areas:

1. Professional Development
2. Physical Fitness
3. Art
4. Enrichment

For more information on the courses available and course descriptions, please call or write:

Office of Short Courses and Conferences
Room 177 Pleasant Hall
Louisiana State University
Baton Rouge, Louisiana 70803
Phone: (504) 388-6621

Changes at Waldemar S. Nelson and Company

The Board of Directors of Waldemar S. Nelson and Company, Inc., New Orleans announces the following officer elections effective July 1, 1981:

Henry T. Madden, President
Charles H. Weatherly,
Executive Vice President
Jerrel J. Freeman, Senior Vice President and Manager of Engineering

Waldemar S. Nelson, chairman of the Board, will continue active practice with the firm.

John F. Vogt, Jr., P.E., formerly senior vice president of Middle South Utilities, Inc., has been retained in the capacity of senior consultant, effective June 1, 1981.

Edward J. McNamara, P.E., formerly vice president of Freeport Minerals Company has been retained in the capacity of senior consultant, effective July 1.



No Fueling

"Neither snow, nor rain, nor heat, nor gloom of night stays these carriers from the swift completion of their appointed rounds."

To this age-old credo may soon be added the words, "Nor lack of gasoline", as the U.S. Postal Service adds the first 14 of 375 electric mail delivery vans to its fleet of gasoline powered delivery vehicles. Pictured above is the electrically-powered delivery van made by Commuter Vehicles of Sebring, Florida, which was recently put into service in Tampa, Florida. The electric mail delivery program is expected to go nationwide in an effort by the Postal Service to reduce costs. The electric delivery van operates for just pennies per day, can be re-charged overnight or between deliveries and is also quiet and pollution-free.

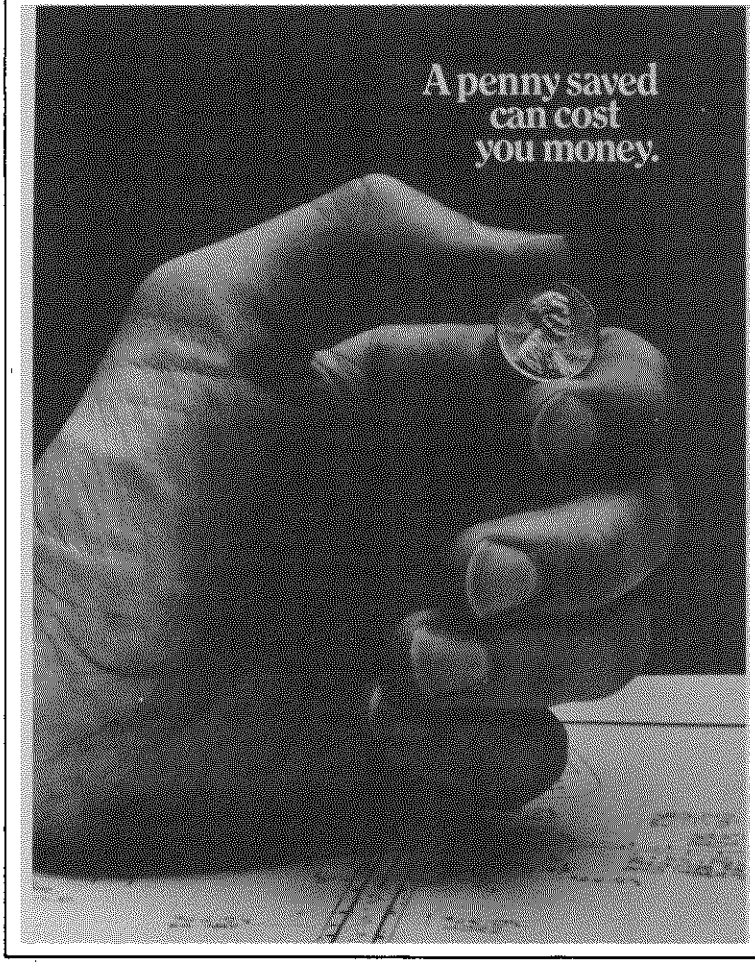
Timetable Set For Scholarship Program

The timetable for NSPE's 1981-82 scholarship program is as follows:

—August-early November, 1981: Materials to be distributed by states and chapters to high schools in their assigned areas
—November-December, 1981 (specific dates set by local chairmen): applications to be collected, interviews conducted, and chapter winners selected
—January 1, 1982: applications for selection to be turned in to state office by chapters. Suggested state society selection committee meeting.
—February 5, 1982: applications for national selection to be turned in to NSPE headquarters.
—March 31, 1982: announcement of national winners.

Commentary on Agreements for Engineering Services and Contract Documents

The Engineers' Joint Contract Documents committee has published a revised "Commentary on Agreements for Engineering Services and Contract Documents (No. 1910-9). The new 62-page Commentary, written by John R. Clark, special legal counsel to the



You may be able to find Professional Liability Insurance Coverage for your architectural or engineering practice for less money, but you won't find a program that works as hard or does as much for you as CNA's Architects' and Engineers' Professional Liability Insurance, administered by Victor O. Schinnerer & Company, Inc.

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Ours is the most comprehensive professional liability insurance program available, with special features like the Deductible Credit Plan, First Dollar Defense Cost Coverage and Fully Retroactive Coverage.

So when you're looking for Professional Liability Coverage, don't forget to check what you're getting for your money. What you give up to save a little now could cost you a lot later.

The CNA Architects' and Engineers' Professional Liability Program is commended by the American Institute of Architects and the National Society of Professional Engineers/PEPP.

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Phone: (212) 344-1000

595 Market Street
San Francisco, CA 94105
Phone: (415) 495-3444

joint committee, replaces the 1974 edition and reflects changes in the documents and new documents issued by the joint committee in recent years.

The purpose of the commentary is to explain the relationship between the various standard documents issued by the joint committee, and to point out the rights and duties of the various parties to a project from initial planning to final completion. The new commentary may be purchased at a single copy price of $10.

In a related move to make the document series more usable, the joint committee has also made available a loose-leaf binder for all the documents. The binder may be obtained from NSPE with the full set of documents included for $54, or without the documents $10.

The joint committee has also published a commentary on the AIA's standard form for use when an architect retains an engineer. The joint committee commentary notes several features in the AIA document which may be unacceptable to engineers or which need careful attention for possible revision. This document (No. 1910-25) is available from NSPE at a single copy price of $3.

The new documents and binders are available from: NSPE, 2029 K Street NW, Washington, D.C. 20006; (202) 463-2383.

LES Scholarship Winners

The 1980-81 recipients of the LES Scholarships are:

$1,000

Mr. John C. Gilbert
149 Platt Drive
Haughton, La. 71037
Plans to enroll Louisiana Tech

$500

Mr. John Phillip Wust
23 Forstall Ave.
Kenner, La. 70062
Plans to enroll LSU

$250

Miss Susan M. Kuhn
794 Heritage Ave.
Gretna, La. 70053
Plans to enroll LSU, Baton Rouge

Miss Paticia D. Elliott, recipient of a $1,000 NSPE Regional Grant, has advised her rejection of the Grant. She has entered Baylor University and is studying accounting.

Officer & Amendment Election Results

A tellers committee composed of three members from three different chapters met on June 30 and counted the ballots. A total of 831 ballots were received but 39 were spoiled ballots, the majority of which did not have the required identification on the outer envelope.

The elected LES officers for 1981-82 are:

Lamon L. Moody, Jr., P.E.	President-Elect
Dudley Hixson, P.E.	2nd Vice President
Henry E. Markel, Jr., P.E.	Secretary-Treasurer
John W. Roach, Jr., P.E.	State Director
Ted J. Povinelli, P.E.	State Director
E.E. "Buddy" Moncla, P.E.	National Director

The constitutional amendment requiring signatures of a minimum of 60 members with at least 15 from each of four different chapters on petitions passed with a 73% majority.

John E. Ritter, P.E., elected president-elect last year will be president of LES in 1981-82. Charles S. Goodrich, P.E. and A. Andre Amy, P.E. will remain on the 1981-82 board as State Directors. They were elected last year for a two year term.

Engineers Week 1982

"Engineering: Pioneering America's Revitalization" will be the theme of Engineers Week, 1982, to be celebrated February 21-27. The theme will provide a focus for the wide range of promotional materials to be made available to states and chapters for use in observing this national event.

Louisiana Engineering Foundation (LEF) Receives Tax Status

After more than two years of paper work, the Louisiana Engineering Foundation has received notification from the Department of the Treasury of exemption from Federal Income Tax under Section 501 (c) (3) of the Internal Revenue Service. This is a big breakthrough for the Foundation.

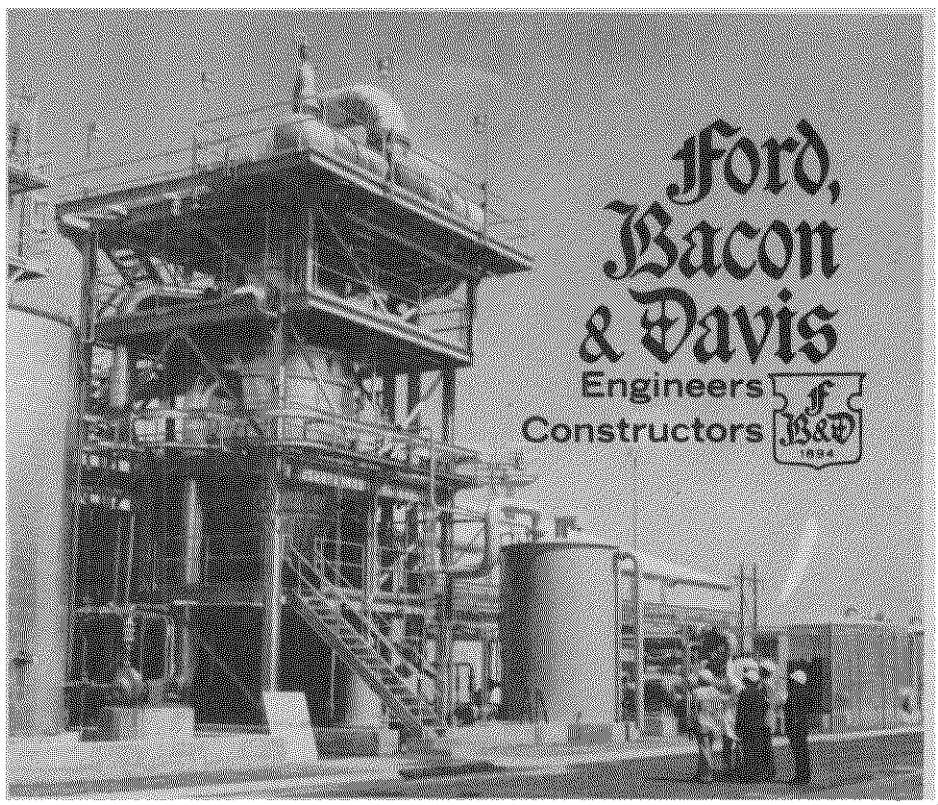
Basically, it gives LEF tax exempt status and (2) it makes individual and corporation contributions tax deductible.

Ford, Bacon & Davis

Working for Louisiana

When ERCO Industries Inc. decided to build its first United States plant in Louisiana, Ford, Bacon & Davis was given the responsibility for engineering and construction. Today, the $13 million plant is producing 25,000 tons of sodium chlorate annually, both in solution and crystal forms, for pulp and paper mills as far as 1,000 miles away.

This is just another example of how Ford, Bacon & Davis has been working for Louisiana since 1894. If you want to know how we can work for you in Louisiana, or anywhere else in the world, call (318) 388-1530 or write Box 1762, Monroe 71201.



New Members

ALEXANDRIA

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Rt. 5, Box 54
Apt. 52
Leesville, LA 71446

BATON ROUGE

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10727 Wheeler Bend
Baton Rouge, LA 70814
Private Practice

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GOTECH, Inc.
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Baton Rouge, LA 70808
Private Practice

Norval P. Knapp, P.E.
9867 W. Tams
Baton Rouge, LA 70815
Government

Shashikant C. Shah, P.E.
LA DOTD
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Baton Rouge, LA 70804
Government

Guy W. Sledge, P.E.
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BAYOU

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Raymond Fabricators
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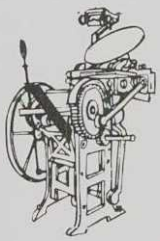

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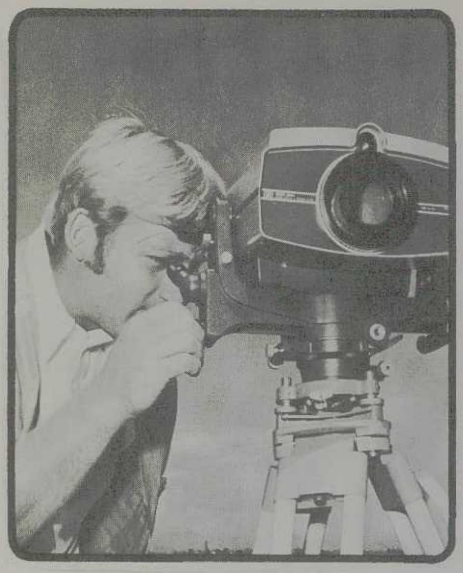

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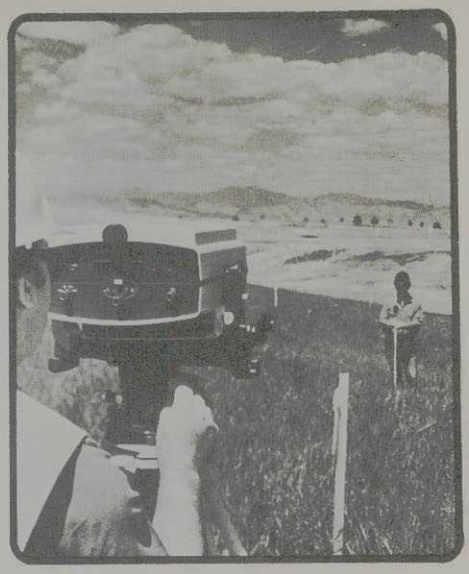

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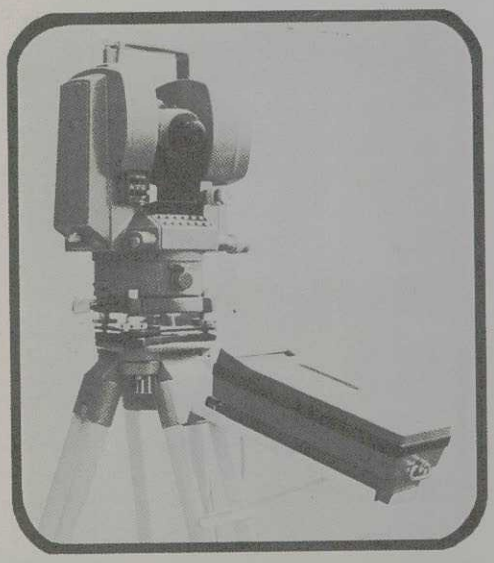

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October, 1981

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About the Cover:

Daniel H. Vliet, P.E. recently retired his post as executive secretary to the State Board of Registration for Professional Engineers and Land Surveyors after 16 years. A tribute to him and his years of service begins on page 6.

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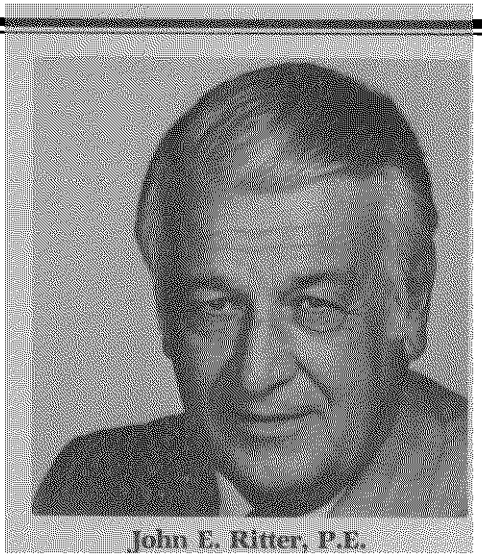


John E. Ritter, P.E.
LES President

The Publications Committee of the National Society of Professional Engineers conducted this year an every-member opinion survey on their two excellent major publications - the quarterly "PE" magazine, and monthly Engineering Times. A total of 78% of the respondents answered yes and 18% no to the question of "Do you regularly read?" Essentially the same percentages agreed and disagreed with the format. While there was some sentiment toward abolishing both publications, 38% for and 55% against, most members 62% to 34% endorsed such a move if it were the only alternative available to maintain the society's fiscal solvency. Obviously, a journal for any large organization is a "must" for visibility. It is the house organ covering in detail programs and activities, as well as providing an outlet for readers' questions and opinions. Certainly "The Louisiana Engineer" welcomes involvement from each reader by way of suggestions for improvement, questions, comments, or contribution of material for publication.

Two readers commented on items in the August issue. One, Brig. General Roy Kelley, U.S.A. (Ret.) questioned the use of the word welfare and the clarity of one of the paragraphs in the proposed rules of the Louisiana State Board of Registration, Professional Conduct for Professional Engineers and Land Surveyors. While this document has been in preparation for over a year and reviewed by each state chapter, Mr. Kelley's comments will be referred to the Ethics and Professional Conduct Committee for handling. The other responder was critical of the contents in one of the columns. The letter was unsigned and further information is required for the handling of the complaint.

The organization is off to a flying start this year. Membership development is well ahead of schedule, the formation of a Louisiana Political Action Committee is underway, an Ad Hoc Committee has been authorized to study problems identified in the engineering schools of Louisiana, the Louisiana Engineering Foundation should own their first building by October 15, 1981, and plans for Engineers Week by all of the chapters are proceeding.

Edgar Rivera, chairman of the State Membership Committee, has issued his first report. It shows that with 22% of the year having elapsed, over 27% of the contest quota has been attained. New Orleans leads the way with 42% and is closely followed by Alexandria with 39%. Edgar predicts all chapters will exceed their quota. Last year the Bayou group, with James Guion heading the Membership Committee, placed first with a record breaking 408%.

A committee chaired by Curtis Dyle and composed of Jerrel Freeman, Vincent Forte, and Lloyd Piper is in the process of developing the legal work, bylaws, and other details associated with the establishment of an LES PAC. The organization will be a voluntary, nonprofit, unincorporated group whose membership consists of concerned engineers, their spouses, and others interested in the engineering profession. Contributions will be made to candidates for local and state public office, without regard to party affiliation, who by their acts have demonstrated interest in the services of engineers in matters of public interest. Qualified engineers will be encouraged to seek office. "Political action" is actually an obligation of all American citizens. In many countries, the people can only watch the process from the sidelines as their self-appointed leaders inaugurate one another into political power. In a democracy, it is not supposed to work that way. We should be "active" citizens. If we do not work for what we want, we deserve what we get.

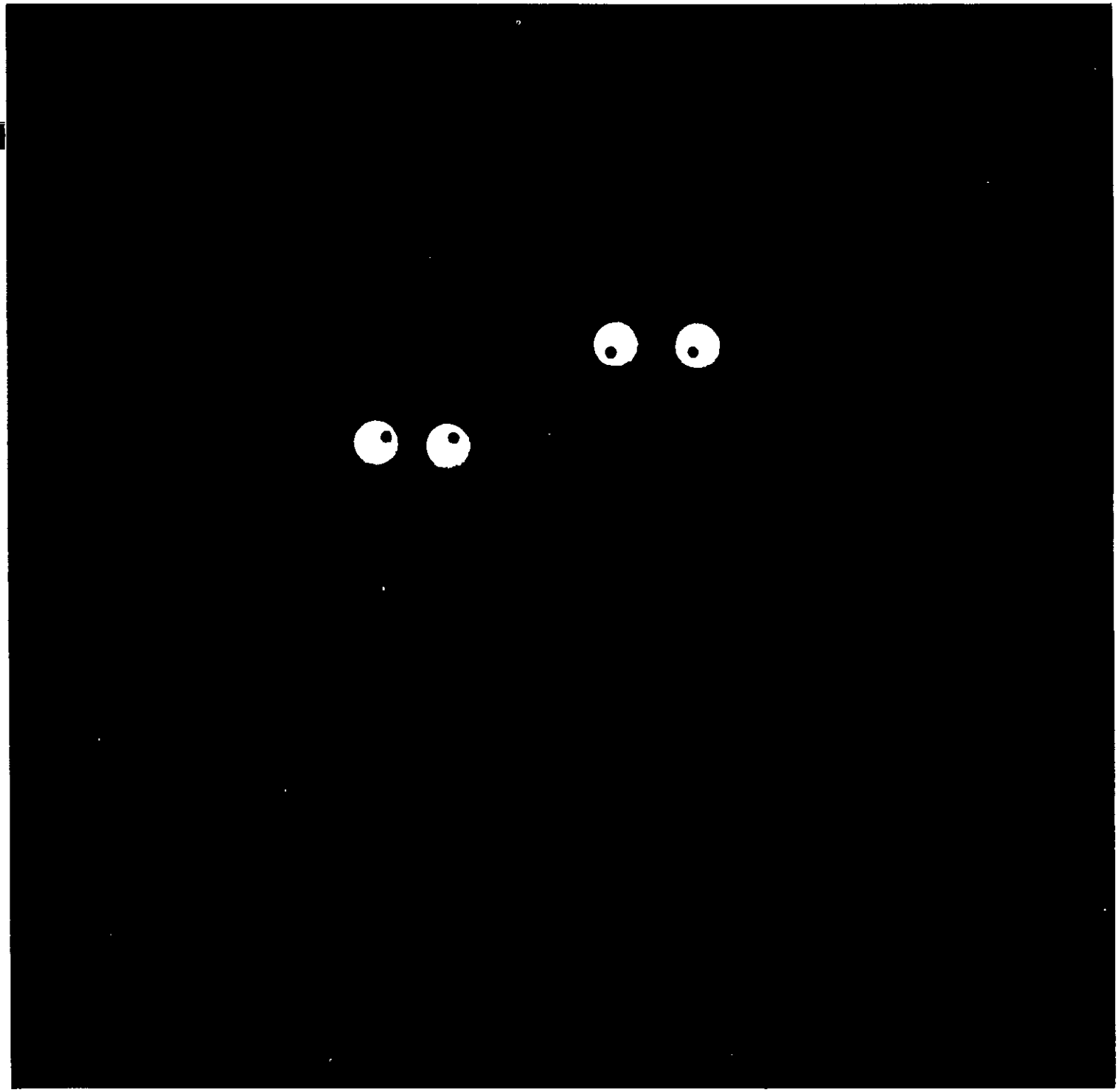
As pointed out in the August "Louisiana Engineer," engineering education is approaching a crisis condition in Louisiana and throughout the entire nation. The problems are concentrated in three principal areas: the critical shortage of qualified faculty; the lack of resources necessary to prepare future faculty; and the absence of modern laboratory equipment and facilities. A nominating committee consisting of Neil Klock, Jr., Jackie D. Robbins, and the chairman, James C. Porter, has proposed members for an ad hoc committee to study the problems. The LES Board of Direction has approved the selections and the study, costing a maximum of $7,500, will begin immediately. Your help may be required to finance this endeavor. Upon completion of the project, the recommendations will be presented to appropriate state agencies. The study will be limited to those Louisiana universities with accredited programs in engineering. These are: University of Southwestern Louisiana, University of New Orleans, Tulane University, Southern University, McNeese State University, Louisiana Tech University, and Louisiana State University.

It has been a long road, but the Louisiana Engineering Foundation (LEF) is about to tack on a fourth milestone. The first was attained with LES President Jim Meyer appointed Vincent Forte to head up a committee to organize the foundation. Work proceeded quickly and smoothly and on November 22, 1978, the group was incorporated. The long awaited tax exempt status from IRS was recently obtained. This, of course, is of prime importance, as it will permit tax deductible contributions, as well as allow the organization to pursue its goal for the betterment of our engineering profession.

An active LEF Scholarship Program has already been initiated. Negotiations are currently proceeding with Mr. Leo Odom on a contribution - purchase arrangement to acquire his building, currently rented to LES for offices on Nicholson Drive. Mr. Odom's gracious contribution, estimated to be $125,000, should permit the foundation to reach its fourth milestone of owning its first building by October 15, 1981. Dr. Roger Richardson, an LEF Board member who served as the fund chairman for CEBA Building at Louisiana State University, has agreed to be the fund chairman for the organization. Your contribution is needed.

The Thirty-Second Annual National Engineer's Week will be celebrated on

Continued on page 20



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A Tribute to
DANIEL H. VLIET, P.E.

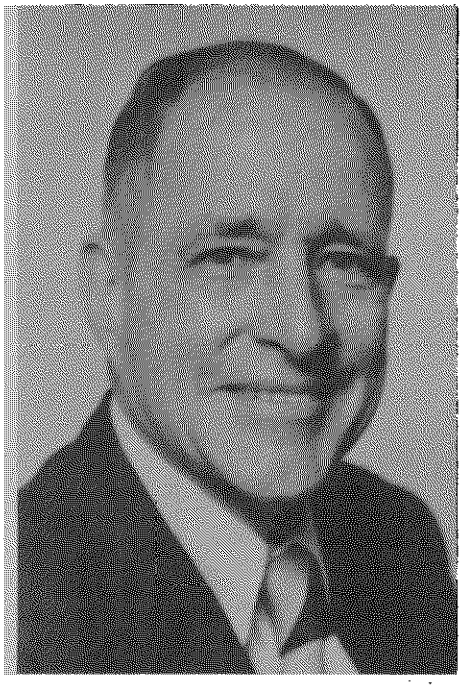
This issue of the LOUISIANA ENGINEER is dedicated to a man for whom every registered engineer in the state has the utmost respect. He is Daniel H. Vliet, P.E., former Executive Secretary of the State Board of Registration for Professional Engineers and Land Surveyors.

For the past 16 years, he has been both a professor of electrical engineering at Tulane University and the executive secretary of the State Board of Registration. His first love is teaching. He felt the responsibilities of the executive secretary position required full-time involvement and, therefore, resigned July 1, 1981 to devote his time to instruction at Tulane.

He is a native of New Orleans and received his BSEE degree from Tulane in 1949; MSEE degree from the University of Michigan in 1952; and PhD in electrical engineering from the University of Wisconsin in 1965. His teaching experience includes Tulane 1949 to date, and visiting teaching assignments at MIT and the University of Wisconsin.

Dr. Vliet has been active in many professional and technical societies over a long period of time: life member and member of various committees for LES; member of NSPE and past chairman of engineering registration committee; member of NCEE and past chairman of the State Board Secretaries committee, member of national council records committee, and NCEE/ABET committee; past chairman of the New Orleans section of LEEE; past chairman of Power Engineering Society, New Orleans section; member of Tau Beta Pi; and Eta Kappa Nu.

He has been a counselor and outstanding coordinator between the Louisiana Engineering Society and the State Board of Registration. The LOUISIANA ENGINEER is the official publication of the LES and the journal of the State Board of Registration. As the "spokesman" for engineering in Louisiana, his column "Vliets Views" appeared regularly in the magazine and kept engineers throughout the state up-to-date on engineering registration matters.



Daniel H. Vliet

Dr. Vliet is the recipient of numerous awards: National Science Foundation Science Faculty Fellowship (two awards); Western Electric Fund Award for excellence in Instruction of Engineering Students; Society of Tulane Engineers Award for Teaching Excellence; LES Charles M. Kerr Public Relations Award; and the LEEE New Orleans Section, Edward R. Freitag Award for Service to the Profession.

He is married to the former Jan Conery of New Orleans. They have three children, Mrs. Janet V. Tully, Margot C. Vliet, and Daniel H. Vliet, IV.

Dr. Vliet has worked with many registration board members in his 16 years as executive secretary. Here are a few comments from present and past Board members:

Waldemar S. Nelson, P.E.
Waldemar S. Nelson and Company
New Orleans

"I have known Dan many years in his capacity as member of the electrical engineering staff at Tulane University and he worked with our firm during one of his summer vacations.

"When he became secretary of the Louisiana State Registration Board for Engineers and Land Surveyors I had occasion to confer with him more often. When the Board moved its office to the John Hancock Building across the street from my office at about the time I became a member of the Board, our contacts became frequent. I developed a great respect for his energy and efficiency in handling the Board's affairs as well as a warm friendship with him as a person.

"One of the most singular things about Dan is that he was a licensed lighter-than-air pilot who flew blimps on submarine search missions over the Gulf of Mexico during the second World War. Many executive secretaries are full of hot air or gas but very few have a license saying they know how to use hot air or gas productively!"

Larkin Agnew, P.E.
Soil Conservation Service
Alexandria

"Dan is most knowledgeable of not only Louisiana registration law but how it compares with many other states. He is concerned that Louisiana's law remain strong. He was a great help to me during my term on the State Board of Registration, always ready to answer or search out answers to my many questions. My wife and I will always treasure the good times we had with Dan and Jane and feel we have life long friends in them."

Arthur R. Theis, P.E.
DOTD, Baton Rouge

"I have had the opportunity of working closely with Dr. Vliet for the last three years as a member of the Licensing Board for Professional Engineers and Land Surveyors. His background and knowledge of Board activities together with his outgoing personality has made my tenure with the Board a very pleasant experience. Dan is such an outgoing individual that his energy provides impetus to Board activities. He has always been a willing participant in discussions and

has actively participated in NCEE activities in order that we can stay abreast of other licensing board activities."

Francis C. Roy, P.E.
Industrial Equipment & Engineering
Lake Charles

"I have known Dan Vliet for more than 20 years. During the past year I have had the pleasure of working closely with him. I am always comfortable with Dan — when depending upon him in important matters, seeking his advice, or sharing the lighter moments of life (including his great oyster Po-Boy laced with Tabasco). I would be greatly pleased to feel that Dan and Jane would always count me as a friend."

James L. Meyer, P.E.
Meyer, Meyer, LaCroix & Hixson
Alexandria

"While I have been acquainted with Dan for many years, it was not until July, 1976 that I had the opportunity to work closely with him. The first thing I realized was just how active Dan was - a Tulane electrical engineering professor, executive secretary to the Board of Registration, and one who found time for his favorite hobby, sailing. Busy people get things done, and this can certainly be said of Dan Vliet.

"Dan can manage his time, and also can manage people. At my first Board meeting he told me not to worry about getting my feet on the ground because he liked to 'bring new Board members along slowly.' Well, after five years I realized that Dan was always 'bringing us along' although sometimes not so slowly.

"Dan has developed a technique for getting one to see his point of view which is quite effective, and worth passing along. Whenever you are in a casual, one-on-one, situation with Dan, the conversation is generally on a first name basis — 'Hello, Dan, hi, Jim, look here, Dan, that's right, Jim' — but when Dan gets serious, it's always 'Mr.' He puts his arm around your shoulder, looks up into your eyes (if you're over 5 feet tall) and says, 'Mr. Meyer, what do you think about . . . ?' From that point on, look out!

"Dan is a love — we'll truly miss him."

Roy T. Sessums, P.E.
Freeport Minerals Co. (ret.)
Maj. Gen. U.S. Air Force (ret.)
New Orleans

"It was my pleasure and privilege to have worked with Dan for over 12 years of his tenure with the State Board. I have never been associated with anyone who was more capable, competent and effective in the performance of his duties. He was not only professional, but he was gracious in his manner of working with the members of the Board as well as those engineers, or aspiring engineers, who sought information and/or registration with regard to the engineering profession.

"In addition to his professionalism and the manner in which he discharged his duties, it was always a pleasure to be associated with members of his family. Mrs. Vliet was always a very charming and gracious hostess. Their children reflected the fine attributes of their parents."

James W. Reeves, P.E.
Dean, College of Engineering
University of Southwestern Louisiana
Lafayette

"I worked closely with Dan for 10 years. The state and the profession have been fortunate to have someone of Dan's dedication and ability serving for the past 16 years. Dan has a memory which would put most computers to shame and the ability to reduce complicated arguments to simple explanations. However, even with his many outstanding qualities, the one that I have always appreciated most is his love for the Board, the profession and for people in general."

Fred C. Culpepper, Jr., P.E.
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"I have known Dan for several years prior to becoming a member of the State Board of Registration. I had not really worked closely with Dan until I became a member of the Board. Dan is obviously a walking encyclopedia of the Board, its history, its program, and its official actions during and prior to his tenure as executive secretary.

"Dan is a professional in every sense of the word. He believes in and practices professional ethics in all of his business and personal relationships. As a member of the Board I am going to miss his sage advice in dealing with problem applications.

"I can only say that in my opinion Dan has served the Board and its members in an outstanding way and we will all miss him."

Edward J. McNamara, P.E.
Consulting Engineer, VP Freeport Mineral (ret.)
New Orleans

"I have worked closely with Dan Vliet for over 15 years. In fact, Dan was just starting out as executive secretary to the Board during my term as president of the Society.

"The Society and the State Board of Registration have been very fortunate in having such an individual as Dan serving in that capacity. Always most cooperative and helpful, Dan's column "Vliet's Views" that appeared in the Louisiana Engineer regularly, really expressed the Board's views and the interpretation of the registration law which is so vital to the engineering profession.

"We, as members of the Board, shall miss the services of Dan, but he has done an exceptional job in training his successor Paul Landry. Notwithstanding that, Dan has also volunteered his services to the Board to assist and counsel us as we might require. This is truly an extraordinary service to the engineering profession."

Leo M. Odom, P.E.
Pyburn & Odom, Inc.
Baton Rouge

"It was with deep regret that I learned of the retirement of Dan Vliet from his job of executive secretary of the State Board of Registration for Professional Engineers and Land Surveyors.

"Dan started with the Board in 1964, some 14 years after its creation, at a time when registration applications were piling in, and shortly after its headquarters had been moved from cramped, free space at Tulane to more adequate quarters in rented space. Although he was ably assisted by his predecessor, Frank MacDonald, the establishment of files and the problems involved in securing and training personnel to work with him had to be handled as first items of business.

"Throughout his career with the Board he has been patient in working with registrants and Board members as well as efficient, loyal and energetic in performing his ever-expanding duties. During his tenure, the number of Board members increased from 7 to 10, the number of registered engineers from 7,380 to 14,008, the requirements for registration for both professional engineers and land surveyors were greatly expanded, and the problems with enforcement became more numerous.

"One of the main requirements of the secretary of this Board is responsiveness to the public, to the registrants and particularly to the Board. Dan has performed this function faithfully and well."

1981 Annual Convention — Toro Hills

The annual LES convention held at Toro Hills, Many, on July 23-25, 1981 was productive and enjoyable, but we had a near record low attendance for this type of meeting. There were 71 engineers and 44 ladies registered for the three-day affair.

The convention got underway Thursday afternoon with recreation. Nineteen golfers participated in the tournament on the hilly, narrow fairways of the Toro Hills course. Eight participated in the tennis tournament at the local courts. Hodges Gardens was toured by many of the attendees, who were impressed by its beauty even though it was not the season for blooming flowers. An enjoyable fellowship was held Thursday evening around the pool.

The education seminar held Friday morning was productive, John C. Pickels, P.E., an engineer and a lawyer, discussed "The Legal Aspects of Engineering." Robert Schroeder, from the Corps of Engineers, presented a talk with slides about the "Atchafalaya Basin." Lloyd Piper, P.E., chairman NSPE-PAC, reported on political action committee successes and problems. He recommended that LES form its own PAC.

The luncheon Friday was attended by 67 engineers and guests. Col. William E. Kellenberger, P.E., director of facility engineering, Fort Polk, presented an interesting program about Fort Polk, its past, present and future.

Practice division and committee meetings were held Friday afternoon. One hundred twenty engineers and guests attended the installation banquet Friday evening. Herbert G. Koogle, P.E., NSPE Southwestern region vice president from Albuquerque, New Mexico installed the 1981-82 LES officers. The Cities Service Company, Refinery Division, Lake Charles Operations was winner of the state Industrial Professional Development Award. At the banquet Jerrel J. Freeman, P.E., presented the Louisiana IPDA plaque to Jerry Thompson, manager, operations engineering. Dan Vliet, P.E., was presented a gift from LES to honor his 16 years as executive secretary of the State Board of Registration.

Friday, the ladies toured Fort Polk and had lunch at one of the non-commissioned officer clubs.

Golf and tennis prizes were presented at breakfast Saturday morning. Winners were:

Golf

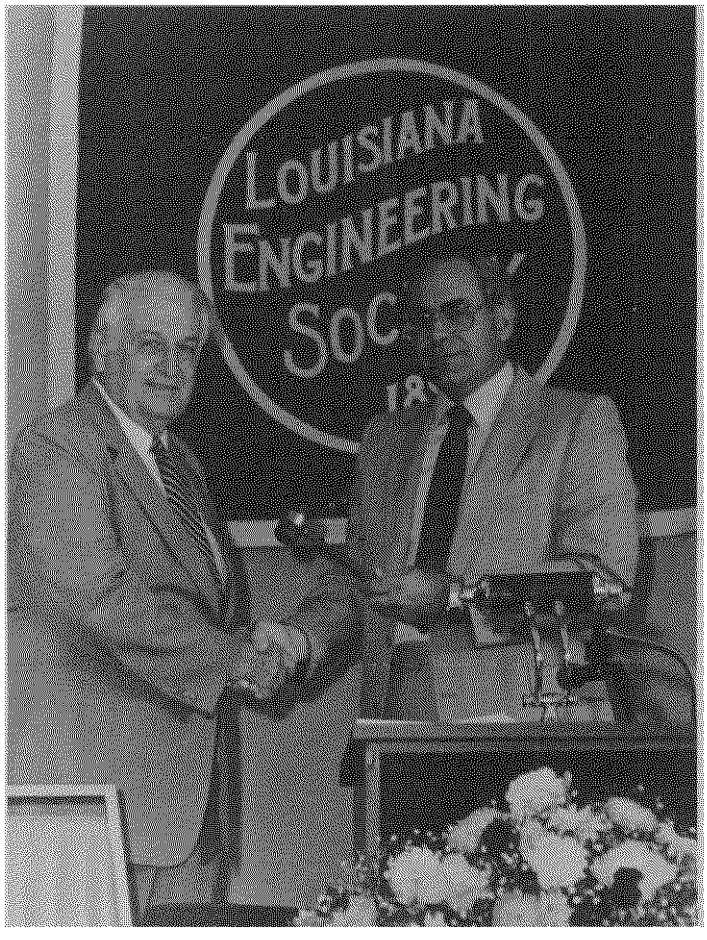
Men: Low Gross - Lloyd Hoover, P.E.
Runner-up - R. C. Spears
Low Net - Billy Rentrop, P.E.
Runner-up - Art Meyer, P.E.
Closest to Hole - Carl Flettrich, P.E.

Ladies: Low Gross - Jo Ann Meyer
Net - Jo Ann Meyer

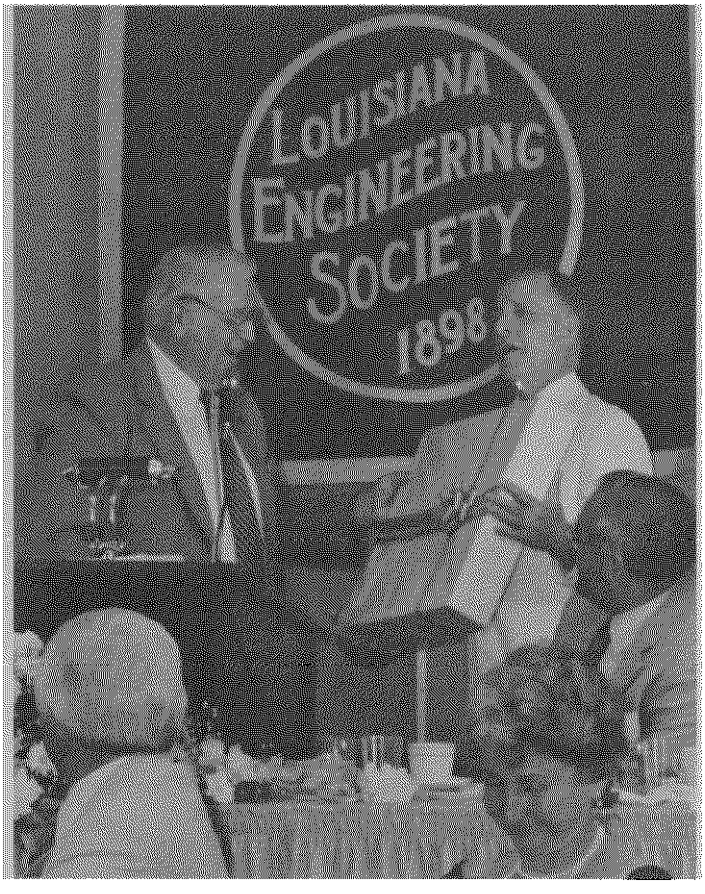
Tennis

First- Edgar Benoit, P.E.
Second- Marilyn Freeman
Third- Jean Blanche
Bob Blanche Tie

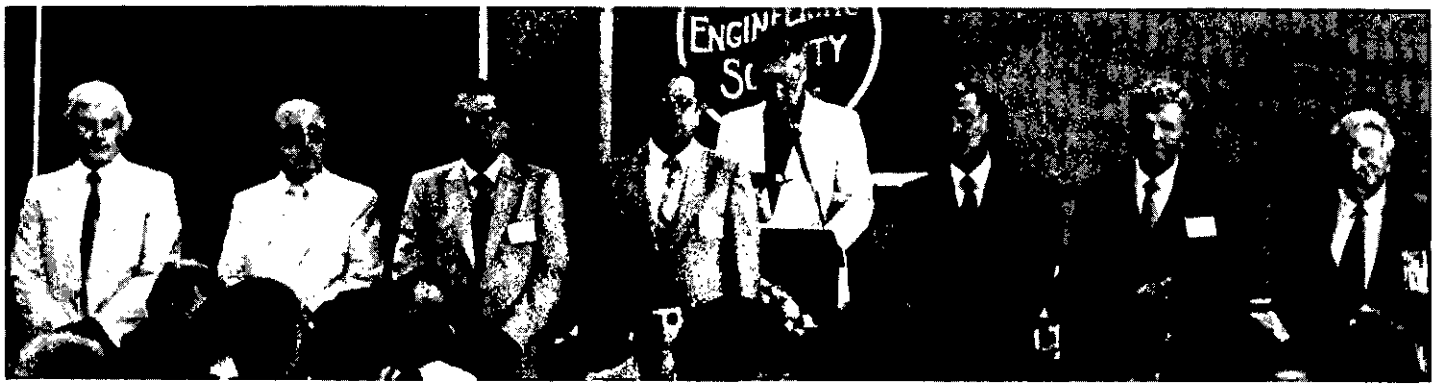
General Membership and Board of Direction meetings were held Saturday morning.



John E. Ritter, P.E., incoming LES president, receives the gavel from outgoing president Jerrel J. Freeman, P.E.



John E. Ritter, P.E., left, presents a gift of appreciation to Dan Vliet, P.E., who had just retired after 16 years as executive secretary of the State Board of Registration for Professional Engineers and Land Surveyors.





ABOVE: New LES officers for 1981-82 are from left, Ted Provinelli, state director; John Roach, state director; E. E. "Buddy" Moncla, NSPE director; Henry Markel, Jr., secretary-treasurer; NSPE Southwest region Vice President Herb Koogle who installed the officers; Dudley Hixon, second vice president; Lamon Moody, first vice president; and John E. Ritter, president.

LEFT: Jerrel Freeman, P.E., left, presents the Industrial Professional Development Award to Jerry Thompson of the Cities Service Company.

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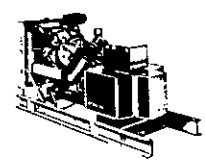

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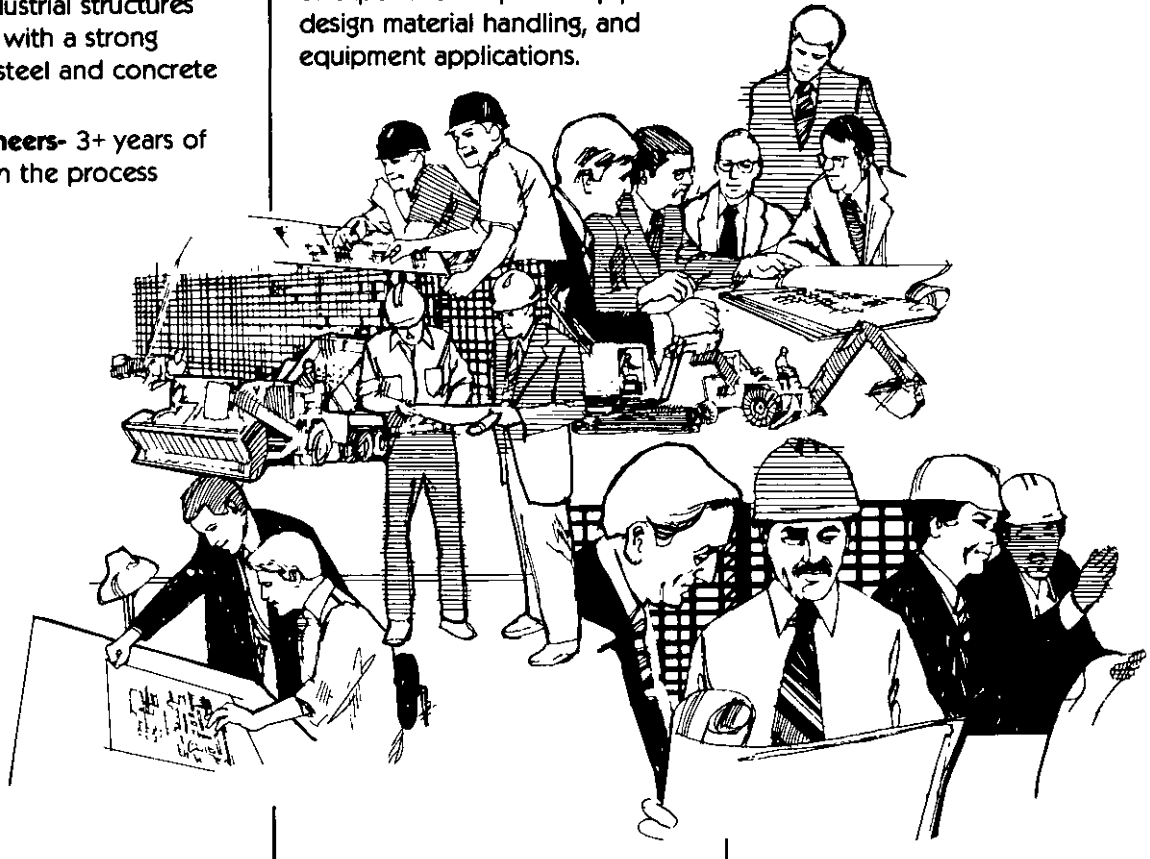

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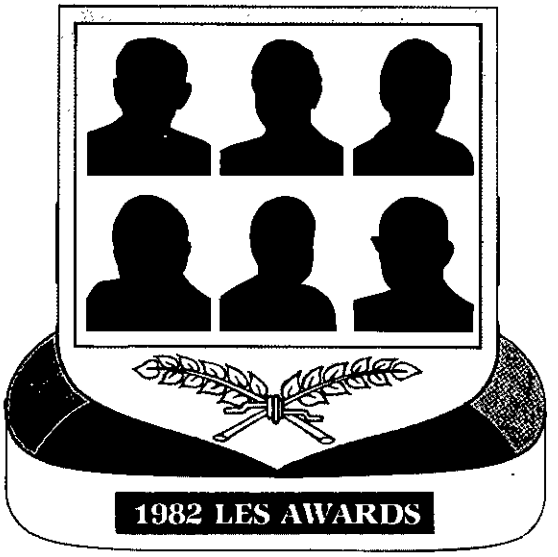
LES AWARDS PROGRAM

Francis C. Roy, P.E., Chairman
Honors and Awards Committee

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.



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 and Awards Committee.

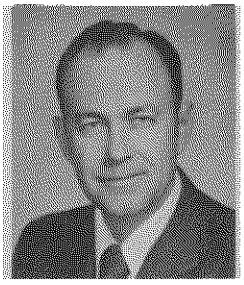
Nominations may be submitted to a member of the Honors and Awards Committee, or to the Honors and Awards Committee in care of the state office, no later than December 1, 1981. Nonminations for the awards must be submitted on the appropriate form. These forms were delivered or mailed to each chapter on September 19. The nomination 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. It is essential that such documentation carry the present title and company connection of the nominee, and set 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 Director by December 1, 1981.

Awards will be presented during the Society's spring meeting on April 23, 1982 in Lake Charles.

NÔTRE MÉTIER



Paul L. Landry, P.E., Executive Secretary, Louisiana State Board of Registration for Professional Engineers & Land Surveyors.

The Board is in the process of adopting Revised Rules of the Board which will be promulgated in the Louisiana Register. A revision of the rules is necessary so that the Rules of the Board conform with Act 568 of 1980, the Registration Law for Professional Engineers and Land Surveyors. Registrants of the Board (professional engineers, engineers-in-training, professional land surveyors, land surveyors-in-training and firms) and the members of the Board are required by Act 568 to abide by these rules.

Some rules of the Board are of little interest or do not apply to some registrants, for example, an engineer-in-training would in all probability have little interest in the rules and statutes that apply to land surveying firms. On the other hand, all registrants and the Board members should have a high interest in the Rules for Professional Conduct because the violation of one of these rules could have severe repercussions. The proposed Rules for Professional Conduct were published in the August, 1981 issue of the Louisiana Engineer, Pages 11-12. The rules will be published in their entirety and promulgated in the Louisiana Register as they are adopted by the Board.

The registration certificates for professional engineers and land surveyors are worded for male registrants. The Board has recently approved the revision of the registration certificate which is to be issued to female registrants. Female registrants (only) who wish to receive a revised certificate should either return the old certificate to the Board for replacement (at no cost) or they may order a new certificate without returning their old certificate and pay a $5.00 fee. This does not apply to EIT certificates, they are worded properly for either sex.

The Board has approved a new fee schedule which will go into effect on 1 January, 1982:

	Present	1982
Application for Registration:		
Professional Engineer	$35.00	Same
Land Surveyor	35.00	Same
Engineer-In-Training	20.00	Same
Land Surveyor-In-Training	20.00	Same
Temporary Permit:		
Professional Engineer	$35.00	Same
Renewals:		
Professional Engineer	$10.00	Same
Land Surveyor	10.00	Same
Corporations	10.00	$15.00
Engineer-In-Training	4.00	5.00
Land Surveyor-In-Training	4.00	5.00
Civil Engineer-Public Employee	2.00	Same
Certificate Replacement:		
Professional Engineer	$ 5.00	$10.00
Land Surveyor	5.00	10.00
Engineer-In-Training	5.00	10.00
Land Surveyor-In-Training	5.00	10.00
Rosters:		
Professional Engineer	$ 5.00	$10.00
Foreign & Domestic Corporations	5.00	10.00
Land Surveying Compendiums	$ 2.00	Same

LOUISIANA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

STATEMENT OF RECEIPTS AND EXPENDITURES

FOR THE YEAR ENDED JUNE 30, 1981

RECEIPTS	
Registrations of Professional Engineers and Land Surveyors	$ 28,266
Certification of Engineers in Training and Land Surveyors in Training	20,049
Temporary Permits	1,005
Renewal of Licenses of Professional Engineers and Land Surveyors	170,036
Renewal of Certification of Engineers in Training and Land Surveyors in Training	10,611
Registration of Corporations and other Firms	5,950
Renewal of Licenses of Corporations and other Firms	9,045
Penalties - Delinquent Licenses	4,185
Miscellaneous Receipts - Sale of Certificates, Compendia, Rosters, etc.	626
Interest:	
U.S. Treasury Notes and Bills	9,843
Interest Earned - Savings and Loan Associations	2,381
Total Receipts	$261,997
EXPENDITURES	
Per Diem to Board Members	$ 7,975
Expenses of Board Members	22,533
Technical Assistance - Examinations, Grading, etc.	7,205
Salaries - Executive Secretary and Administrative Assistant	42,910
Salaries - Stenographic and Clerical	51,438
Data Processing Service	5,965
Retirement Fund Contributions	10,663
Attorney Fees and Expenses	5,533
Auditing and Accounting Fees	2,900
Insurance - Blanket Position Bond, Accident, Liability, Hospitalization, etc.	3,090
Fees - National Council of Engineering Examiners	1,285
Examination Papers - National Council of Engineering Examiners	15,676
Printing	42,531**
Postage	13,242
Rent	14,600
Office Supplies, Rental and Maintenance of Equipment, etc., and Miscellaneous Expenses	6,648
Telephone	3,669
Fees Refunded	1,604
Partial Cost of Publishing THE LOUISIANA ENGINEER	17,605
State Unemployment and F.I.C.A. taxes	1,348
Total Expenditures	$278,420
EXCESS OF (EXPENDITURES) OVER RECEIPTS	$ (16,423)

**Printing cost for the Professional Engineers and Land Surveyors Roster was a carryover from the privious year (1980 Roster)

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Robert L. Rebori, President
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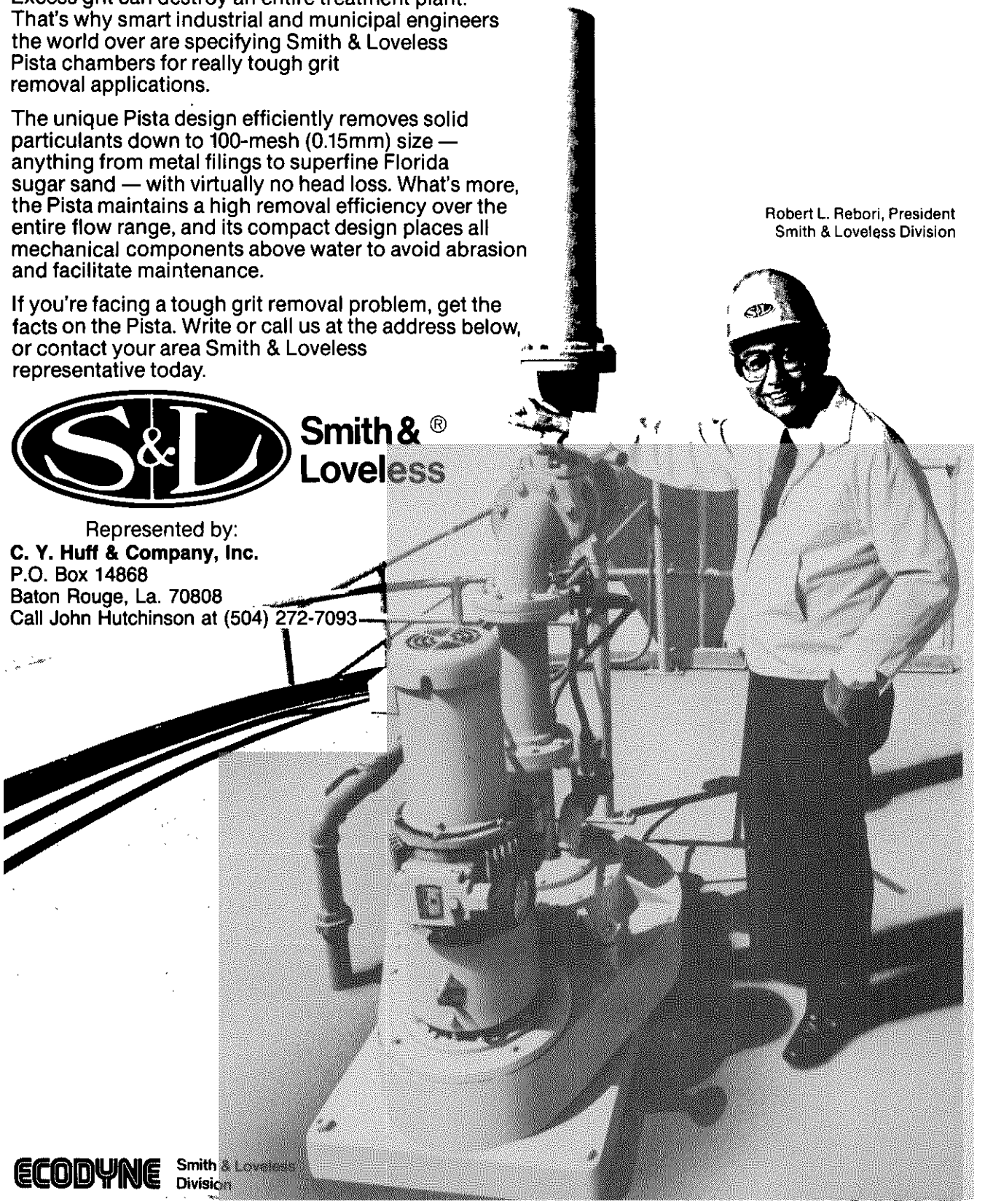

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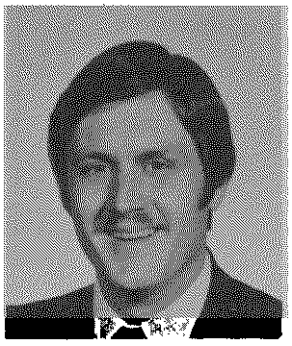
Consulting Engineers Section

THE SPEC SHEET



Warren J. Wilder
CEC/L Executive Director

Schooltime, Schooltime

School is back in session after a long and hot summer. Here are some seminars and workshops that are being offered this fall to further the education of our consulting engineers:

The American Consulting Engineers Council has announced a fall series of workshops on marketing professional services for engineering and architecture firms. This unique four-day program covers the marketing field from initial research to presentations to clients.

Included in the series is a full day program on market research, including techniques for evaluating market potential, developing a plan to match a firm's capabilities with markets and assessing client needs.

The other five half-day sessions include discovering and winning new businesses, promoting professional services, establishing successful relationships with clients, conducting winning presentations and insuring client commitment to the design firm.

The flexible workshop format allows participants to decide which sessions to attend. The series offers continuing education units for participants who complete all five workshops.

This successful workshop series will again be conducted by Stuart Rose, executive director of Professional Development Resources, Inc., Washington, D.C. The market research workshop will be conducted by Roger Grimshaw, vice president of Phillips Swager Associates, Peoria, Ill.

Dates and locations for the marketing of professional services workshops are: Sept. 29-Oct. 2, Cherry Hill, N.J.; Oct. 6-9, Detroit; Oct. 13-16, Nashville; Oct. 27-30, Denver; Nov. 10-13, Los Angeles; and Nov. 17-20, Portland. For more information contact ACEC's Professional Development and Meetings Division, 1015 15th St., N.W., Suite 802, Washington, D.C. 20005.

The American Consulting Engineers Council is the organization for 3,800 engineering firms in private practice.

Don Thompson Associates will be offering a new one-day professional development program for CEO's, principals, and officers of architectural, consulting engineers, and planning firms. The program *Quality Management in a Design Practice* will be offered in seven major U.S. cities in December.

This program will answer many questions that are confronting the top management of small (less than 50 employees) design firms today.

The registration fee will be $245.00, and it will be conducted by Don Thompson, a management consultant who specializes in executive counseling with architects and engineers.

In announcing the program, Don said, "We have created a 'double-headed monster' in professional service organizations today. Principals of design firms have been exposed to vast amounts of formal education and experience to keep them abreast of the state-of-the-art on the technology side, but unfortunately the same is not true of the management side. This program is designed to address this problem."

Quality Management in a Design Practice, a program designed to increase the management effectiveness of architects, consulting engineers, and planners will be held in the following cities:

Denver, Colorado . . . December 1, 1981
Seattle, Washington . . . December 2, 1981
Los Angeles, California . . . December 4, 1981
Minneapolis, Minnesota . . . December 7, 1981
Boston, Massachusetts . . . December 8, 1981
Houston, Texas . . . December 10, 1981
Atlanta, Georgia . . . December 11, 1981

For more information, contact Don Thompson at Don Thompson Associates, 3247 Embry Hills Drive, Atlanta, Georgia, 30341. Or call (404) 455-8414.

Toying Around With Engineering

Here is a most unusual public relations idea conceived by Consulting Engineers of Tennessee and that organization's Executive Director Ms. Mary D. Shahan:

A nationwide contest to design a children's game or toy based on the theme, "Let's Play Engineer," is about to be launched by CE/Tennessee. The design competition, for which rules are being made final, will be open to all registered engineers interested in contributing the time and the imagination needed to devise a toy suitable for children six to eight years old.

The ambitious project is the result of extensive groundwork by CET Executive Director Mary D. Shahan and the CET Public Relations Committee, in cooperation with TSPE. The idea has already been readily endorsed by a major Nashville-based toy manufacturer, Kusan, Inc., which will monitor the competition and then manufacture, market, promote and sell the winning toy or game. Shahan, who is now working with an attorney to put the final touches on the legal agreements and contest rules, expects the rules will be ready for distribution in mid- to late September.

The motivation for this novel idea is quite logical, says Shahan. The CET PR committee has long been looking for an idea to bring more attention to the profession and at the same time provide a better understanding of it. "Early on we became keenly aware that if we were going to influence people, we were going to have to start with a very young age group. We need to influence a whole generation and what better place to start than with grade school children?" asks Shahan.

The committee in fact first recommended that any toy developed be directed at preschoolers. However, after meetings with Kusan marketing officials last month in Minneapolis, it was decided to target the six-eight year olds. "The feeling is that younger children will naturally copy their older siblings," explains Shahan.

The CET executive director still seems somewhat surprised by Kusan representatives' enthusiasm for the project. "When I went to the first meeting I didn't know what to expect," she recalls. "I thought maybe they would be polite and then put the whole idea on a shelf. But they literally jumped out of their chairs and asked us, 'Where have you been all these years?' "

Erector sets notwithstanding, the toy market has been sadly lacking in educational and recreational toys and games

Continued on page 16



Think of it as a light switch. Or a thermostat.

Now a single system can enhance your internal and external communications *and* lower your energy costs by as much as 20%. And that single system is already wired to a large extent in any building with existing telephone lines. So you save considerably on the cost of installation as well.

Dimension® PBX with Energy Communications Service is easy to operate and easily updated. It implements your programmed "on-off" cycles and load-shedding during times of peak demand. It transmits signals to units that help prevent energy waste in ways as simple as turning lights on and off, as complex as adjusting heating and cooling systems. Night and day. Summer and winter.

The same system—using the same lines and pushbutton control—helps you quickly adjust to change and growth in communications. To renumber extension phones without rewiring; to reconfigure communications for entire departments without changing equipment. And more.

Energy Communications Service achieves vital savings that begin with a Bell System Energy Study at your place of operation. Start the process with a call to your Bell Account Executive. It's as easy as flipping a switch. And smarter than fiddling with thermostats. **South Central Bell.**

The knowledge business

SPEC SHEET
Continued from page 14

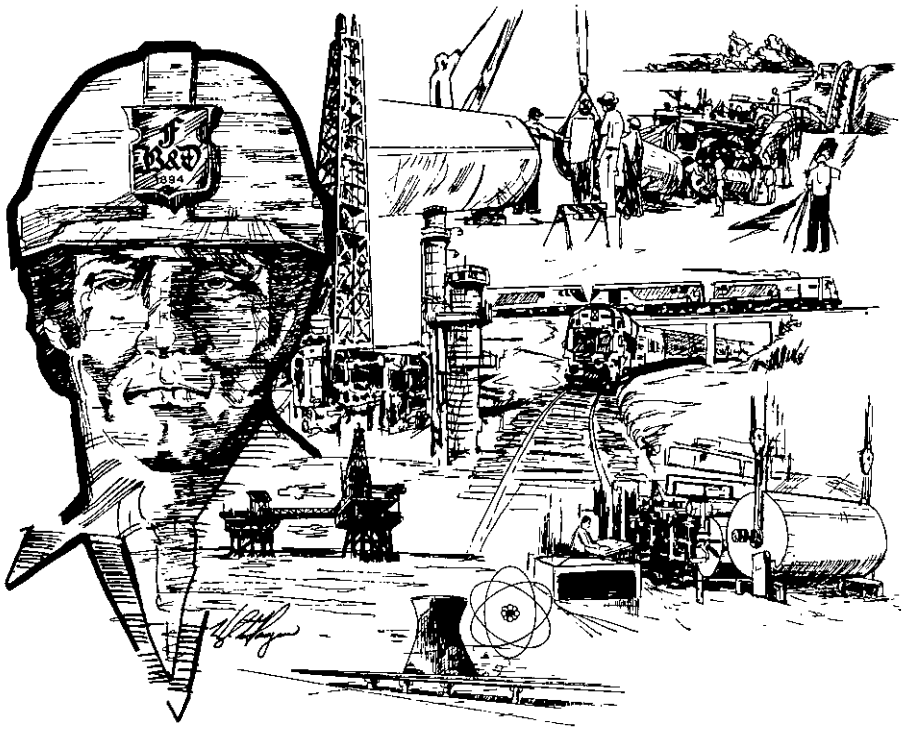
based on the engineering discipline, explains Shahan. This project is an attempt to fill that void and at the same time draw more attention to the profession through the design competition.

The preliminary schedule for the project calls for dissemination of contest rules in September, with judging of the entries in January, 1982. Announcement of the winning toy is slated for Engineers' Week in February. The toy will then be manufactured and marketed in time for Christmas sales promotions.

Louisiana Institute of Building Sciences (LIBS) Publishes New Document

Here is a small new publication that could help reduce those roofing call backs and keep you out of court. The new LIBS Document 101, "Building Owners Guide for Protecting and Maintaining Built-up Roof Systems," is designed to show the building owner his responsibilities in connection with his roof. You should see that your building clients get a copy. (Available for 1-9 copies @ $1.75 ea. or 10 or more $1.50 ea, plus 25% for postage and tax, from LIBS, 820 North St., Baton Rouge, La. 70802.)

Working for Louisiana



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POTPOURRI

R. C. "Doc" Spears
Executive Secretary

Bayou Chapter Wins 1980-81 Membership Contest

The Bayou chapter won the 1980-81 membership contest with 223% of quota and 408% of contest. In addition to points for new LES members, chapters are credited one point for each new NSPE member. The Bayou chapter had a quota of 13 and added 29 new members, 24 of whom joined NSPE.

The Alexandria chapter won second place with 308% of contest and the New Orleans chapter was third with 228% of contest. All eight chapters surpassed the 100% mark in the contest.

A portable rostrum was presented to the Bayou chapter at the September meeting in Alexandria.

"Engineers Pioneering America's Revitalization" Is 1982 Engineers Week Theme

As in the past 31 years, the White House will proclaim the week of George Washington's birthday, February 21-27, 1982, national Engineers Week. Engineers, their employers, friends, families and those who wish to recognize the profession will celebrate the event focusing on the theme, "Engineers: Pioneering America's Revitalization."

In planning the event, Alfred C. Ingersoll, P.E., 1982 national chairman remarked: "A century ago, engineers were preparing America for her great leap into world power status. They were in the pioneering forefront — crossing the Western frontier as well as the intellectual, technological and scientific frontiers posed in the then-burgeoning Industrial Age. Their efforts made the later Atomic and Space Ages possible. Now we stand poised at another frontier. Will we be able to maintain America's prominent position in the world? America's engineers think so, and will be carrying that message to all who will listen during the week of George Washington's birthday in 1982."

NSPE Scholarships Reaching $354,000

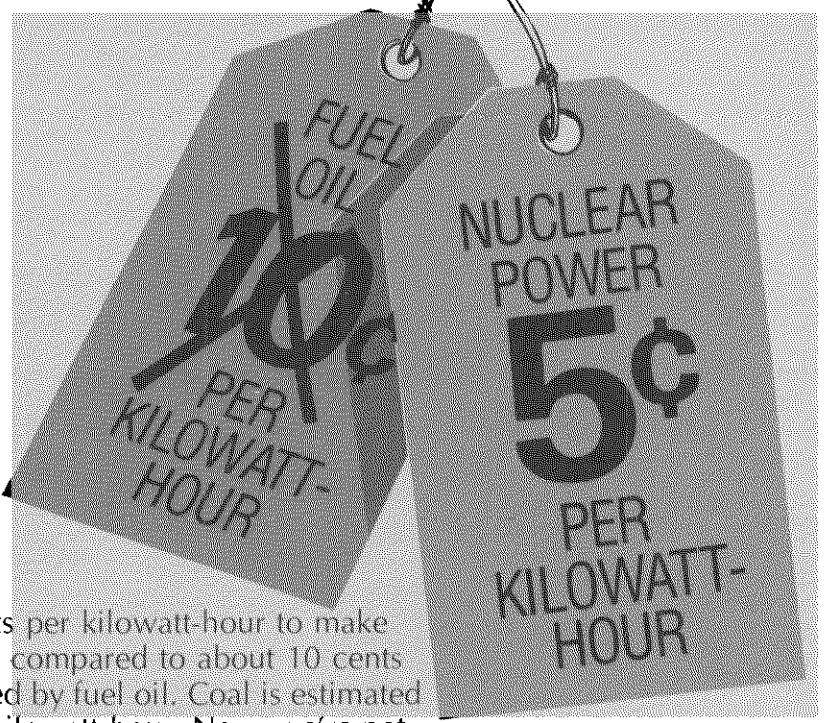
In the 1981-82 academic year, 354 engineering students will receive scholarships from the NSPE Educational Foundation. This amounts to more than $354,000 of scholarship assistance for engineering students provided by NSPE members, industries, memorial bequests, NSPE Auxiliaries, and participating universities.

This is an increase of 51% above last year's 234 students and amounts to about 52% more than last year's $234,000 level.

LES members support this program each year by contributing $1.00 when they pay their annual dues.

Continued on page 18

SALE ENERGY



By 1985 it will cost about 5 cents per kilowatt-hour to make electricity with nuclear power as compared to about 10 cents for electricity now being generated by fuel oil. Coal is estimated to be in the range of 7 cents per kilowatt-hour. Now, we're not saying that 5 cents per kilowatt-hour is cheap. The days of cheap electricity are gone. Forever. But it does make a difference.

For example, the 72 nuclear power plants operating in the U.S. generated more than 276 billion kilowatt-hours. Or about 13% of all commercial electricity. Furthermore, these nuclear plants produced a savings in generating costs of approximately 3 billion dollars. For the typical residential customer, the average savings on annual bills ranged from $11.70 to $106.44.*

No single source of energy can possibly supply all the electric power we will need. Conservation and a balance of nuclear power and coal will be essential in meeting that need.

*Figures obtained from Atomic Industrial Forum, Inc.

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

POTPOURRI

Continued from page 16

Changes At Pyburn & Odom

Leo M. Odom, P.E., chairman of the board, Pyburn & Odom, Baton Rouge, announced the election of Harold L. S. Odom, P.E. as president of the firm. He also serves as president of Odom Offshore Surveys, Inc.

Shepard F. Perrin, Jr., P.E., former executive director of LOOP, has been elected to the Board of Directors of Pyburn & Odom and will serve as director in charge of marketing development.

New Orleans Auxiliary Scholarship

Terry Harrington, who graduated this past spring from Tulane University with a master's degree in chemical engineering, has been awarded $1,000 by the New Orleans Women's Auxiliary of the Louisiana Engineering Society.

The 27-year old Harrington won the award for her excellence in chemical engineering.

A native of Grand Rapids, Michigan, Harrington graduated from Tufts University with a major in chemistry in 1976. She worked for Eastman-Kodak Company in New York before moving to Baton Rouge to work as a chemist for the Ethyl Corporation.

Engineering Education and Awards Highlight NSPE Annual Meeting

Engineering education was a main topic for the NSPE summer meeting in Bismark, North Dakota. The Professional Engineers in Education (PEE) practice division proposed "A Program for Producing More Engineering Doctorates to Meet National Needs for Productivity and Innovation." The Board of Directors approved the program which, if implemented, would help insure availability of enough advanced degree engineers annually to meet the needs of education, government and industry.

For some time NSPE's Board has encouraged the development of an NSPE Professional School Recognition program. At this meeting PEE reaffirmed its support of the concept. After meetings with the Accreditation Board for Engineering Technology (ABET) and NSPE's Education Advisory Group this fall, PEE will survey deans of engineering schools for their opinions on professional schools and then plan a course of action for the program.

In an effort to more precisely differentiate between engineering team members, the Board resolved that "Engineer" or "Engineering" should not be used in the title or in the description of academic programs, degrees or courses in technology, among other recommendations. Most importantly it was resolved that state societies would meet with technology schools in their respective states to seek voluntary compliance with the recommendations.

Awards ceremonies were an important part of the meeting. James Shivler, P.E. and Kenneth Roe, P.E., received NSPE Awards, the highest honor awarded by the Society. Dennis Hirschbrunner, P.E., was presented the Young Engineer of the Year Award and Donald G. Iselin, P.E., accepted the annual Professional Engineers in Private Practice Award. Robert Nichols, P.E., received the PEI Distinguished Service Award. Joe Foster, P.E., accepted the 1982 Engineers Week Theme Award on behalf of the East Arkansas Chapter.

LSU Seminar-Writing Professional Communications

A seminar on Writing Professional Communications will be held October 26-28, 1981, at Pleasant Hall, LSU, Baton Rouge.

Today's engineer, technical manager, planner and administrator should attend. Skills in written communications can be acquired and enhanced by the application of several simple and time-proven principles.

The course is comprised of lectures and workshops on organization of material and the use of clear, direct language. Each participant is given an assignment in writing which is discussed and analyzed toward improving written communications. This material can be put to use immediately, since the assignments can be work related.

For further information, contact: Olin K. Dart, PhD, P.E., Professor of Civil Engineering, Louisiana State University, Baton Rouge 70803, (504) 388-8442.

Support the La. Engineering Foundation

The Louisiana Engineering Foundation (LEF) has received its tax exempt status 501 (c) (3), which makes individual and corporate contributions tax deductible.

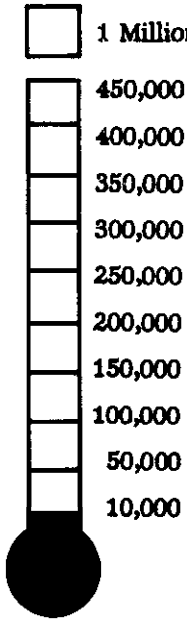
The LEF is formed exclusively for charitable, educational and scientific purposes, including:

1) The granting of scholarships
2) The instruction of the public and dissemination of engineering information beneficial to the interested public
3) Establishment and maintenance of an engineering center

Our immediate goal is to purchase the building at 1213 Nicholson, Baton Rouge. One of our members is contributing a sizable amount to allow this purchase at a good price.

The mercury in the thermometer has been dormant around the $10,000 level for some time because of our delay in receiving the 501 (c) (3) tax exempt status.

For those of you who have contributed, we are grateful. Hope all of you will put a check in the mail today. Use the coupon below.



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Business Address _____

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Telephone _____ Date _____ 19 ____

Total Pledge _____

Cash/Check Attached _____ Bal. Due $ _____

I hereby pledge to

LOUISIANA ENGINEERING FOUNDATION

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 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.

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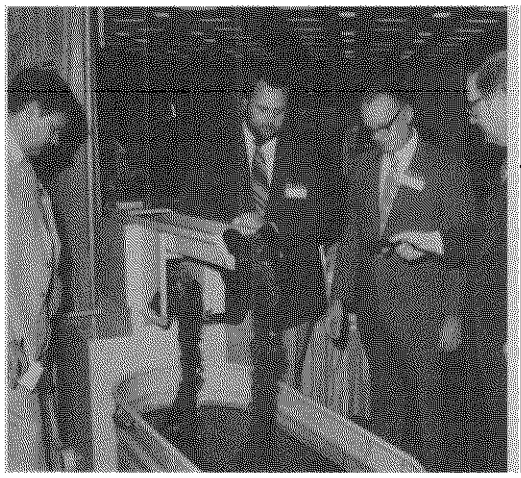

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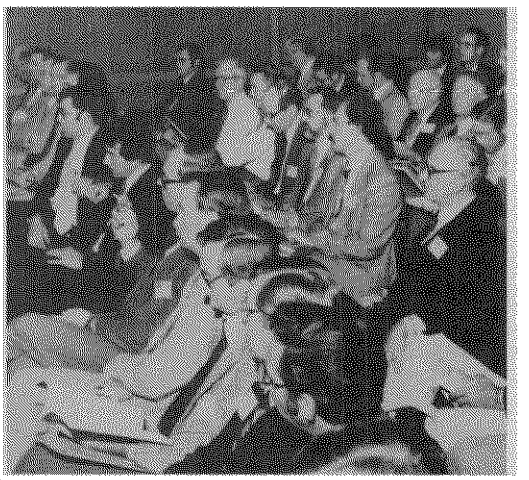

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Continued from page 4

February 21-27, 1982. It is always scheduled during the week of George Washington's traditional birthday, in honor of the first president, who was a noted military engineer and land surveyor. This year's theme is "Engineers: Pioneering America's Revitalization." Engineers, our modern day pioneers, see progress being made towards the revitalization of American technology, productivity and the economy. The same people who have achieved our past and present world-famous technological miracles will conquer tomorrow's frontiers. Engineers are continuing work to insure America's technological vitality and prosperity. Engineer's Week is your opportunity to publicize your profession's role in providing a comfortable lifestyle by volunteering to speak before civic and professional groups. These people are usually seeking a good program.

EngiNEWS

Les Awards $1750 in Scholarships in 1981

Jack Thigpen, P.E., Dean of Engineering, Louisiana Tech University presented a check to John C. Gilbert, Haughton, for $334. John was winner of the LES $1,000 scholarship. He will receive the balance of the scholarship at the start of the second and third quarters.

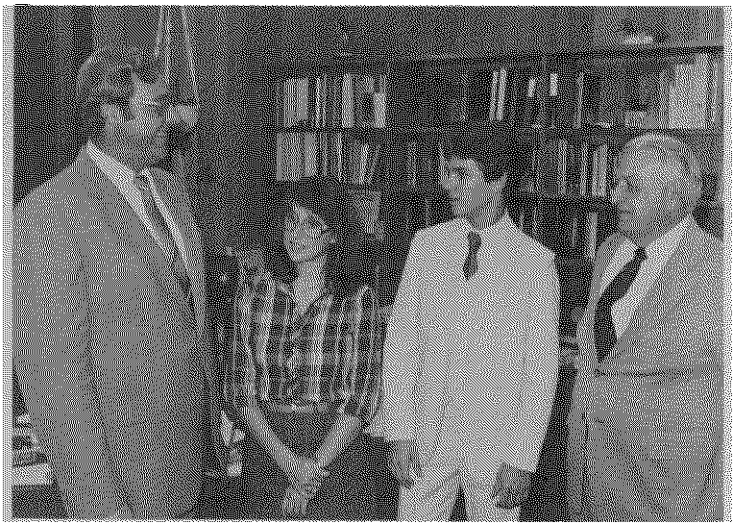


John G. Gilbert, left, receives scholarship check from Jack Thigpen, P.E.

On September 15, Richard Matula, P.E., Dean of Engineering LSU, and John E. Ritter, P.E., LES president, presented LES scholarship checks to Philip Wust and Susan Kuhn in the dean's office at LSU.

Philip Wust, Kenner, received the LES $500 scholarship and his check at the presentation was for $250. Susan Kuhn, Gretna, received the $250 scholarship and her check was for $125. Each will receive the balance of the scholarships at the start of the second semester at LSU.

Below: Richard Matula, P.E., left, with scholarship recipients Susan Kuhn and Philip Wust, and LES president John E. Ritter, P.E.



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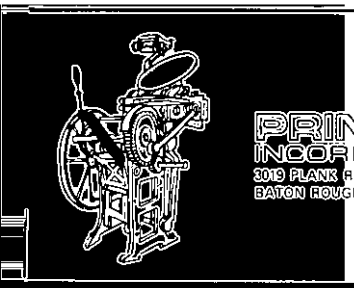

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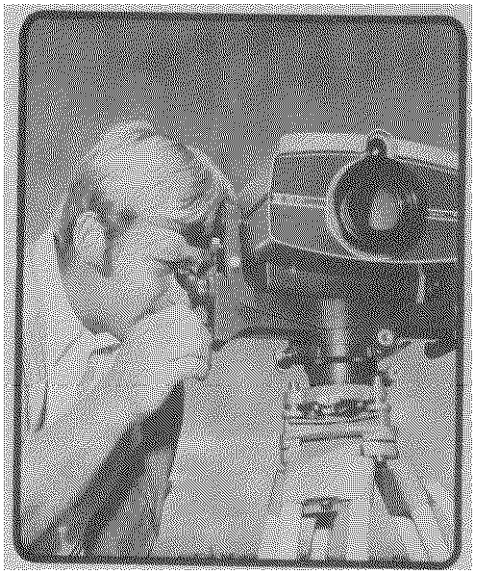

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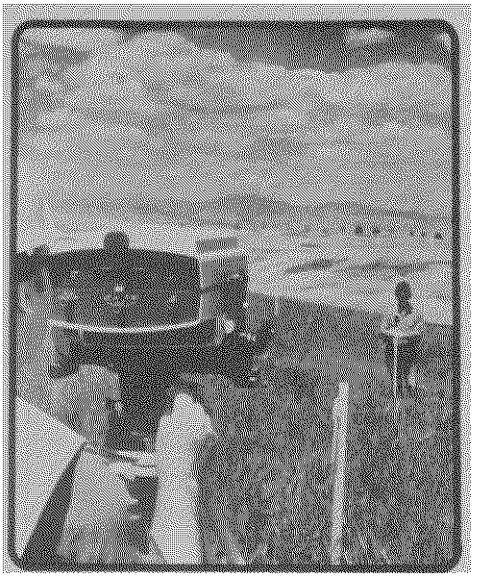

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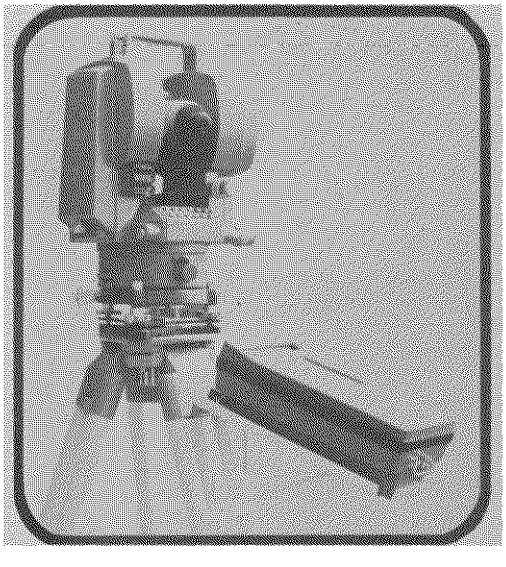

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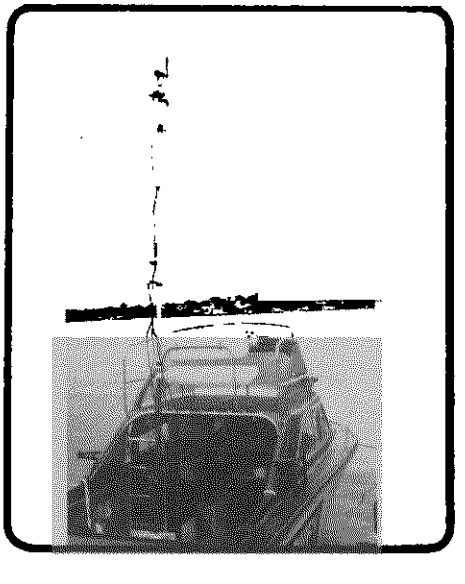
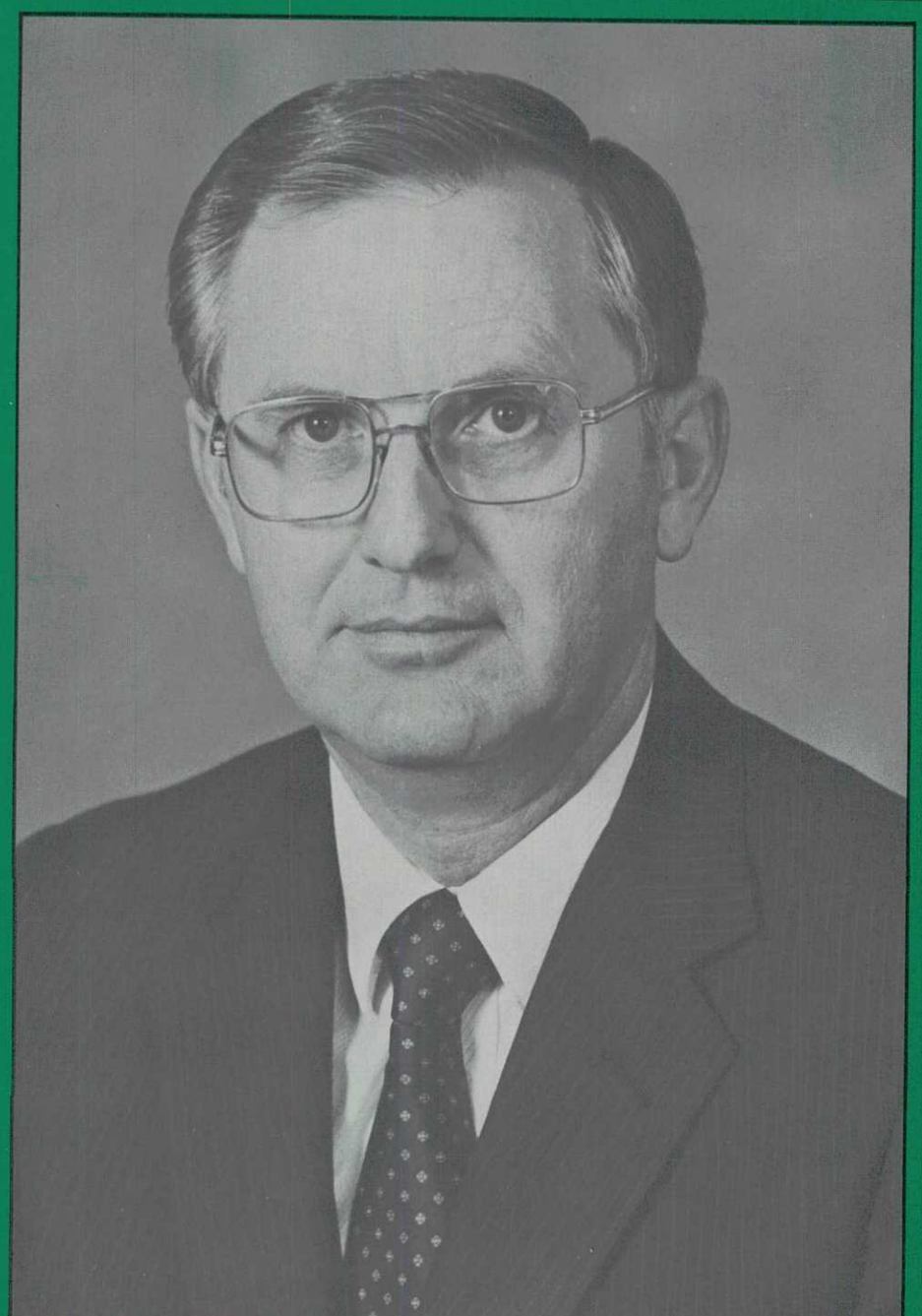


December, 1981

LOUISIANA ENGINEER



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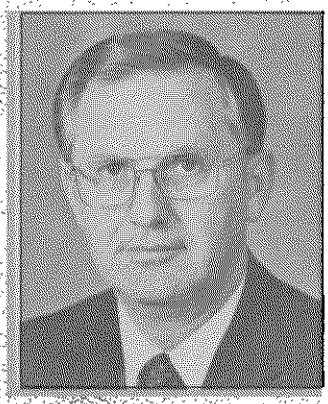

The LES Officers & Staff Wish You a Merry Christmas

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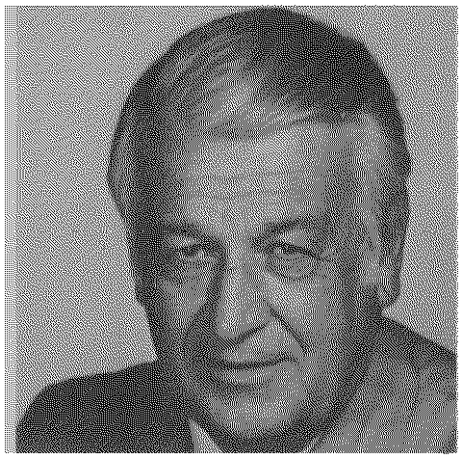
PRESIDENTIAL PRIVILEGE

The engineering profession is beginning to realize the full importance of a public relations program. Other professions spend large amounts each year on advertising and public relations. Yet, of all the professions, ours is probably the least understood by the general public. The reason for this is rooted in history. The civilian practice of engineering, as opposed to its military uses, did not become formalized until the 19th century with the establishment of schools to teach engineering. Thus, it is a relatively new field as compared to medicine or law. In the modern world, virtually everyone utilizes products that are the result of engineering; yet few people either employ engineers or come in daily contact with one.

The purpose of a better public understanding of the engineering profession is two-fold. The first is to attract the best qualified students into the various engineering fields and the second is to obtain public recognition of the importance of engineering and the resultant personal awards for the individual. These objectives require multi-faceted public educational efforts to increase our visibility. This is the trust and objective of the 1981-82 LES Public Relations Program. It is time for all of us to lend State Chairman Ted J. Provinelli a hand and get involved. Engineering as a profession is depending on it.

Salary Survey

NSPE's most recent salary survey, based on 17,993 returns, showed that the yearly median member income earned from primary employers including base salary, bonuses, commissions, and fees reached $35,500 in January, 1981.This was up 11.4% in the 15 months since the previous survey in October, 1979. During the same period, the consumer price index rose 15.6%. As might be expected, members with advanced degrees reported higher median incomes than others. Those with doctorates earned $41,500 as compared with $34,884 for those with a B.S., $36,000 for an M.S. and $38,500 for an MBA degree. Compression is still causing problems for the engineering community. If anything, it has become a larger problem than before. The latest survey shows that those with under one year of experience reported a median of $21,930, up 18.9% compared with an 11.3% advance to $43,400 for those in the 30 years and up experience category. As a result, the gap between the groups fell from 114% of first-year rates to 98%.



John E. Ritter, P.E.
LES President

Energy .

At last, a log jam limiting the development of one form of energy has been bridged. President Reagan recently announced a four-pronged program to stimulate the nuclear power industry which calls for the licensing of 33 nearly completed nuclear reactors by 1983, an end to the ban on commercial reprocessing of spent fuel rods, a state/federal effort to store and dispose of high level radioactive wastes, and the streamlining of nuclear power plant licensing procedures along with the removal of other barriers to increase use of nuclear power. Even more important, he also announced that the Clinch River breeder reactor will be completed. President Reagan recognized that the federal government has, unfortunately, created a regulatory environment that is forcing many utilities to rule out nuclear power as a source of new generating capacity, even when their consumers may face unnecessarily high electric rates as a result. A goal of reducing the time from planning to operation of a nuclear plant from the present 10-14 years to 6-8 years has been set. Energy Secretary James Edwards told reporters at a press conference following the President's announcements, "There are 3,000 to 4,000 spent fuel rods stored around the country. Spent fuel rods still contain 50-60% of their energy producing potential. The potential to generate enough electricity for the free world for another 2,000 to 3,000 years exists if fuel from conventional reactors is recycled for use in breeders."

Membership

LES Membership Report No. 2 from State Chairman Edgar Rivera, EIT, shows we are falling somewhat behind in our goal. With 35% of the year having elapsed, the percent of quota is 30.3. New Orleans continues to lead the membership contest with an excellent 63.3%. Edgar urges all chapters to continue to strive for new members to reach or surpass the necessary quota. Retention of members should also be a high priority activity at this time for each chapter. One of the best ways to encourage a wavering soon-to-be dropout is a personal phone call from a fellow chapter member asking renewal.

Young Engineers

The State Young Engineers Committee, chaired by Eric Duck, EIT, has completed the pamphlet named "Professional Engineer?", which was initiated by last year's committee headed by Jack Laws, EIT. The outstanding document contains important advice and guidance to persons planning to pursue a career in the field of engineering and who plan to become professional engineers in the state of Louisiana. The information contained is based on the registration law - LRS 37:681 through 37:703 - and the rules of the registration board. Ten thousand copies are currently being printed. Each 1982 graduating engineer in Louisiana will receive one of the pamphlets.

State Computer

A committee composed of Edgar Rivera, Dale Hunn, and Chairman John Bergeron is studying the justification for purchasing a computer for the State Office to handle membership data. This work is currently contracted out at a cost of $5,000/year.

Roster

The Publication Management Associates has offered to prepare, print, and mail a roster/handbook directory at no cost to LES. The book will contain an updated constitution and bylaws, award recipients, past presidents, members by chapter, practice divisions, etc. The sale of non-objectable advertising will return a profit to the publishers. Waldemar S. Nelson, P.E., and his LES Publications Committee are studying the proposal.

As we enter the holiday season, let us give thanks to our gracious God for all of the blessings He has given us over the past year, despite our own inequities and short-comings. From the Ritter household, we wish each of you a most enjoyable holiday season. May Christ bring you the joyful hours of family reunion, happy memories, and the warmth of abiding friendships.

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Price Competition In The Procurement Of Architect-Engineer Services

This article is a condensed version of a statement made by RADM D.C. Iselin, U.S. Navy, Commander, Naval Facilities Engineering Command before the House Subcommittee on Military Construction in 1978. Even today, it appears as a sound and clear explanation of the procurement of design professional services on the national level and good information for state and local governments.

I would like to address briefly the related topic of price competition in the procurement of architect-engineer services. The dialogue on this issue has been going on with varying degrees of intensity now for over ten years. I freely admit to having very strong convictions on this subject, convictions born of intimate personal involvement in this field for many years.

In buying architect-engineer services, we are not buying a predetermined product, as when we have our construction plans and specifications — then we have predetermined exactly what we are going to buy.

We are buying professional skill in the engineering and architectural fields, creative talent, and a level of effort. Until we go through a significant amount of dialogue with the A-E which I will elaborate upon in a moment, there is no mutual understanding between the A-E and the government on exactly what the A-E will be required to do, and therefore no basis for him to make a realistic fee proposal.

While we recognize that we are requesting substantial sums of money on an absolute basis each year, we feel it is important to view the design cost in the perspective of the total project cost over the term of its useful life span. If we take a typical bachelor enlisted quarters, for example, and examine the total cost over its estimated economic life of 25 or more years, we find that outfitting, operating, maintenance and repair costs represent 56% of the life-cycle cost, construction costs represent 42%, and the design cost represents approximately 2%. This relatively modest cost notwithstanding, the A-E's design effort has critical influence on both the 42% for construction cost and especially the 56% for operations, maintenance, and repair. The design funds are "front-end money" which has tremendous leverage on life-cycle costs. Because of this leverage, it is vitally important that we get the highest possible technical quality in the design effort. In my professional opinion, any proposal which seeks to reap a near-term saving by reduction in design cost, but which increases the risk of diminished technical quality of the design effort, is shortsighted in the extreme. We will live with the cost impacts of that diminished technical quality for the full economic life of the facility; this concern is the cornerstone of my opposition to price competition.

We have provided numerous procedural safeguards to insure that our business is conducted fairly and honestly and in the Government's best interests. We use a board of three or more professional personnel in the procurement of architect-engineer services.

There are, of course, varying forms of price competition, ranging from outright competitive bidding such as we use for construction contracting, to various approaches for considering fee as one of several factors. My concern is two-fold: First, you cannot consider fee by itself — as I have indicated, quality of the design effort is paramount; secondly, I feel that once fee is introduced, it will tend to dominate. The A-E's fee proposal is an easily understood, concrete number which anyone can evaluate. The more important considerations of technical competence, design quality, and creativity are just the opposite — they are abstract, difficult to define, and hard to evaluate. I am afraid that fee will become the "easy way out" and that design quality will be degraded to our detriment over the long term.

Finally, in my judgment, the consideration of fee introduces a divergence between the interests of the government and those of the A-E. The government is interested in the highest quality design. Under price competition, the competitive pressures eventually induce the A-E to provide that amount of design effort which will just "get by," in order to reduce his fee proposal and thereby increase his chances of receiving the award. The pressures induced by fee competition, therefore, impell us toward the "least common denominator": The least-cost A-E who, in order to cut costs, will reduce his design effort accordingly. These pressures run counter to the government's long-term objective for high quality design. What we need is an A-E who will consider the feasible design alternatives, evaluate the different candidate building systems to insure lowest life-cycle cost, and provide us with the most cost effective project design for the long term.

I have a high regard for the professional quality which our present procedures have in general provided over the years. We do have competition among A-E firms, but it is a technical competition aimed at selecting the A-E who is best qualified technically to undertake the project at hand. We have provided numerous procedural safeguards to insure that our business is conducted fairly and honestly and in the government's best interest. We use a board of three or more professional personnel to consider the qualifications of interested A-E firms and develop a slate of firms for further consideration. A separate board considers the qualifications of the firms on the slate in great detail and conducts interviews to evaluate technical competence. Based on their evaluation, they develop a selection list of 3 or more firms in order of priority with the firm considered "best qualified" at the head of the list. The proceedings of these boards are carefully documented in a written record. Board actions are subject to higher-level review and approval. Selections for large contracts are submitted to headquarters for review and approval, and very large jobs receive OSD approval. We take great pride in the fact that there has been no hint of scandal in the Department of the Navy in our A-E contracting. When the selection has been approved, we provide to the A-E a description of the scope of work and request that he submit a fee proposal. We also prepare our own independent government estimate of the amount of A-E effort and the cost, in the same degree of detail as the A-E. During subsequent negotiations, we first endeavor to insure that there is a mutual understanding of what the A-E is required to do. This dialogue is critical. The A-E through his questions may stimulate us to consider new and different technical approaches to meet our basic requirements. Through this dialogue, the project requirements are refined and agreed upon. *Only after this mutual understanding has been achieved of what the A-E will be expected to do are we in position to consider price in its proper perspective.* Negotiations proceed with the objective of reaching agreement on a fair and reasonable price for the A-E effort. Through the negotiat-

ing process, differences between our estimate and the A-E's are identified, discussed and resolved. Usually there will be further refinements of project requirements during this exchange. Finally a price is agreed upon, and the negotiation board report is approved by an appropriate higher level, depending on the size of the contract. If we should be unable to reach agreement on a fair and reasonable price, as sometimes happens, we break off negotiations with the first firm, repeat the process with the firm considered "second most highly qualified," and continue until an agreement is reached.

Our A-E procurements are conducted completely in the open — all requirements for A-E services with a fee exceeding $10,000 are advertised in the COMMERCE BUSINESS DAILY, and interested firms submit their qualifications for consideration. We also announce all contract awards in the COMMERCE BUSINESS DAILY so we are under the watchful eye of the entire A-E community and their professional organizations.

These basic procedures have worked well for a good number of years, with continuing refinements such as those instituted by the Brooks Act in 1972. Most important in my view, is the coincidence of interests between the government and the A-E which these procedures engender. The government is interested in the highest quality design; the A-E is likewise interested in the highest quality design, because in so doing he maximizes his opportunity for future work with the government. This coincidence of interest is in marked contrast to the divergence noted earlier under price competition, which induced the A-E to shave his costs at the expense of design quality, in order to maximize his chances to get the award.

In summary, our procedures for programming budgeting and contracting for design are carefully conceived, proven by the test of many years, and are, in my professional judgment, achieving on a very cost-effective basis the two objectives established by the Congress back in 1952: sound cost estimates and timely construction awards. Further, I firmly believe that our present procedures provide the lowest life cycle costs when the complete spectrum of design, construction and annual operations and maintenance costs if considered.

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Legislative Update

Wilfred B. Barry, P.E.
Legislative Committee Chairman

This is the first report from the LES Legislative Committee for the 1981-82 LES program year. Under business carried over from the 1981 Regular Session of the State Legislature, LES jointly requested with LAA that a joint Commerce Subcommittee from both houses of the Legislature be appointed and charged with meeting informally before the 1982 Regular Session. The purpose of the conference is to receive testimony from engineers and architects on methods and legislation to enable professional design firms to practice engineering and architecture under one corporate structure. Presently, Act 225, establishing the A/E Corporate Practice Law, bars engineering corporations from practicing architecture regardless if a licensed architect is on the firm's staff. This conference is tentatively scheduled after the first of the year.

At the first meeting for the 1981-1982 LES Legislative Committee, held in Alexandria in September, a subcommittee was appointed to formulate testimony and provide suggestions for the joint Commerce Subcommittee to review. The subcommittee met in November in Baton Rouge represented by both LES and CEC/L and chose to resolve the issues by presenting the following alternatives:

1. Propose to add a section to the present Business Corporate Law such that no corporation can be prohibited from practicing engineering or architecture provided that the work is performed under the direct supervision of a full time salaried registered engineer or architect and that the engineer or architect be licensed under Louisiana Law, or

2. Add Chapter 17 to the Louisiana Revised Statutes such that a Professional Design Corporation will be entitled to perform the same as above #1 with no limits or references to directors of the corporation nor ownership of the corporation, or

3. Amend Act 225 such that the above items #1 and 2 are met.

Waldemar S. Nelson and James L. Meyer have agreed to present the testimony with assistance from Grey Sexton, LES attorney. Other issues, new and from past years, to come to the attention of the committee will be the following:

Liability Protection for Professional Engineers employed by Local Government: The Professional Engineers in Government practice division with the legislative committee will explore means of requiring local governments to provide liability protection for their P.E.'s similar to that provided for state employed P.E.'s.

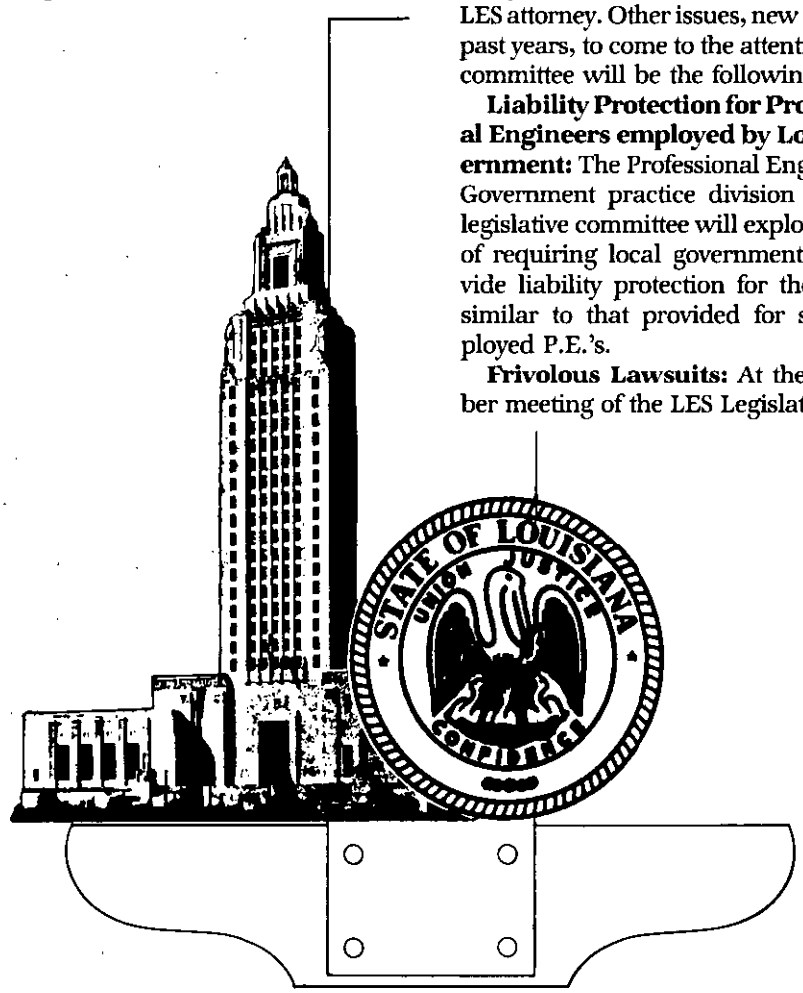
Frivolous Lawsuits: At the September meeting of the LES Legislative Committee, it was resolved to support CEC/L in investigating possible legislative action to limit and restrain those frivolous lawsuits without significant merit or basis, and thereby prevent nuisances and unnecessary legal expenses. Such legislation will have extreme difficulties in passing through the Legislature without extensive support from other professional organizations. Support for legislation from other organizations will be sought in the coming year with possible legislative action coming in the following year.

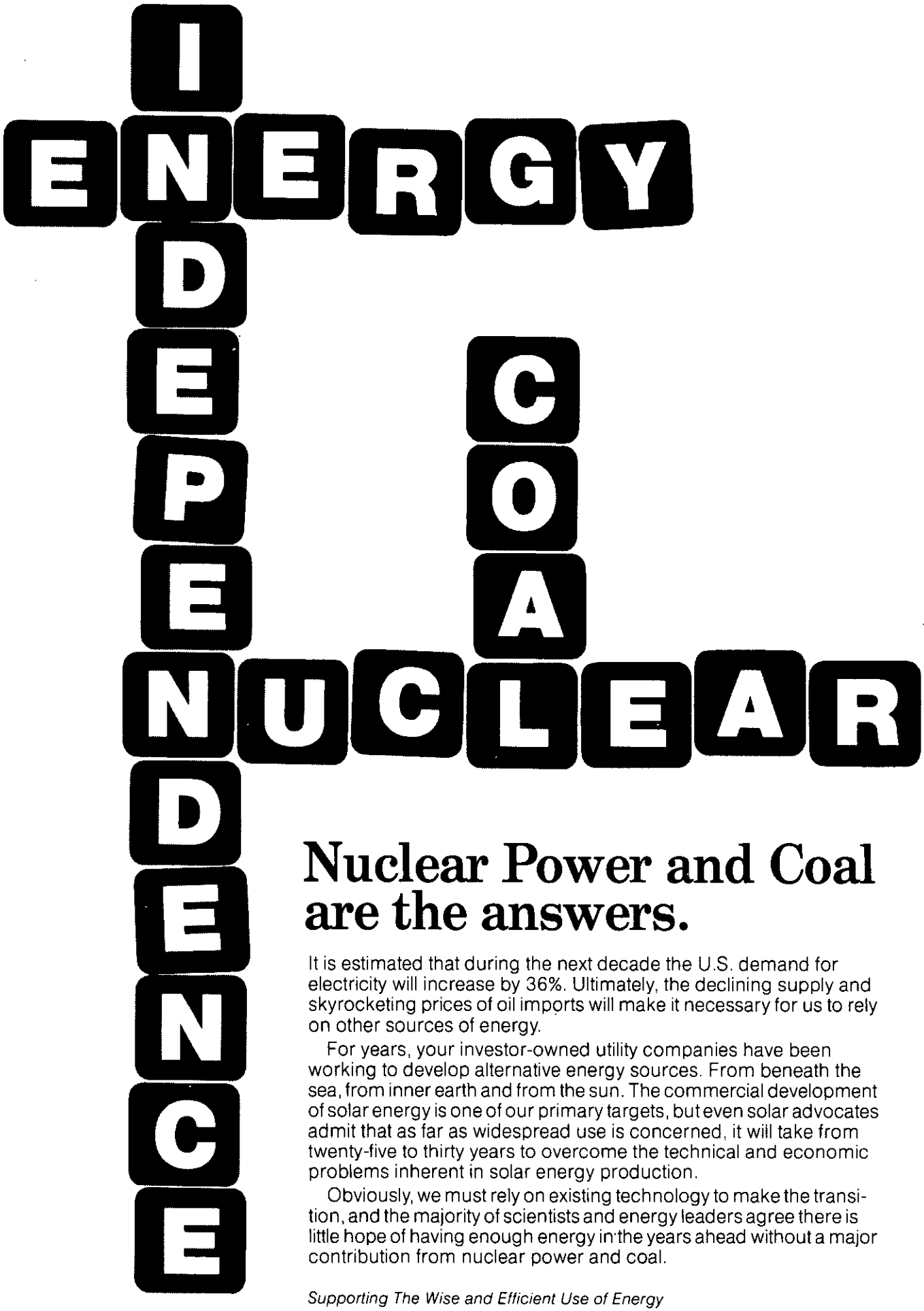
Friend of the court brief on behalf of A. J. Zabbia's consulting firm: LES and CEC/L have prepared a friend-of-the-court brief on behalf of A. J. Zabbia's consulting firm. The issue under dispute is whether an engineering firm contracted to perform professional engineering services to a public body such as a police jury or municipality is in reality a public employee. The LES Legislative Committee supports the CEC/L contention that the engineering firm is not a public employee and thus should not be subjected to grossly inaccurate statements in reference to the firm's performance of its responsibilities.

Registration fee for Professional Engineers and Professional Land Surveyors: The present fee of thirty-five dollars ($35.00) the Registration Board charges for processing an application for registration is inadequate. The Board's executive secretary has requested action from the legislative committee to raise the fee to fifty dollars ($50.00). Such action requires a piece of legislation passed by the State Legislature.

In the 1981 Special Session of the State Legislature, twelve (12) items listed in the Governors call for the session were reviewed by Lamon Moody and myself to see if they would have any impact on the engineering profession. None of them appeared so and no further action was taken.

I have the names of several engineers who have expressed a desire to help us lobby the State Legislative delegates whenever the need arises, even though they are not members of the Legislative Committee. If any other engineers would like to act in that capacity, please contact Mr. R. C. "Doc" Spears and he will forward your name to our committee. So often, action to influence legislators has to be accomplished very quickly. Any support we get helps tremendously with the timeliness and effectiveness of our efforts.





Nuclear Power and Coal are the answers.

It is estimated that during the next decade the U.S. demand for electricity will increase by 36%. Ultimately, the declining supply and skyrocketing prices of oil imports will make it necessary for us to rely on other sources of energy.

For years, your investor-owned utility companies have been working to develop alternative energy sources. From beneath the sea, from inner earth and from the sun. The commercial development of solar energy is one of our primary targets, but even solar advocates admit that as far as widespread use is concerned, it will take from twenty-five to thirty years to overcome the technical and economic problems inherent in solar energy production.

Obviously, we must rely on existing technology to make the transition, and the majority of scientists and energy leaders agree there is little hope of having enough energy in the years ahead without a major contribution from nuclear power and coal.

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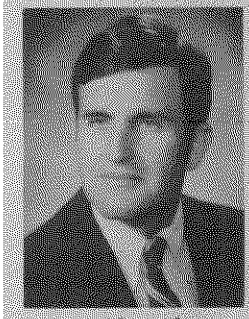

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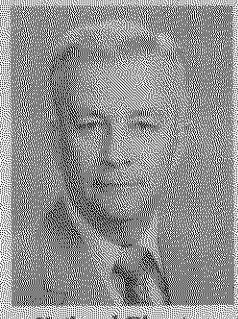

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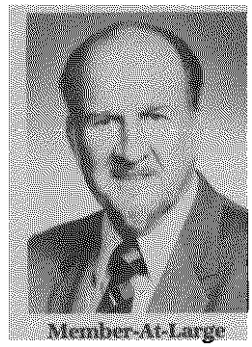

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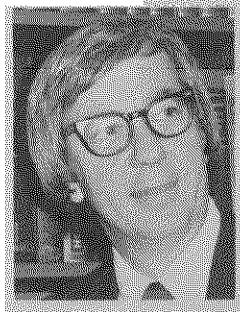

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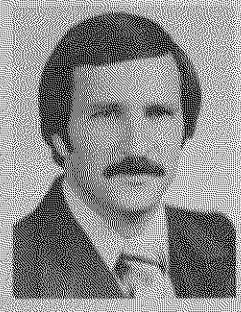

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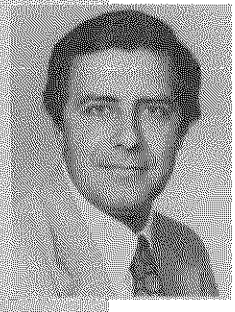

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ROBERT W. McKENZIE, P.E. - A PROFILE

Robert W. McKenzie, P.E., has been elected 1981-1982 President of Consulting Engineers Council of Louisiana, Inc. McKenzie is a partner in the firm of Rayner & McKenzie, Consulting Engineers, Inc., Baton Rouge, La. He received his BS and MS degrees in Civil Engineering from Louisiana State University, Baton Rouge, in 1952 and 1954, respectively. McKenzie attended Officers' Candidate School, U.S. Navy, Newport, Rhode Island in 1954 and was commissioned officer in the Civil Engineering Corps, U.S. Naval Reserve: U.S. Naval Civil Engineering Research and Evaluation Lab in 1955-56. He was then stationed at the U.S. Naval Station, Adak, Alaska, where he worked in the Public Works Department in 1956-57. He has been a guest lecturer on construction technology at LSU as well as visiting professor in Civil Engineering at that same university in 1976.

Prior to establishing his partnership in Rayner & McKenzie in 1968, McKenzie was a structural design engineer with Bodman, Murril & Smith, Architects, Baton Rouge, in 1953. That same year, he joined the firm of Pyburn & Odom, Baton Rouge, as a junior engineer. In 1958, he became associated with Alfred G. Rayner, Consulting Engineer, Baton Rouge, where he worked as a structural engineer until 1968.

McKenzie is a member of, and is active in, several noteworthy engineering organizations, including American Society of Civil Engineers, American Concrete Institute, Louisiana Engineering Society, Consulting Engineers Council of Louisiana, and Chi Epsilon Fraternity, the Civil Engineering National Honor Fraternity.

He is married to the former Nell Cowart and they have three children.

Peter R. Quirk, P.E.

Total Responsibility: Freedom of Choice

Changing times place new demands on those involved in the implementation of construction projects. Within the last few years, the size and complexity of projects have increased, emphasizing the need for effective project management and control of schedules, costs, and quality. The use of multiple construction materials and equipment contracts has proliferated as has the use of the design-construct or turnkey approach to the building of large projects. The thrust has been to phased construction, compressed schedules, and improved performance, all of which the design-construct firms claim as their province.

As a result of an in-depth evaluation of the scope and type of single source, single responsibility services offered by construction companies, construction management firms, and large A-E firms, the industry and utilities relations committee of American Consulting Engineers Council in February 1973 proposed a formal project management method for adoption by A-E firms. This is not a new technique, but a consolidation of a number of different, but related, services that design professionals have been employing in bits and pieces for a number of years.

The scope of project management, as outlined in ACEC's "Project Management Method . . .Something Better than Turnkey" brochure, provides for single source responsibility for the overall project execution. The engineering organization assumes complete responsibility for design and construction administration, with all, or most, of the services provided in-house. Excluded are equipment, materials, shop fabrication, and field construction, which are provided through competitive bidding or negotiation based on detailed specifications and drawings prepared by the design firm. These elements are procured, inspected, and coordinated by the consultant acting as an authorized agent for the client-owner.

More specifically, the project management design firm may offer overall project management, conceptual design, detailed design, bid document preparation, preliminary studies, value engineering, equipment and material purchasing, construction coordination and control, contractor selection and contract negotiation, and start-up and operator training. Not all clients will want all services, and some may wish to have their own engineering departments provide input or perform some of these services. By its very nature, the project management method is flexible enough to provide for these contingencies. What is important is that the design firm offer only those services in which it has capabilities (in some instances, it may choose to secure the services through an outside firm over which it would then maintain tight control).

Our firm believes that proper application of the project management method can achieve completion on schedule and within budget; low initial, operating, and maintenance cost; operating flexibility; and economical and relatively easy expansion of the facility. Certainly the key elements are the need to complete the project on schedule and within budget. This requires maintaining cost control from the early conceptual stages through project definition, design, procurement, and construction. It requires a detailed definitive cost estimate to use as a budget control tool and regular comparison of actual costs to budget. This allows the design firm to monitor cost trends so that alternative steps can be evaluated to maintain the overall budget.

The project management method of bringing a project to completion, as outlined by ACEC and practiced by our firm, allows full freedom and a full range of choices by the owner throughout the project execution. It has proven its benefit on a number of projects ranging in capital costs from $100,000 to more than $100 million, and we are continuing to make refinements in the areas of management, cost control, and overall planning and scheduling to improve this concept of project execution.

Mr. Quirk is executive vice president of Walk, Haydel & Associates, Inc., New Orleans, Louisiana.

WALK, HAYDEL & ASSOCIATES RECEIVES CONTRACT

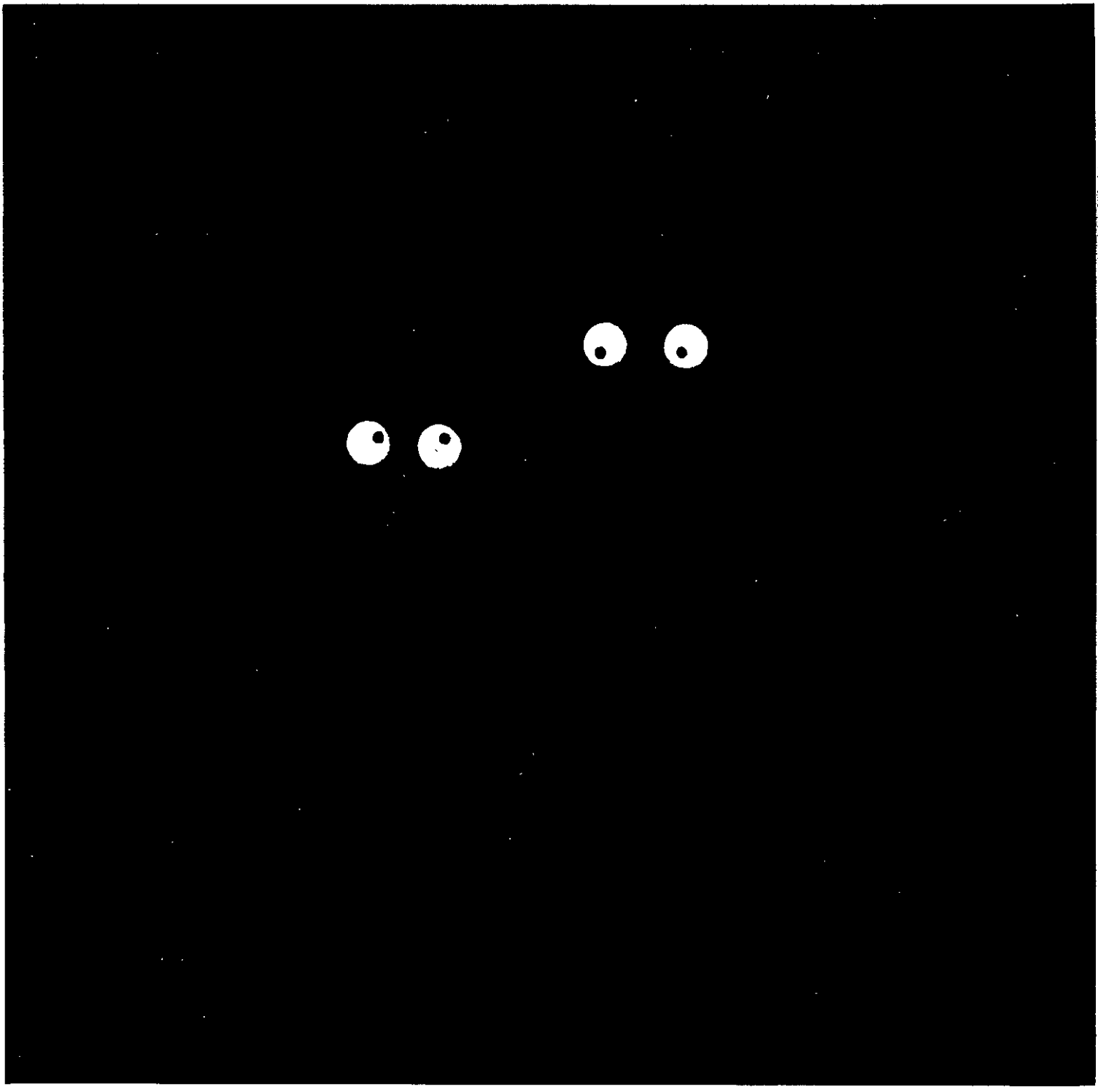
The U.S. Department of Energy, Strategic Petroleum Reserve Office in New Orleans has awarded a contract of $37.6 million for the Big Hill, Texas Project to Walk, Haydel & Associates, Inc., a New Orleans-based consulting engineering organization. This project will commence immediately and will continue through 1985. J. R. Mayes, P.E., has been designated Project Director for Walk, Haydel.

The Big Hill, Texas (Beaumont - Port Arthur area) project is an addition to the Strategic Petroleum Reserve program. It includes a terminal for 140,000,000 barrels of underground crude oil storage with major crude oil and brine pipelines.

Engineering and related services for this project to be provided by Walk, Haydel will include conceptual design review, detail engineering design, field engineering and commissioning assistance.

Walk, Haydel is uniquely qualified for this assignment having substantially completed a similar terminal for underground crude oil storage for the onshore terminal of the Louisiana Superport, the first of its kind in the United States. The detail design of the 2,000,000 barrel crude oil terminal facility at St. James, Louisiana for the DOE-SPR program was previously provided by Walk, Haydel.

Walk, Haydel & Associates, Inc. maintains permanent offices in New Orleans, Baton Rouge and Mobile, Alabama and is ranked No. 77 among the ENR 1981 Top 500 national design engineering organizations.



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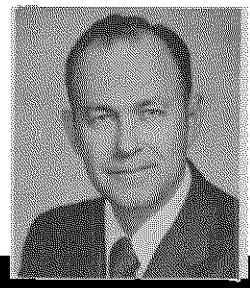

Paul L. Landry, P.E., Executive Secretary, Louisiana State Board of Registration for Professional Engineers & Land Surveyors.

Following months of study, review, discussions, meetings, and debate, the Board is in the process of adopting the new Rules of the Board. They will be promulgated in the Louisiana Register as soon as possible. The rules of the Board are legally binding on all registrants.

ANNUAL RENEWAL

Individual renewal notices have been mailed to all registrants. Renewal fees are to be paid by check to the Board prior to January 1, 1982, and must be post-marked no later than December 31, 1981. Registrants who have not received their renewal notice should mail their annual renewal fee to the Board and state their registration number in the correspondence. The fee schedule is:

Professional Engineer	$10.00
Professional Land Surveyor	10.00
Engineer-In-Training	5.00
Land Surveyor-In-Training	5.00

Unfortunately, the mailing list used for the mailing of this issue of the Louisiana Engineer is the same list used for the mailing of the annual renewal notices. Therefore, when incorrect addresses occur, some registrants will not have the opportunity to read this article. The Biennial Roster of Individual registrants (PE, RLS, EIT & LSIT) will list only those registrants who have renewed their registration as of December 31, 1981. Please spread the word around to help your fellow engineer who has not received his notice.

REGISTRATION & EXAMINATION:

The question asked most often is, "When is the deadline for me to apply to take the examination?" The most truthful answer would be "no one knows and there is no deadline." Let me explain— Some examinations are offered but once a year but most are offered twice a year. For the next three years the examination schedule is as follows:

Examination Schedule

	Spring	Fall
	Apr. 17, 1982	Oct. 30, 1982
	Apr. 16, 1983	Oct. 29, 1983
	Apr. 14, 1984	Oct. 27, 1984
Fundamentals of Engineering Examination (8 hrs.)	X	X
Fundamentals of Land Surveying Examination (8 hrs.)	X	X
Principles and Practice of Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	X	X
Agricultural, Industrial, Metallurgical, Mining & Petroleum		X
Principles and Practices of Land Surveying (4 hrs.)	X	X
Laws and Procedures of Land Surveying (4 hrs.)	X	

The Board must give approval for an applicant to take the examination. This means that an application for registration or certification (in the case of the Engineer-In-Training applicant) must be processed before the Board reviews the application. In the review process the Board may require the applicant to come in for an interview and an oral examination prior to granting permission for the applicant to take the written examination. In some cases the processing of an application can take months for a variety of reasons. Some of these reasons may be—incomplete or improper filling out of the application, incomplete or incorrect addresses for references, references failing to promptly respond to inquiries related to verification of data submitted by the applicant, or certified academic credentials not made available to the Board.

Delay in the processing of an application is often beyond the control of the Board and the applicant. The applicant can help by following the instructions in filling out the application form, insuring that the addresses of the references are accurate, alerting references that an application has been submitted and making timely arrangements to supply certified college transcripts. Experience by the Board office has shown that most applications take a minimum of sixty days for processing and some much longer. Therefore, there is no deadline for an applicant to submit an application. An application submitted within sixty days of an examination date will probably not be processed in time for the applicant to be scheduled for the examination. The only exception to this is the senior engineering student who applies for the fundamentals of engineering examination through the Dean. These applications can be processed quickly. The Deans normally accept applications up to thirty days prior to the examination date. Graduate students may not apply through the Dean, but must apply directly to the Board.

Another factor all potential Professional Engineer applicants need to consider is the anticipated change in the principles and practice of engineering examination. The National Council of Engineering Examination (NCEE) is in the process of revising the principles and practice of engineering examination and it is anticipated that by the spring of 1983, the cost of the examination will more than double. The examination will be modified to test engineers on "what engineers do" versus "what we think engineers should be able to do." That is probably an over simplification but the change of the examination is the result of an NCEE Task Analysis of Licensed Engineers which was completed in the Spring of 1981. This means the registration law will have to be changed to permit the Board to charge for the added cost of the examinations.

Another question that older experienced engineers ask quite often is, "Will I have to take an examination?". The answer to that one is easy, "yes." The law states "On or before December 31, 1984, the board may register an applicant without written examination who presents the written recommendations of five or more professional engineers registered under this Chapter; and who submits proof that he has had at least twenty years of successful practice satisfactory to the board, not less than twelve years of which shall have been in the responsible charge of important engineering work."

The Board has ruled, "The applicant must pass the written examination in the principles and practice of engineering in the branch in which registration is sought."

Dr. Vliet (my predecessor) informed me that the Board has not waived this rule since 1976. A number of experienced engineers in industry are faced with the problem of registration, the passing of the examination. These engineers have been exempt from registration but now they look forward to early retirement and they need registration if they are to continue in a second career as a consulting engineer. A high percentage of these people who take the examination are successful. I would suspect that most of them do some review work prior to the examination. NCEE has review material available and review sessions are sometimes available through the engineering schools.

CORPORATION AND ENFORCEMENT

A number of firms are operating in the state of Louisiana in violation of the statutes. Look in the yellow pages of your telephone directory under "Engineers—" and you will find

firms who advertise under this section who are not registrants of the Board. They are in violation of the statutes. Your reaction may be, "the Board should do something about that." You're right, and the Board is doing something about it—but the Board needs your help. First, let's find out what the statutes and the rules of the Board say about firms:

1. A firm which offers to provide or provides engineering or land surveying services in Louisiana must be a registrant of the Board.
2. A firm which has "engineer," "surveying," or "engineering," in its title, whether it offers to provide or provides engineering or land surveying services or not, must be a registrant of the Board.
3. If an engineering or surveying firm has the title of a living person, that person must be a registrant of the Board. He must be a registered Professional Engineer or Land Surveyor, depending upon the services offered. The exception to this rule is the firm incorporated prior to January 1, 1972.
4. The engineering services executed by the firm must be executed by or under the direct supervision of an engineer who is a registrant of the Board. The engineer shall either be a full time employee of the firm, or a majority stockholder. The engineer may also be any one of the stockholders if all the stockholders are registrants of the Board. This rule applies also to land surveying firms, i. e. substitute "Land Surveyor" for "Engineer," etc.
5. A firm bearing the name of a registrant need not be registered with the Board if the registrant owns 100% of the firm. The individual, however, would, in this case, be registered with the Board.

Firms in violation of the statutes have two options to correct the situation, one, become registrants of the Board, or two, not present themselves or their firms as engineers or surveyors. To become a registrant they may call the Board office (504) 581-7938, for an information packet and application forms. If they are advertising in the yellow pages and they are in violation of the statutes by advertising under "Engineers—," they can correct that by writing to L. M. Berry & Co., P. O. Box 8466, Metairie, LA 70011, and request that the ad be discontinued. A copy of that letter should be sent to the Board office, 1055 St. Charles Ave., Suite 415, New Orleans, LA 70130. This will preclude the board filing a violation against the firm. Firms are being investigated and violations are filed against violators, but that's a cure and not a prevention.

You, as a registrant of the Board, can help in the area of enforcement by:

1. Keeping yourself informed of the statutes and rules of the Board relating to registration and firms.
2. Do not work for, or participate with, a firm which is not in compliance with the statutes. If you do work for, or participate with, a firm in violation, are you not equally guilty of violating the statutes?
3. Informing violators, **directly**, of your observations and suggest they clean up their act. You can help by informing people firmly and politely that they are in violation. It's been my experience that well over 90% of the violators are not informed and they respond promptly when it is brought to their attention.

Your assistance in the area of enforcement is needed and requested. But, let's do it in a grass root's effort at the local level and save the energy and resources of the Board for

Continued on page 18

BOARD MEETING NOTICE

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its 1983 regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

January 26-27
March 23
May 25
July 27
September 28
November 23

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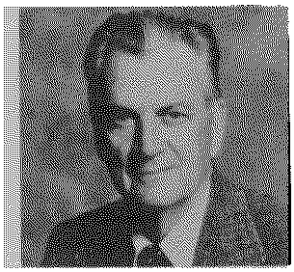

Engineers Club of New Orleans

On Friday, October 30, 1981 the Engineers Club of New Orleans hosted its 2nd Annual Halloween Gala with approximately 60 members and wives attending. The Costume Party was held at the Club's facilities located at 546 Carondelet Street in downtown New Orleans.

Entertainment and dance music for the evening was provided by the Billy Fane Orchestra from Bogalusa.

Chairman for this event was Jack Groh who together with his committee provided those in attendance with a great time, fine food and good entertainment.

The Engineers Club of New Orleans welcomes both New Orleans residents and out of town visitors to come in and visit the Club Facilities.

Tulane and LSU Receive Exxon Grants

Tulane University and LSU, Baton Rouge have been awarded grants from the Exxon Education Foundation to be used for faculty development in the Schools of Engineering.

Tulane and LSU are two of the 66 schools in the country to receive money in the $15 million Exxon program, which was unveiled in New York in October. According to Exxon officials, the program is the largest of its kind undertaken by a corporate foundation.

The special grants of $200,000 for Tulane and $400,000 for LSU are designed to hold talented young engineering faculty members in the face of competition from private industry — competition which is especially stiff during the first five years of a faculty member's career. In addition, two fellowship grants totaling $100,000 were awarded to LSU.

Southern University Receives Money for Engineering School

Southern University has been awarded a $300,000 grant from the Exxon Education Foundation; $100,000 a year for the next three years starting in 1982.

The grant will be used for faculty development in the School of Engineering. Southern is one of six black universities in the country to receive a grant of $1.8 million. The other schools are Howard University, North Carolina A & T State University, Prairie View A. & M. University, Tennessee State University and Tuskegee Institute.

Exxon recognizes the need for minority engineers in the market place and they are supporting and showing confidence in the black schools' past performance.

"We are happy that Exxon has chosen this way of helping Southern to deal with a shortage of talented engineer faculty members," reported Dean M. Q. Burrell, P.E.

LEF Owns Its Headquarters

On November 23, Mr. & Mrs. Leo M. Odom met with Vincent Forte, P.E., president of the Louisiana Engineering Foundation (LEF), officials of the Plaquemine Bank, and others to complete the sale of the LEF office building at 1213 Nicholson Drive, Baton Rouge. Mr. and Mrs. Odom contributed in excess of $100,000 to the Foundation for the purchase of the building. We need $75,000 to own the building, and we are requesting all engineers and employers of engineers to help us retire the debt. Use the coupon in this magazine.

The LEF is formed exclusively for charitable, educational and scientific purposes including:

A. The granting of engineering scholarships,

B. The instruction of the public and dissemination of engineering information,

C. Establishment and maintenance of an engineering center.

NSPE Officers For 1982-83

The NSPE nominating committee has nominated the engineers listed below for the respective offices of the Society for the administrative year 1982-83. All have expressed their willingness to serve if elected:

President-Elect	Louis A. Bacon, P.E., Georgia
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American Coal Training Institute Seminar

The American Coal Training Institute will conduct a seminar, "The Introduction to the Handling, Preparation and Use of Coal" (first two days) and "Mechanical Sampling of Coal" (advanced course on third day) in New Orleans at the Hyatt Regency on April 13, 14, 15, 1982.

For further information, please contact Marie Cain, Registrar, American Coal Training Institute, P.O. Box 7460, Monroe, La. 71203, or telephone (318) 387-3472.

AIChE Seminar

The Baton Rouge Section of A.I.Ch.E. is sponsoring a two-day seminar on Time Management designed for engineers, scientists, and technical managers. The purposes of the seminar are: 1) to develop proper attitude about time: knowing importance of time, knowing you can and do control your time, and learning to admit when you are wasting time; 2) goal setting; 3) establishing priorities; 4) gaining expertise in scheduling time; 5) discovering more effective ways of utilizing time; and 6) using instruments to identify how effectively you are presently utilizing time.

Seminar fee will be $125 AIChE members; $150 non-members and will include luncheon both days. Location will be the Baton Rouge Hilton on April 6 and 7, 1982.

Advanced registration is required and the number of course participants will be limited. Registration will be accepted on a first-come, first-served basis. For further information, contact:

Noel J. Ricord
Time Management Seminar
15345 N. Firewood
Baton Rouge, LA 70816
Telephone: (504) 292-3891
After 4:00 p.m.
(504) 473-9241
Between 7:00 a.m.
and 3:00 p.m.

New Orleans Woman Engineer Wins Business Award

Mrs. Betty Jo Everett of New Orleans has been named "Supplier-of-the Year" by the National Minority Supplier Development Council.

The president of Chatah, Inc., headquartered in Metairie, Mrs. Everett was presented the award in ceremonies on October 22 at the NMSDC's annual meeting at the Atlanta Hilton. She won the award in Classification I, representing minority businesses with gross sales of less than $1 million annually.

Mrs. Everett is a registered professional engineer licensed in Louisiana, Mississippi, Texas and Oklahoma. She is a member of the National Association of Corrosion Engineers, the American Public Works Association, the Society of Women Engineers, and the Louisiana Engineering Society.

Mrs. Everett is the wife of Rex Everett, a retired ODECO consultant, who is now president of Everett and Associates, an oil consulting firm. The Everetts have two daughters and one son, and reside at 6507 Vicksburg in New Orleans.

The Louisiana Engineering Society congratulates Mrs. Everett for this outstanding achievement.

McNeese Engineer Degree Gains National Accreditation

The bachelor of science degree in engineering at McNeese State University has been nationally accredited by the Accreditation Board for Engineering and Technology (ABET), formerly ECPD.

The announcement of this accomplishment was made by Dr. Jack Doland,



Dr. Carroll Karkalits

MSU president, on August 19. Doland praised former president Dr. Thomas Leary for starting the program in the 1960s. "The engineering program is an expensive one, but Dr. Leary and others have worked long and hard to make it a success."

The accreditation of the engineering program at McNeese is especially important to local Lake Charles industries who recruit engineers. Representatives from PPG, Conoco, Cities Service, Gulf States Utilities, and Olin were present during the announcement ceremony and expressed their support of MSU's engineering program.

Dr. Carroll Karkalits, P.E., dean of the school of engineering and technology, and chairman of the LES 1981-82 engineering education committee, said many industries come to McNeese each year to recruit engineering students and the accreditation will be one of great benefit to the school, the students and the area.

The Louisiana Engineering Society congratulates Dr. Jack Doland, president of MSU and Carroll Karkalits, P.E., for this outstanding accomplishment.

Matthew Hall to Acquire the Business Assets of Barnard & Burk

Matthew Hall and Company, Inc. of Houston, Texas announces that agreement in principle has been reached to acquire the business assets of Barnard and Burk, Inc. and an affiliated company. Barnard and Burk, Inc. is a subsidiary of Aerojet-General Corporation, which is in turn a subsidiary of the General Tire and Rubber Company.

Centered in Baton Rouge, Barnard and Burk provides engineering, procurement, construction, construction management, contract maintenance and pipe fabrication services to the oil, gas and chemical process industries throughout the United States.

Matthew Hall and Company, Inc. is the United States holding company of the Matthew Hall Group of London, England. Founded in 1848, the Group is engaged worldwide in engineering design and construction for all the principal energy industries.

Solar Residential Design Competition

A passive solar residential design competition has been announced by the architecture department of Louisiana Tech University.

The competition is open to individual designers and design teams from all backgrounds who have expertise and/or interest in the incorporation of passive solar techniques into the design of single family residencies. Competition is limited to Louisiana individuals and organizations.

There are two categories, professional and student. The registration fee is $25 for the professional category and no fee for the students. Deadline for registration is February 1, 1982. Prizes in the professional category are $1,500, $750 and $500, in the student category $500, $300 and $100. For registration forms, contact Louisiana Tech University, Architecture Department, Passive Solar Residential Design Competition, Ruston 71272 or call Charles Harrington (318) 257-2816.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

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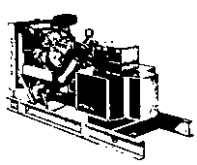

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Ideally, the firm will be located in the Southeast, Southwest, or Northwest and have ready access to air transportation facilities. Our client wishes to retain all top management personnel of the acquired firm.

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those firms and individuals who present serious problems to the safeguarding of life, health and property of the public citizen. The Board recognizes the need for added emphasis in the area of enforcement and has directed me to vigorously pursue violators. Your assistance is appreciated.

FIRMS REGISTERED with the Board who offer to provide or provide engineering services are listed in a Biennial Roster which was published on July 1, 1981. The following firms are registrants of the Board and were inadvertently not included in the roster:

AWA, P. O. Box 161, Alexandria, Louisiana
Aillet, Fenner, Jolly & McClelland, Inc., 1055 Louisiana Ave., Shreveport, LA 71101
Alabama Engineering and Supply, Inc., P. O. Box 1984, Montgomery, AL 36103
Ballard Engineering, 36 Ramah Circle North, Agawam, MA 01001
Bartley Engineering Corporation, 415 North Saint Patrick St., New Orleans, LA 70119
Simmons J. Barry & Assoc., Inc., 8081 GSRI Ave. Baton Rouge, LA 70808
Broussard & Associates, Inc., 829 N. Sibley St., Metairie, LA 70003
Brown & Root, Inc., 4100 Clinton Dr., P. O. Box 3, Houston, TX 77001
Richard Browne Assoc., 3973 S. Sherwood Forest Blvd. Suite 1A, Baton Rouge, LA 70816
Coyle Engineering Co., Inc., 2056 East Texas Street, Bossier City, LA 71111
Frank J. Dalia, Inc., 43 Imperial Woods Drive, Harahan, LA 70123
Dun-Par Engineered Form Co., P.E., Box 11599, Raytown, MO 64138
Inland Corporation, P. O. Box 15271, Baton Rouge, LA 70895
Intech Division-Temple Associates, Inc., 4315 Sterlington Rd., Monroe, LA 71203
Triangle Engineers & Designers, Inc., 4001 Division Street, Metairie, LA 70002
L. S. Womack, Inc., 8300 Old Hammond Hwy., Baton Rouge, LA 70809

Firms who recently became registrants of the Board are:

Allied Engineering Corp., 822 Baronne St., New Orleans, LA 70113
Badeaux and Associates, Inc., 115 East Sixth St., Thibodaux, LA 70301
CBXE, P. O. Box 51443, Lafayette, LA 70505
C-K Associates, Inc., Suite 11-Camelot Square, 11838 S. Harrell's Ferry Rd., Baton Rouge, LA 70816
Eavenson, Auchmuty & Greenwald, Airport Office Park III, 420 Rouser Road, Coraopolis, PA 15108
Fanning, Fanning & Agnew, 2555 74th St., Lubbock, TX 79423
GDC (Gulf Drilling Co., Inc.) 822 Neosho Ave., Baton Rouge, LA 70802
G.R.W. Engineers, 604 Kinloch St., Winnsboro, LA 71295
Gallagher Engineering Corp., 1104 Howard St., P. O. Box 2196, Humble, TX 77338
Gotech, Inc., 8178 GSRI Ave., Baton Rouge, LA 70808
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La-Tex Engineering Co., Inc., 16000 Barkers Point Lane, Houston, TX 77079
Lawson Engineering, Inc., 5925 Line Ave., Shreveport, LA 71106
Northlake Engineering Oilfield Specialty Co., Inc., 206 Marina Blvd., Mandeville, LA 70448
Southern Structures, Inc., Highway 92, Youngsville, LA 70592
Sperry Corp. Traffic & Transportation System, Mail Station C-3, Lakeville, RD., Great Neck, NY 11020

EngiNEWS

LES Training Conference

The Silver Anniversary of the LES Chapter Officers' Training and State Planning Conference held September 17, 18, 19, 1981 at the Sheraton Inn, Alexandria was attended by 94 engineers and 36 ladies. Sixty-nine engineers and guests attended the Thursday evening early bird cocktails and dinner at the Alexandria Golf and Country Club. Pewter cups, appropriately engraved, were presented to all the engineer attendees.

The Friday morning session was conducted by John E. Ritter, P.E. Each activity chairman reported on aspects of his area to the new officers and committee members: Professionalism, James E. Meyer, P.E.; State Board of Registration, Paul E. Landry, P.E.; Meetings and Programs, James W. Reeves, P.E.; Trends in Engineering Education, J. J. Thigpen, P.E.; Practice Divisions, James S. Janssen, P.E.; Louisiana Engineering Foundation, Vince Forte, P.E.

Seventy-nine engineers and guests attended the luncheon Friday and enjoyed an excellent presentation on the DOTTIE (Dial One Time To Inform Everyone) system by Harold Burk and Martha Nelson. The advantage in making one call to notify all utility companies, pipeline companies and municipalities when intending to excavate was covered thoroughly.

Committee and practice division meetings were held Friday afternoon, where the new groups made plans for the new year.

One hundred thirteen engineers and guests enjoyed a delicious catered meal at the Farmers Market, Alexandria on Friday evening. The cocktail hour was hosted by Louisiana Industries, Inc. Golf and tennis tournament prizes were presented at this function. Twenty three golfers entered the tournament Thursday afternoon at the Alexandria Golf and Country Club. Awards were presented to the winners: Closest to Hole, John J. Bergeron, P.E.; Longest Drive, Cecil Raggio, P.E.; Low Net, Lloyd Hoover, P.E.; Low Net Runner-up, Cecil Raggio, P.E.; Low Gross, Lloyd Hoover, P.E.; Low Gross Runner-up, Jack Groh, P.E.; Ladies Low Gross, Beverly Groh; Ladies Low Net, Bonnie Goutreau.

Five tennis players participated in a tournament Thursday afternoon with Jerrel J. Freeman, P.E., first place; Garland Pennison, second; and Jean Blanche, third.

Fifty engineers and guests attended the Saturday morning breakfast. John E. Ritter, P.E. presented a portable podium to the Bayou Chapter of LES for winning the 1980-81 membership contest.

New Presidents

James R. Sims, George R. Brown Professor of Civil Engineering at Rice, has been named president of the American Society of Civil Engineers (ASCE) for 1982. John R. Wiedeman, president of Wiedeman and Singleton, Inc., Atlanta, was named president-elect.

Dr. Robert E. Larson, President of Systems Control, Inc., Palo Alto, California, has been elected 1982 President of the Institute of Electrical and Electronics Engineers (IEEE). Mr. James B. Owens, retired president of Gould-Brown Boveri, Rolling Meadows, Illinois, has been elected president-elect.

Report of LES-PEC Activities

Edward I. Lanier, P.E., Chairman

The LES/PEC is looking forward to another good year with enthusiasm and optimism like no one else but an engineer in construction can have.

We had our planning conference meeting in September in Alexandria at which time plans were made for the April meeting in Lake Charles.

The topic of discussion at our April meeting will be "Labor Productivity." It is a constant challenge for engineers in construction to motivate people to be productive at their job. LES/PEC will sponsor a panel discussion by three panelists during the PEC meeting.

The purpose of sponsoring programs of this type are two-fold. First, LES/PEC wants to give PEC members a reasonable desire to participate in the activities of the practice division. Secondly, after PEC members take the initiative to become involved, their attitude could be changed from casual interest to keen interest because of a discovery that there is an opportunity of personal benefit and growth.

Another topic of discussion will be the 1983 Construction Professional Development Award to be given to an outstanding construction employer. We will endeavor to sponsor a state award thereby nominating our state recipient to NSPE for a national award.

We expect to have good attendance, renewed interest and beneficial results from our spring meeting in Lake Charles.

IN MEMORIAM

Francis M. Taylor, P.E.

Dr. Francis M. Taylor died on September 17, 1981 at the age of 77. He was born in Richmond, Virginia and attended VPI where he received B.S. and M.S. degrees in Chemical Engineering. After several years with Tennessee Eastman, he returned to school and received a PhD from Ohio State. He joined the Chemical Engineering department at Tulane in 1938 and rose to the rank of Professor and Chairman. At the time of his retirement in 1970, he was Director of the Chemical Engineering Practice School. He was a member of many honorary and professional societies including Tau Beta Pi, Sigma Xi, AIChE, ASEE and LES. He became a Life Member of the Louisiana Engineering Society in 1968. He is survived by his wife, a son and a daughter.

William Milsted, P.E.

William R. Milsted, 46, the first city engineer of the city of Houma, died on October 11, 1981 in New Orleans.

He was the head of the environmental department of Gulf South Engineers, Houma, at the time of his death.

Milsted received his degree in mechanical engineering from the University of Southwestern Louisiana and was a registered professional engineer in Louisiana and Mississippi. He became a member of the Louisiana Engineering Society in 1970 and was active in the Bayou Chapter.

The Society extends its deepest sympathy to his wife, Carolyn, and family.

New Members

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Alexandria, LA 71301
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James R. Johnson, P.E.
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Baton Rouge, LA 70814
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Baton Rouge, LA 70816

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Baton Rouge, LA 70802
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Baton Rouge, LA 70816
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P.O. Box 71
Denham Springs, LA 70726
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515 Pershing Street
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1982 Engineering Management Courses at LSU

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CERTIFICATE

Upon completition of four acceptable courses and a certificate application form, the participant will be awarded a Certificate in Engineering Management by the Division of Continuing Education. An Advanced Certificate will be awarded to students who take a total of six courses.

COST

The registration fee per participant is $200 for each course and includes the cost of textbooks.

REGISTRATION

To insure that each student will have an opportunity to participate in discussion, enrollment in each section will be limited to 30 students.

Classes will be organized Mon., Jan. 11, 1982 in Room 122A, LSU Medical Center, New Orleans - 7:30 PM and on Tues., Jan. 12, 1982 in Room 3136 CEBA Bldg., LSU, Baton Rouge - 7:30 PM.

Class sessions will be held in the University Medical Center at New Orleans, on the Baton Rouge campus, and in other cities throughout the state where there is adequate demand. To preregister for the classes complete the attached form and return with $10 preregistration fee. Fee is applicable toward the $200 total registration fee and will be refunded if class chosen is not offered.

AVAILABLE COURSES

Course A — Project Management with CPM/PERT
Course B — Engineering Economy
Course C — Financial Decision Making
Course D — Operations Research for Engineers
Course E — Basic Engineering Statistics
Course F — Cost Estimating & Engineering and Management
Course G — Engineering Management and the Law
Course H — Federal Income Taxation

Please complete the following form and return it with the $10 preregistration fee to the address below if you are interested in the fall program. (Classes will begin during the week of Jan. 25, 1982.)

Name _____

Address _____ Phone _____

City & State _____ Zip _____

MAIL FORM TO:
Dr. L. Mann
Industrial Engineering Dept., CEBA Bldg.
Louisiana State University
Baton Rouge, Louisiana 70803

I wish to preregister for the course indicated. (Please show your first choice with a 1, second with a 2, etc. Show a single location choice only.) I understand if my first choice is not offered, I can request a refund of the $10 preregistration fee. This condition also applies if the class is scheduled on a night I cannot attend.

COURSES OFFERED

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( ) Engineering Economcy
( ) Finance
( ) Operations Research
( ) Engineering Statistics
( ) Cost Estimation
( ) Engineering Mangement and the Law
( ) Federal Income Taxation

LOCATIONS

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Metairie, LA 70003
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821 Gravier Street
New Orleans, LA 70112
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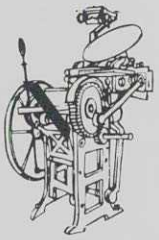

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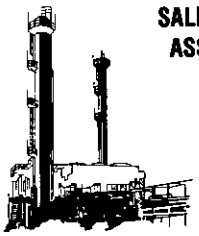

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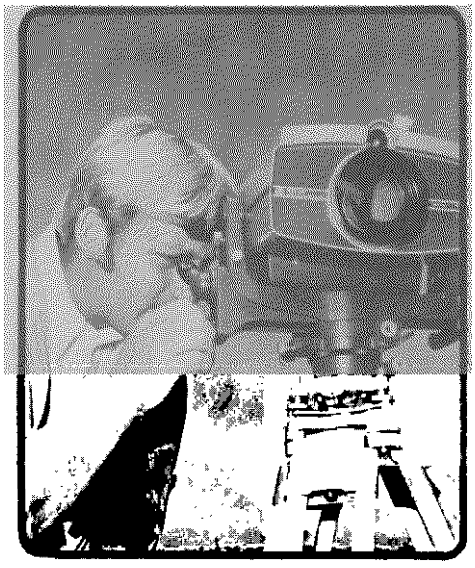

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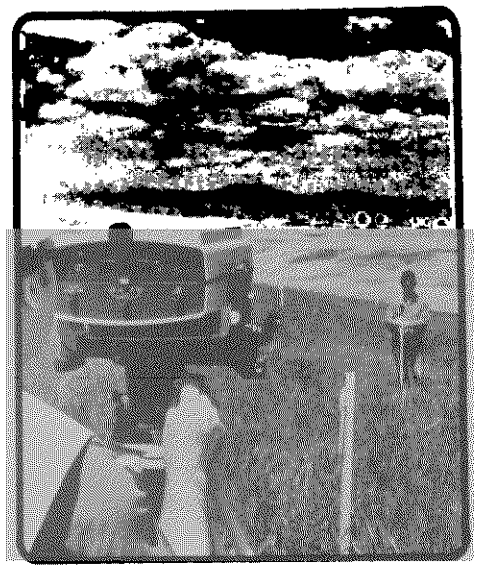

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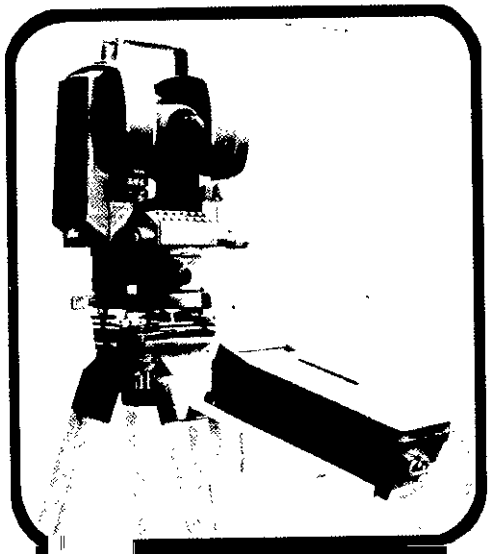

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