



FEBRUARY, 1987
LOUISIANA



**Louisiana
Engineering
Society
Honors Four
Outstanding
Engineers**



C. Carter Brown, P.E.
Service to the Profession



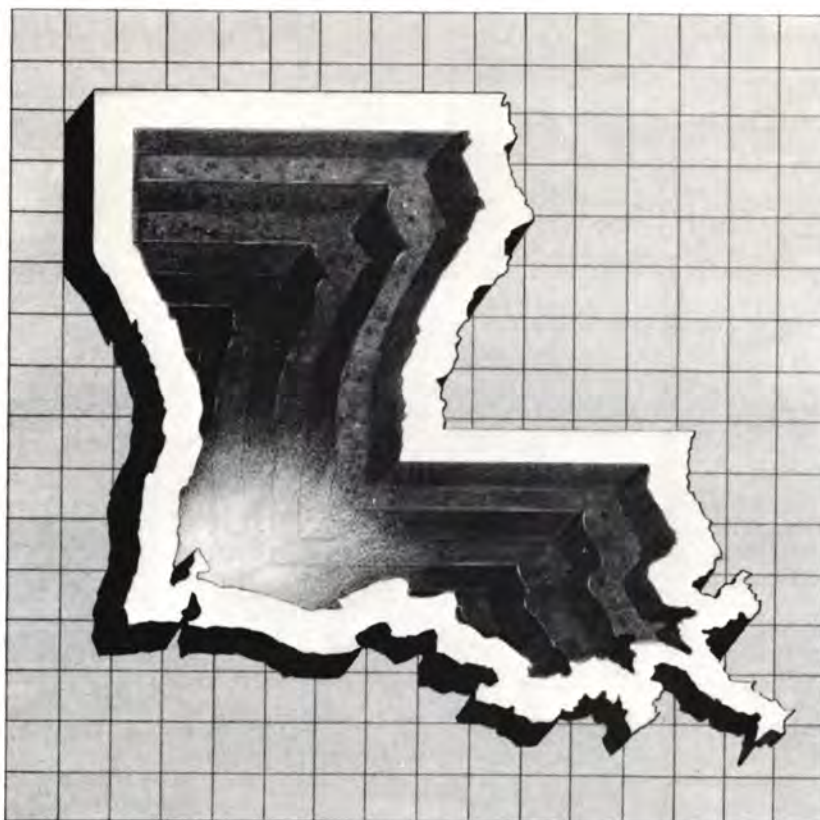
Gerald M. Haydel, P.E.
Engineer in Management



James C. Webb, P.E.
Public Relations



James C. Wernicke, P.E.
Young Engineer



INNER STRENGTH

A key ingredient to the economic recovery of Louisiana is the staying power of our own healthy business and industry. Though much is said about those facing hard times, there remains a strong foundation of expanding firms with additional growth potential even in the face of oil price fluctuations.

As our native enterprises succeed and begin to influence new markets, the multiplication of jobs and opportunities follows.

The Louisiana Investor-Owned Electric Companies vigorously encourage ambitious home-grown companies. When a company outgrows its facility, our Area and Industrial Specialists are at hand to help find a new home. Our researchers compile confidential data defining site availability, transportation needs and access, local zoning and regulatory considerations, and much more.

Louisiana's Investor-Owned Electric Companies provide experts to design a tailor-made energy package that is supply-certain and cost-conscious, and Area Development professionals assist companies throughout the state in such important matters as finance, market research, loan packaging, cost control, and the like.

Promoting inner strength is a prime concern of Louisiana's Investor-Owned Electric Companies. It's a simple fact of business: as those among us prosper, we all share in that success in the long run.

Investing in your energy future

LOUISIANA'S 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

FEBRUARY, 1987



ABOUT THE COVER

Four outstanding engineers are recognized by the Louisiana Engineering Society for their contributions to the profession. Story on page 8.



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State and Nation Celebrate National Engineers Week

THE WHITE HOUSE
WASHINGTON

NATIONAL ENGINEERS WEEK

February 22 - 28, 1987

I extend warm greetings to the professional engineers gathered to celebrate the 37th annual National Engineers Week.

Americans owe the engineering profession special recognition for its role in helping to build a strong economy. Professional engineers' practical research and scientific knowledge help make possible our fine standard of living. As innovators and problem solvers with a willingness to take risks, engineers are leaders in establishing America's preeminence in creating new technology.

Engineers are highly qualified to help our Nation -- achieve greater productivity and economic growth -- both vital to America's future. Our Nation will continue to count on your talent and technological skill to help achieve continued domestic prosperity, national security, and a strong competitive position in world markets.

I commend your distinguished service to the Nation and wish you continued success. God bless you.

Ronald Reagan

The National Society of Professional Engineers (NSPE) first sponsored National Engineers Week in February 1951. The purpose of the week is to bring visibility to the profession.

The week is always celebrated during the week of George Washington's birthday. Our nation's first President was a military engineer and land surveyor. Additionally, Washington was responsible for establishing the first U.S. engineering school, at Valley Forge, PA, which later became the U. S. Military Academy at West Point, N.Y.

During these years of NSPE spon-

sorship the annual observance has grown from a few scattered proclamations, dinners and speeches to elaborate programs and week-long activities in urban and rural areas throughout the country. Engineers in industry, government, construction, private practice and education promote public recognition of the profession. Governmental agencies, technical professional organizations and citizens groups join the celebration.

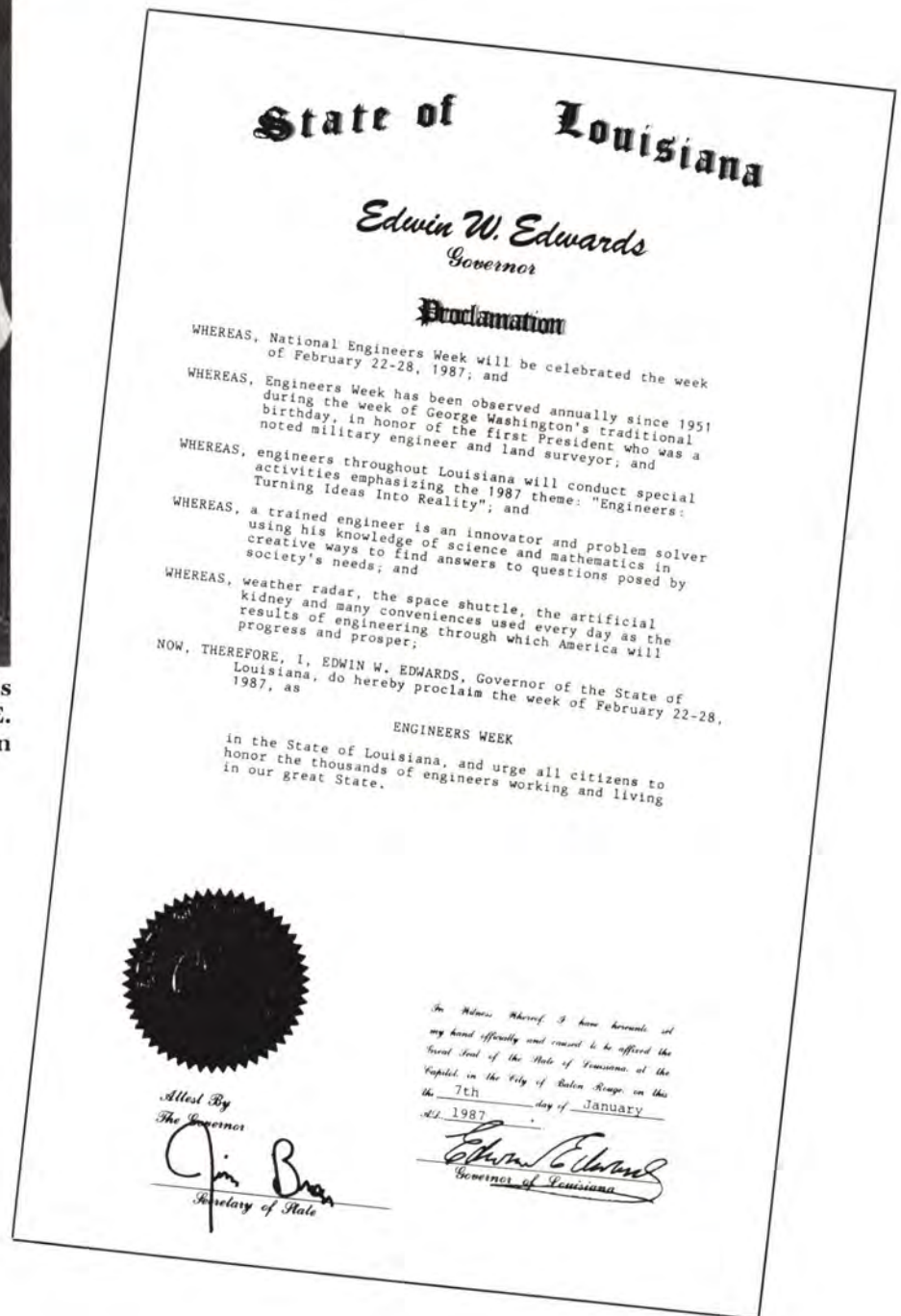
Young people are an important part of the week. Thousands of students in junior and senior high schools and colleges are introduced to many facets of the

engineering profession. Engineers stage tours and exhibits in the nation's industrial and research facilities, award scholarships to deserving and needy youngsters, publish special sections in local newspapers calling attention to challenging careers in engineering, and conduct math competitions for 7th and 8th grade students, among other activities.

National Engineers Week is so important to the U.S. and its communities that for the past 36 years, beginning with President Truman, the presidents of the United States have sent special messages of appreciation to the engineering profes-



Louisiana Governor Edwin Edwards hands LES President Robert P. Blanche, P.E. as resolution proclaiming Engineers Week in Louisiana.



sion through the National Society of Professional Engineers.

In 1987 National Engineers Week will be celebrated from February 22-28. The theme for the week is "Engineers: Turning Ideas Into Reality." The theme is intended to highlight the image of the engineer as an innovator. Engineers are problem solvers. They use their knowledge of science and mathematics in creative ways to fulfill society's needs.

You may ask what is the significance of the theme. What do weather radar, the Space Shuttle and an artificial kidney

have in common? They are all ideas that became reality through engineering. "Engineers: Turning Ideas Into Reality" is the reason we celebrate National Engineers Week.

Where will we find future energy supplies? Will the country have enough water? How well will America compete in the universal technology marketplace? Many of the problems faced by this country require engineering solutions. It is through engineering that America will progress and prosper.

Touch the thermostat and the heat

goes on. Turn a knob and the television goes on. Lift the telephone receiver and you can reach almost anywhere in the world. Many of the conveniences we use everyday are the results of engineering. But many of these everyday wonders are taken for granted. We don't think about the engineering that made them possible.

During National Engineers Week the National Society of Professional Engineers and the Louisiana Engineering Society hope everyone will pause to salute our nation's engineers. They are "Turning Ideas Into Reality."

Support Is Strong For Engineering Education



Robert P. Blanche, P.E.
President
Louisiana Engineering Society

Never in the 20 years of my participation in the Louisiana Engineering Society have I seen so much statewide support for the engineering profession and its benefits, as was expressed during the Board of Regents' hearings on engineering education in Louisiana.

The Board of Regents had a review of engineering education in the state performed by a committee of consultants made up of department heads of recognized engineering schools throughout the United States. The committee made visits to each school, discussed their particular programs with the administrators, faculty, and students. They then prepared a preliminary report, which was issued to the schools and other interested parties, held hearings, got responses to the preliminary report, and then prepared and issued a final report to the Board of Regents. Their report recommended the closing of several engineering colleges and the consolidation of programs.

On December 11th and 12th, public hearings were held by the Board of Regents and each university presented its case as to why its programs needed to remain intact. The theme that was repeated over and over again throughout the hearing was that engineering education is a predominant force within each university, and that engineering excellence will provide a means for Louisiana to attract new industry and to increase the productivity and competitiveness of the state's existing industries. Politicians, industry leaders from both within and outside the state, and the business community in general made convincing presentations for the continued need of strong engineering education programs within their areas.

The Board of Regents, after due consideration of all of the information presented, made the decision to keep all of the engineering programs throughout the state intact.

In order to attain excellence in engineering education and provide the engineering resources for future development of this much needed resource, it is imperative that the Board of Regents and the university administrations, which

were so strong in their commitments to engineering, properly fund these programs to assure that their goals and desires are met. Throughout the hearings it was evident that engineering education should be close to or at the top of a priority listing of needs. During these periods of financial crisis, our leaders and administrators of the higher education system must commit and expend funds on a priority basis and stop these foolish across-the-board cuts.

Engineers Week

The month of February again is set aside to acknowledge the engineering profession and how it has linked advances in technology to national progress and industrial development. ENGINEERS TURNING IDEAS INTO REALITY are those who truly take the scientific discoveries and turn them into useful applications in order that we might compete effectively throughout the world. The contributions of the American engineer to our national progress are documented throughout our history, and we should all be proud to acknowledge and promote our engineering profession.

MATHCOUNTS

The month of February also kicks off the Chapter MATHCOUNTS competitions throughout the state. Each chapter has a formidable task in administering local competitions, and all members who are willing to help should volunteer their services to assist their local coordinator. The MATHCOUNTS competition is one of the major undertakings of our Society and it needs the assistance of all of us in order to assure that it continues to be successful. The purpose of MATHCOUNTS is to encourage junior high school students to excel in math. The enjoyment and amount of personal self-satisfaction you will receive from working with this program is more than adequate compensation for your efforts. I can guarantee that you will get more out of this program than you could possibly put into it.

Awards Meeting Scheduled for Monroe

Now is the time to make your reservations for the 1987 Awards Meeting. The meeting this year is March 18-21 and will be held at the Holidome in Monroe. A program was published in the December issue of the *Louisiana Engineer*.

The meeting will begin on Wednesday afternoon with golf and tennis at the Pine Hills Country Club in Calhoun, La., and on Wednesday evening, the Monroe Chapter is providing a hosted "Happy Hour" from 5:30 p.m. to 7:00 p.m. Come join us for fellowship.

We are pleased to be able to provide two seminars for this meeting, one on Thursday morning and one on Friday morning. The Thursday seminar is entitled "Better Oral and Written Communication Skills for Engineers"; and the Friday seminar is entitled "Personal Computer Applications for Professional Engineers". Both are provided as a service to engineers and are free of charge. Please plan to attend both these timely

seminars.

We will be entertained on Thursday evening by a group of Louisiana Tech University students, who will perform a skit depicting college life in the 50s.

Our meeting will conclude on Friday evening with our Awards Banquet. This function honors the recipients of the LES Awards. Please join with us in acknowledging the outstanding contributions of our 1987 award winners.

Our ladies will also be entertained during the daytime hours on both Thursday and Friday. On Thursday, a tour of the Follette Pottery Studio will be conducted. Mr. Follette's work is sold in more than 70 galleries and shops throughout the country. Plans are also underway for a luncheon on Thursday for the ladies. On Friday, Christine Philley will conduct a presentation entitled "Your Image Impact", dealing with projecting a good image through proper clothing and accessories. Both these

functions should provide many hours of enjoyment.

Chester Kelsey, P.E./P.L.S., who is NSPE PEPP Chairman, will be the guest speaker at the PEPP Practice Division meeting on Friday. Anyone interested in hearing him is urged to attend.

Please make your plans now to attend this meeting of the Louisiana Engineering Society. During these times, it is especially important that all LES members, and those engineers who are not presently LES members, unite to insure that the Louisiana Engineering Society maintains the ability to continue providing the utmost in service to the engineering profession. We need your input at committee meetings; and your practice divisions need your support, also. Please, help your professional society continue to help you. Give us your support!

REGISTRATION COUPON - LES AWARDS MEETING HOLIDAY INN HOLIDOME - MONROE - MARCH 18-21, 1987

Name _____	Spouse's Name _____	
P.E. YES _____	NO _____	Chapter: _____
		No. Tickets _____ Amount _____
*PREPAID Discount Registration Fee	\$35.00	_____
Registration Without Prepayment	\$60.00	_____
**Daily Registration Fee	\$12.00	_____
Spouse Registration	\$10.00	_____
Thursday Seminar	FREE	_____
Thursday Early Bird	\$10.00	_____
Friday Seminar	FREE	_____
Friday Luncheon	\$ 7.50	_____
Friday Banquet	\$13.00	_____
Saturday Breakfast	\$ 6.00	_____
Golf	\$20.00	_____
Tennis	\$ 3.00	_____
	TOTAL	_____

*Prepaid discount applies only if registration & payment is received one week prior to convention

**Daily registration fee is applicable for one day attendees only

☐ Payment Enclosed

☐ Will Pay At Registration Desk

MAKE CHECKS PAYABLE TO LES

PLEASE NOTE: A PARTIAL REFUND WILL BE MADE IF CANCELLATION IS RECEIVED FOUR DAYS PRIOR TO CONVENTION

THIS COUPON MUST BE RECEIVED BY FEBRUARY 25, 1987

Hotel Reservation Card - Louisiana Engineering Society - Holiday Inn Holidome - March 18-21, 1987
(Please type or print)

Name _____	(Last)	(First)
Address _____		
City, State _____	Zip _____	Tel. _____
Arrival Date _____	Departure Date _____	

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	1 Adult	2 Adults
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Standard-Domeside	\$50.00	\$56.00
King-Domeside	\$52.00	\$58.00
King-Minisuite-Dome	\$55.00	\$61.00

All reservations will be held until 6:00 p.m. unless guaranteed. Refund given if cancellation made 7 days prior to beginning date of conventions.

Guaranteed Credit Card # _____ Expiration Date _____

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**LES
Honors
Outstanding
Engineers**



**LEO M. ODOM AWARD FOR
SERVICES TO THE PROFESSION**

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.



C. Carter Brown, P.E.

C. Carter Brown, P.E., is now a Senior Advisor and Consultant to the firm of Brown and Butler, Inc. He received his Bachelor of Science Degree in Civil Engineering in 1934 from Louisiana State University. He is a Registered Professional Engineer in Louisiana, Mississippi, Alabama and Florida.

Mr. Brown's practice spans fifty-two years of registered practice in general engineering. He began his career in 1934 as an observer for the U.S. Coast and Geodetic Survey. In 1935, he was employed as a hydraulics engineer with the U. S. Soil Conservation Service. In 1941, he was employed by the Louisiana Department of Public Works as a design engineer and progressed to Director of Public Works before leaving in 1948. From 1944 until 1946 he served as an officer of the U. S. Navy in the Pacific Theater. Mr. Brown co-founded the firm of Brown and Butler, Inc. in 1948 in which he was a partner until 1970 when he became sole owner of the firm. In 1983, Mr. Brown sold his interest in the firm and has continued as an advisor and consultant.

Mr. Brown is a Fellow of the American Consulting Engineers Council and the American Society of Civil Engineers; he is a member of the Consulting Engineers Council of Louisiana, the Louisiana Engineering Society, the American Water Works Association, the Water Pollution

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A.B. PATERSON MEDAL FOR AN ENGINEER IN MANAGEMENT

The Louisiana Engineering Society has a special award for an 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.



Gerald M. Haydel, P.E.

Gerald M. Haydel, P.E., is Chairman of the Board of Walk, Haydel & Associates, Inc. Mr. Haydel received his Bachelor of Science Degree in Civil Engineering from Tulane University in 1952. He is a Registered Professional Engineer and Land Surveyor in Louisiana and Mississippi.

Mr. Haydel, together with Frank H. Walk, founded the firm of Walk, Haydel & Associates in 1959. The firm provides engineering and architectural design services for major industrial, government and commercial owners as well as procurement and construction management services.

He has directed the development of the organization as Chairman of the Board or President from less than ten people in 1959 to a nationally ranked engineering and architectural corporation of 500 professional engineers, architects, technicians and support personnel. The firm in 1986 was ranked No. 57 in the *Engineering News-Record* survey of the Top 500 design firms in the United States and No. 15 in the Top 50 construction management firms.

The organization routinely designs facilities each year with a total installed cost in excess of \$200 million from its four design offices located in New Orleans, Baton Rouge, and Mobile. Since 1959 the firm has designed in excess of

Continued on next page

CHARLES M. KERR PUBLIC RELATIONS AWARD

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



James C. Webb, P.E.

James C. Webb, P.E., is Assistant Executive Director of the Offshore Terminal Authority, Louisiana Department of Transportation and Development. He holds a Bachelor of Science Degree in Civil Engineering from the University of Southwestern Louisiana. Mr. Webb is a Registered Professional Engineer in Louisiana.

In his position, Mr. Webb has been responsible for supervising the environmental monitoring program, reviewing the Louisiana Offshore Oil Port (LOOP) engineering and construction plans, performing on-site inspections to assure compliance of Authority regulations, coordinating activities between the several engineering consultants, federal and state agencies, and LOOP's operation and construction divisions.

During his previous employment with the Department of Public Works, Mr. Webb was Chief of the Flood Control and Reports Section and was responsible for statewide water resources planning, flood control and coordinating the Department of Public Works involvement in planning a navigation system on the Red River.

Mr. Webb is a member of the American Society of Civil Engineers, the National Society of Professional Engineers, the Louisiana En-

Continued on next page

F. HUGH COUGHLIN YOUNG ENGINEER AWARD

This award is given to an engineer not over 35 years of age who has demonstrated to a high degree capabilities in his chosen field. 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.



James C. Wernicke, P.E.

James C. Wernicke, P.E. is Founder and President of Diversified Engineering Services, Inc. of New Orleans, Louisiana. He is a native of Long Island, New York and attended Rensselaer Polytechnic Institute from 1970 - 1973 in an accelerated program for his Bachelor of Science degree in Mechanical Engineering. From 1974 - 1976 he continued his studies towards a Master of Science degree in Chemical Engineering at the University of South Florida. He is a Registered Professional Engineer in the state of Louisiana, a member of the National Academy of Forensic Engineers and a National Panelist for the American Arbitration Association.

Mr. Wernicke served in various construction and project engineering/management positions from 1973 to 1984. Major projects where he served in responsible control include a \$4.5 million sulfuric acid interstage absorption system, \$1.2 million phosphoric acid flash cooler addition, \$55 million phosphate mine and beneficiation plant, \$22 million uranium recovery plant, \$15 million phthalic anhydride plant expansion, \$25 million carrier board factory, \$70 million 150,000 BPSD crude unit, \$40 million crude oil storage terminal and tanker dock, \$3.3 million alkylation tank farm revamp, \$30 million refined products

Continued on page 17

C. CARTER BROWN, P.E.

Control Federation, the American Arbitration Association, and the Society of American Military Engineers.

He holds an Honorary Membership in the Louisiana State University Chapter of Chi Epsilon. In 1968, he received an award from the Consulting Engineers Council of Louisiana for "contributions to the private practice of professional engineering at the local, state and national level," and, in 1976, for his "work with the younger engineers through the scholarship and ethics programs." In 1977, he received the Consulting Engineers Council of Louisiana's A. E. Wilder, Jr., Award in recognition for his outstanding contributions to the engineering profession.

Mr. Brown has served on the Board of Directors and as Vice President of the American Consulting Engineers Council as well as on many of its committees. He served as President of the Gulf Institute of Consulting Engineers, now the Consulting Engineers Council of Louisiana, and of the Louisiana Section of the American Society of Civil Engineers.

He has offered aid and guidance to countless young engineers in the Baton Rouge community over his many years of practice. He has served the ASCE Student Chapter on the Louisiana State University campus on request over the years. He has donated, unselfishly, his and that of his firm's time to completely study the feasibility of constructing the Darlington Reservoir which would serve as a flood control and recreational facility on the Amite River. He has been a leading proponent of the project in attempts to seek public support and funding for this multi-purpose project which would serve to protect many residences in the floodplain from floods in the future. This project, if and when completed, would result in the reduction of millions of dollars in losses suffered by the ever increasing number of victims of flooding in the areas below the proposed reservoir.

Mr. Brown is listed in "Who's Who in Engineering" as well as "Who's Who in America." He is active in a number of civic endeavors and is an officer and board member of the Better Business Bureau.

Although born in Natchitoches, he is a life-long resident of Baton Rouge and is married to the former Sylvia Gass. They have three children, Barbara, Ellen, and Carter.

His outstanding record and high standard of conduct and his active participation has been an inspiration to many of us in the Louisiana Engineering Society.

His achievements exemplify the outstanding leadership recognized and honored through this award.

GERALD M. HAYDEL, P.E.

3,000 projects.

The firm under Mr. Haydel's capable leadership now employs in excess of 550 engineers, architects, other professionals, technicians and support personnel. While Mr. Haydel has directed the organization, one of his more notable achievements was to develop a participative management style within the organization to allow many other members in the organization to participate in major company decisions.

Mr. Haydel's professional and technical society memberships include the American Consulting Engineers Council, the Consulting Engineers Council of Louisiana, the Louisiana Engineering Society, the National Society of Professional Engineers, the American Society of Civil Engineers, the Instrument Society of America, the American Petroleum Institute, and Tau Beta Pi Fraternity.

Mr. Haydel received the Outstanding Alumnus Award for 1986 from the Tulane School of Engineering.

He has been active in educational leadership at all levels. He is Immediate Past President of the Board of Advisors of Tulane University School of Engineering and is a past member of the Board of Trustees for St. Martin's Episcopal School.

Mr. Haydel is active in many civic organizations including the Greater New Orleans/Metropolitan Chamber of Commerce and the World Trade Center.

He is a native of New Orleans and is married to the former Agatha B. Mayronne. They have two sons and two daughters and all are engineers. He and his wife reside in River Ridge, Louisiana.

The accomplishments of Mr. Haydel as a manager and professional engineer make him a worthy recipient of the A.B. Paterson Medal for an Engineer in Management.

JAMES C. WEBB, P.E.

engineering Society, and an Honorary Member of Chi Epsilon, Louisiana State University Chapter.

As a professional engineer, Mr. Webb participates in public service organizations, which serves to humanize our profession which is often criticized for being less than sensitive to human needs and relations. He is a founding member of the Boys' Club of Greater Baton Rouge

and has served on the Board of Directors as Treasurer. Mr. Webb is also a member of the Kiwanis Club of Capital City where he has chaired the Citizenship, Memorial Stadium Christmas Tree Sales and Membership committees, serves on the Board of Directors and as its delegate member to the Baton Rouge Inter-Civic Council.

Mr. Webb has been very active in the American Society of Civil Engineers. He is currently serving as Vice President for the Louisiana Section, is a Past President of the Baton Rouge Branch, and is a former editor of the section's newsletter. As editor, he has often utilized his position within the Society to bring public attention to the engineering profession and encourages others to do the same when appropriate.

Mr. Webb is now serving as State Chairman of the Professional Engineers in Government practice division of the Louisiana Engineering Society. He is a past chairman of the LES Baton Rouge Chapter's Public Relations Committee and Publicity Committee for Engineers Week 1985.

Recognizing the technical significance and major proportions of the Louisiana Offshore Oil Port when it was completed, Mr. Webb worked with the Louisiana Section of the American Society of Civil Engineers and the Baton Rouge Chapter of the Louisiana Engineering Society to prepare the documentation and forms to nominate the project for both the NSPE Outstanding Engineering Achievement Award and the ASCE Outstanding Civil Engineering Achievement Award. The project won both awards and was published nationwide.

By awareness of and participation in these kinds of programs, engineering projects of great significance and more particularly, one in Louisiana, received public recognition and brought about public awareness of professional engineers and their important works. Mr. Webb followed this effort a year later and submitted the recently completed Mississippi River Bridge at Luling, Louisiana, for the ASCE Outstanding Civil Engineering Achievement Award. This project also won the award which resulted in similar benefits to the engineering profession and the state of Louisiana.

Jim is a native of Lafayette and is married to the former Jerrie Phillips of New Iberia. They have two children, Ben and Cindy.

The Charles M. Kerr Public Relations Award recognizes Mr. Webb's efforts in promoting the goals of the Louisiana Engineering Society and those of professional engineers in general.

Roster of Engineering and Surveying Societies

The Inter-Society Relations Committee of the Louisiana Engineering Society is responsible for compiling a roster of chief executive officers for other engineering societies in the state on an annual basis for publication in the *Louisiana Engineer*. The purpose of this effort is to improve communications among the entire engineering community in Louisiana and identify contacts for such inter-society activities as Engineers' Week programs, technical seminars, and coordination of legislative efforts. If your engineering organization is not listed and you wish to be included in next year's roster, please make that request through the LES headquarters at P. O. Box 2683, Baton Rouge, LA 70821.

Charles L. Eustis, P.E., Chairman, Inter-Society Relations Committee

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

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Consulting Engineers Section
Warren J. Wilder
CEC/L Executive Director



CEC/L Announces Scholarship Competition

Consulting Engineers Council of Louisiana, Inc. has announced its 16th Annual Scholarship Competition. The program will award \$1,000 to the most qualified engineering student, \$500 for second place, and \$250 for third place. Last year's winner was Connie Gipson, a civil engineering major at Louisiana State University, Baton Rouge.

To be eligible for a scholarship, a student must be a U.S. citizen entering the junior, senior or fifth year (of a five-year program) in the fall of 1987 and be enrolled in a university or college program accredited by the Accreditation Board for Engineering and Technology. Accredited universities in Louisiana include LSU (Baton Rouge), USL (Lafayette), McNeese University (Lake Charles), Tulane University (New Orleans), University of New Orleans, Southern University (Baton Rouge), and Louisiana Tech (Ruston).

Engineering colleges at these universities have received application forms and all students who are qualified are urged to compete. Students also must be working toward a B.S. in engineering. Preference is given to students interested in pursuing a career in consulting engineering.

Deadline for submitting application form to the CEC/L office is March 6, 1987. CEC/L will evaluate the entries and forward the top three entries to the American Consulting Engineers Council to represent Louisiana in the national competition.

National Scholarship

An outstanding U.S. engineering student will receive a \$7,000 scholarship

this year from the American Consulting Engineers Council. Second place will receive \$3,000 while third place will receive \$2,000.

Last year's \$5,000 top award went to "Scholar of the Year," David Myers, an electrical engineering student at Ohio Northern University. The national scholarship committee will meet on April 16 to select the winners, then member organizations will notify the winners in their area. The Scholar of the Year award will be presented at the ACEC annual convention in Minneapolis, Minn. in May, 1987.

The competition is organized by the nonprofit American Consulting Engineers Council Research and Management Foundation (ACEC/RMF) through ACEC's state and regional affiliates, or Member Organizations.

ACEC is a national association of 4,700 independent, private practice engineering firms that employ some 127,000 engineers, scientists, technical and support staff. The firms annually design some \$100 billion in constructed public and private industry projects. Consulting engineers Council of Louisiana, Inc. is one of the 51 affiliated Member Organizations of ACEC with more than 170 member engineering firms.

ACEC Bid Busters Fight Competitive Bidding Selection Method

What happens when your firm encounters a federal government client who is determined to ask for price bids? Perhaps the procurement officer is misinformed, in a hurry or just doesn't care and hopes no one will question the procedure. You know it's against the Brooks Law, but to avoid being labeled a trouble maker (and perhaps jeopardizing future jobs) you're reluctant to call the agency to

task. On the other hand, merely "going along to get along" goes against your grain. More importantly, you know it may well compromise the quality of the finished project. What to do?

That's when many ACEC members rely on the Council's national office to intervene. That's what DJG, Inc., a 30-person E/A firm in Williamsburg, Virginia, did earlier this year when a local Department of Defense procurement officer attempted to use a competitive bidding method of selecting a design firm for a 14,000 sq. ft. dormitory and training facility at Camp Peary, near Williamsburg.

Alerted to the situation by DJG president Daniel J. DeYoung, ACEC's Cathy Connor phoned the DoD procurement officer and explained that the federal Brooks Law requires selection by qualification, followed by price negotiation. Prepared for the possibility that the officer might consider the job as construction rather than design, Connor was surprised to learn he had a different reason. The local DoD felt it was operating on a tight schedule and believed that this would justify circumventing the Brooks-prescribed procedure. After speaking with Connor, the procurement officer apparently checked with Washington and, two weeks later, withdrew the bid request. The solicitation was replaced with a Brooks proposal process.

"You'd be surprised how often these things happen just because procurement staff doesn't understand the correct procedure. Most of the time an explanatory call to the right person is all it takes," said Connor.

Subsequently, DeYoung said, "We submitted our firm's credentials in a Standard Form 255 proposal and were ultimately selected. After selection, the facility wanted a lump sum price for our services for the design of the proposed

\$750,000 dormitory/lecture facility, which we provided in early June of this year. The lump sum price was ultimately accepted without negotiation." In addition, DeYoung reports that shortly after completion, the same DoD agency awarded two additional projects on the same basis to DJG.

"If your staff . . . had not interceded on our behalf, we would not have submitted a proposal and would, therefore, have lost the potential job opportunity," DeYoung wrote in a follow-up letter to ACEC.

In another recent case ACEC's special counsel for procurement services, Mark Casso, coached a local Internal Revenue Service contracting officer on the fine points of Brooks-style procurement. This time, the IRS had followed Brooks procedures up to the point of selecting four firms based on qualification and ranking them. Then, the Kentucky-based contracting officer issued a bid request to all four firms. One of the four, an ACEC-member, contacted Casso for assistance.

"When I called," said Casso, the IRS contracting officer acknowledged her unfamiliarity with proper procedure and seemed grateful for our suggestions about how to correct the error. She then sent a follow-up letter to the four firms, indicating that the IRS intended to negotiate first with the top-ranked firm."

(From: *ACEC On Your Side*, January, 1987, a new publication of the American Consulting Engineers Council)

Congratulations To Life Members

CEC/L congratulates two new ACEC Life Members. They are John S. McCormick, P.E., and Alfred R. Salzer, Jr., P.E., both of New Orleans. Life Member status is bestowed upon ACEC members who honorably retire from the engineering profession and upon the recommendation of the member organization. Both gentlemen had joined the Council in the "early days" when CEC/L was the Gulf Institute of Consulting Engineers. Both were active in their day serving on many committees and holding various offices.

These gentlemen join an elite group composed of only two other CEC/L members; H. Nash Ogden, P.E., Baton Rouge; and Werner Ammann, P.E., New Iberia (both of whom are also ACEC Fellows).

New Member Firms Welcomed

CEC/L warmly welcomes the following firms that were inducted into the organization in 1986:

Belcher Engineering, Baton Rouge. Expertise in mechanical engineering specifically HVAC, plumbing, storm & sanitary, gas distribution, energy conservation and management. Mike Belcher, P.E. is the owner.

Building Systems Management, Ltd., Lafayette, offers mechanical and electrical engineering services. It is owned by Jim Poché, P.E.

Cortech, Inc., Slidell, offers services in environmental work, municipal engineering, civil and structural engineering and studies. Carlos A. Cordon, P.E. is owner and president.

Dames & Moore, Baton Rouge, is a branch office of Dames & Moore out of Los Angeles, CA. Tom Turner, P.E. heads this office offering consulting and environmental engineering and earth science.

F.J.M., Inc., Baton Rouge, is headed by Oren C. Furnish, P.E. The firm offers mechanical, electrical engineering, surveying, civil engineering and construction management.

Hebert Engineering Corporation, Baton Rouge, offers civil and process detail design. It is headed by Terry V. Hebert, P.E.

Kulkarni Consultants, Metairie, is welcomed back in after a short respite. Subash Kulkarni, P.E. heads this civil and structural engineering firm.

Pan American Engineers - Baton Rouge, Inc., Baton Rouge, is now on its own as a separate firm and is headed by Dale Hodges, P.E. The firm offers civil engineering services.

Southland Industrial Consultants, Inc. Baton Rouge, is headed by Charles Pourciau, P.E. It offers services in electrical and instrumentation engineering.

Spectrum Engineering Corporation, Baton Rouge, offers electrical, mechanical and structural engineering and is operated by Chelsae Knight, P.E.

James M. Montgomery Consulting Engineers, Inc., Metairie, is a branch office of a firm headquartered in Pasadena, CA. This office is headed by Mark Biggers and Vic Gulas, both P.E.s. It offers services in water, wastewater, industrial and hazardous waste, drainage, solid waste, hydrology and general civil engineering. This office is back in after being inactive for several years.

We welcome these new (and old) firm members and encourage them to take an active part in the Council.

Asbestos: Model Guide Specs Available, Legislation Passes

Calling it an attempt to set forth the state-of-the-art in asbestos abatement, the National Institute of Building Sciences (NIBS) has released "Model Guide Specifications, Asbestos Abatement in Buildings." The document provides a basis for the preparation of technical project specifications as a part of a comprehensive set of contract documents.

• Consistent With EPA

In 1985 the Environmental Protection Agency substantially revised and reissued its "Guidance for Controlling Friable Asbestos-Containing Materials in Buildings." The NIBS publication is technically consistent and should be considered complementary to the procedures and recommendations set forth by EPA. Another concern, however, is the statutes and regulations that are rapidly being enacted at other levels of government concerning asbestos. Engineers and abatement contractors should research and familiarize themselves with state and local regulations before undertaking asbestos work.

• Contractor Accreditation Mandated

The Asbestos Hazard Emergency Response Act of 1986 (AHERA) (P.L. 99-519) requires, among other things, that EPA establish a model contractor accreditation plan that states must adopt. This has come in response to reports of "rip and skip" contractors removing asbestos from schools, resulting in improper cleanup. The law also requires EPA to promulgate regulations which prescribe proper inspection, response action and transport and disposal procedures. School districts are required to: 1) inspect for asbestos; 2) prepare a management plan; and 3) take the appropriate action where necessary to protect human health. AHERA also requires EPA to study the extent to which asbestos poses a problem in public and commercial buildings and the liability and insurance problems of engineers and other contractors. The model specifications are available from the National Institute of Building Sciences (\$60 to members; \$75, non-members), 1015 15th St., N.W., Suite 700, Washington, DC 20005, 202-347-5710; and the new asbestos law (P.L. 99-519) is available (one copy free) from the U.S. Senate Document Room, Washington, DC 20510, 202-224-3121.

(From: *Interpro*, December, 1986, a publication of the American Consulting Engineers Council, highlighting the organization's interprofessional activities).



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



In Memoriam

Robert Winfield Parks, P.E.

Robert Winfield Parks, P.E., a Board Member, died on December 28, 1986. He was 64 years of age. Mr. Parks was the first Petroleum Engineer to be appointed to the Board. He was appointed by Governor Edwards on August 5, 1985.

At the September, 1986 meeting of the Board, Mr. Parks was elected Secretary of the Board with his term to commence on January 28, 1987. Mr. Parks served on the Board as a member of the Agricultural, Industrial, Chemical, Petroleum, Mining, and Mechanical Engineering committees. He was also a member of the Engineer-In-Training Committee, and Chairman of the Finance Committee.

Mr. Parks was serving the National Council of Engineering Examiners as a member of the Uniform Examination and Qualifications of Professional Engineering Committee.

He was an Adjunct Assistant Professor of Petroleum Engineering at Tulane University. He had retired from the Exxon Company, USA, having worked as a field engineer, petroleum engineer, staff engineer, reservoir engineer, and senior staff engineer in Oklahoma, Kansas, Mississippi, Florida, and Louisiana. He was recently a consulting associate with Atwater Consultants, Ltd., New Orleans. He was a Registered Professional Engineer in Texas, Mississippi, Oklahoma, and Louisiana.

Mr. Parks was a member of the Society of Well Log Analysts and the Society of Petroleum Engineers. He served as Chairman of the New Orleans Section of the Society of Petroleum Engineers.

Report of Disciplinary Action

On November 18, 1986, the Board ordered, adjudged, and decreed that Mr. Wayne M. LaBiche, a registered Professional Engineer with the Board, Number 15804, was guilty of misrepresentation, deceit, and misconduct in violation of Louisiana Revised Statute 37:698 A (2) and (4). Mr. LaBiche by his own admission not only advertised professional land surveying services on April 3, 1986 but provided those same services and used his civil engineering stamp to seal nine (9) surveying plats in New Iberia, Louisiana in 1984 and 1985, all without benefit of registration as a professional land surveyor in Louisiana.

The above action was initiated based upon formal charges preferred by the Board pursuant to Section 37:698 A (2) and (4) of the Louisiana Revised Statutes, which authorizes the Board to take disciplinary action against any registrant or certificate holder found guilty of any misrepresentation, deceit and misconduct in the practice of engineering or land surveying. The matter was originally set for hearing on November 17, 1986 but pursuant to a written stipulation, Mr. LaBiche waived his right to a formal hearing and requested instead to appear before the full Board. Mr. LaBiche presented a short statement to the full Board

explaining the circumstances surrounding his illegal surveying activity.

Following a full vote of the Board it was ordered that:

- (a) Mr. LaBiche be fined the amount of five hundred dollars (\$500.00) to be paid by certified check within seven (7) days of the expiration of the judicial review period allowed by the Louisiana Administrative Procedure Act.
- (b) Mr. LaBiche pay the costs of having resurveys by a registered Professional Land Surveyor of ad surveys he performed illegally. Such penalty shall include providing each client with a new survey plat, the act of filing the resurveys in appropriate court records, and providing the Board with a copy of each plat of resurvey by February 2, 1987.
- (c) Mr. LaBiche receive a public reprimand.
- (d) The results of the decision be published in the *Louisiana Engineer*, the official journal of the board, and the *Larpenteur Louisiane*, the official journal of the Louisiana Society of Professional Surveyors identifying Mr. LaBiche by name.

Registration Board 1986 Roster

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One Per Person-

As long as the supply lasts-

STATE OF LOUISIANA
BOARD OF REGISTRATION
FOR PROFESSIONAL
ENGINEERS
AND LAND SURVEYORS

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Test Your Knowledge of the Registration Law and Rules of the Board

You, as a registrant of the Board of Registration, are responsible for abiding by the law and rules of the Board. To help you in evaluating your knowledge, I present to you ten questions. I suggest that Louisiana Revised Statutes 37:681 through 37:703 as amended by Act 568 of 1980, Act 461 of 1982, and Act 580 of 1985; and the rules of the Board, Louisiana Administrative Code 19-3:1 through 3:13 revised October 20, 1985 be used as references.

Procedures for taking the exam:

- (1) Challenge associates to the competition.
- (2) Betting limit—\$2.00 (as specified in the yet-to-be-promulgated gambling laws of the state).
- (3) Collect test material (each one should have a set of the law and rules).
- (4) Lock yourselves up in a room with no telephone.
- (5) You say go (that insures you to

have a ten-second jump on your associates).

- (6) When the first one finishes (that has to be you) test associates must stop answering questions.
- (7) Grade your own test (this affords you the opportunity to change some answers).
- (8) Collect your winnings and go back to step 1 above (with different associates, of course). I suggest no more than five iterations, because by then you'll either be bored or you'll get caught.

Have fun, here are the ten questions:

1. A person shall be construed to practice professional engineering by:
 - A. Verbally claiming to be an engineer
 - B. Using a sign, other advertisement, letterhead, or cards which represent the person as a professional engineer
 - C. Being represented as able to perform any engineering service or work designated and recognized as engineering
 - D. All of the above

2. The practice of engineering or land surveying by a registrant who is either incapable of exercising ordinary care and diligence, or who lacks the ability and skill necessary to properly perform the duties he/she undertakes is known as:
 - A. Negligence
 - B. Misconduct
 - C. Gross incompetence
 - D. Decreased performance

3. The Board has the power to suspend, refuse to renew, fine, or revoke the certificate or reprimand any registrant or certificate holder found by the Board to be guilty of:
 - A. Practice of fraud or deceit in obtaining a certificate of registration or certification
 - B. Any fraud, deceit, gross negligence, misrepresentation, violation of contract, gross incompetence, or misconduct in the practice of engineering or land surveying
 - C. Any felonious act or violations of Rules of Professional Conduct adopted by the Board
 - D. All of the above

4. At any Board hearing, an accused individual, registrant, or certificate holder shall have the right to:
 - A. Appear by counsel
 - B. Appear in person
 - C. Produce evidence and witnesses in his behalf and/or cross examine witnesses in his defense
 - D. All of the above

5. Any person or corporation who shall practice, or offer to practice engineering or land surveying in Louisiana without being registered shall be _____ and upon conviction in court may be _____:
 - A. Guilty of a felony - fined
 - B. Guilty of a misdemeanor - imprisoned
 - C. Guilty of a felony - fined and imprisoned
 - D. Guilty of a misdemeanor - fined or imprisoned

6. Which is the following persons are exempted from professional registration in Louisiana:
 - A. Chemical Engineers
 - B. Industrial Engineers
 - C. Officers and Employees of the U. S. Government engaged in engineering or surveying for said government
 - D. Surveyors in industry

EXAMINATION SCHEDULE and APPLICATION DEADLINE DATES

EXAMINATION	SPRING		FALL	
	Application Deadline Date	Examination Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	Jan. 15, 1987	Apr. 11, 1987	Aug. 7, 1987	Oct. 31, 1987
Principles and Practice Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	Jan. 15, 1987	Apr. 11, 1987	Aug. 7, 1987	Oct. 31, 1987
Agricultural, Industrial, Metallurgical, Mining & Petroleum	NOT AVAILABLE		Aug. 7, 1987	Oct. 31, 1987
Fundamentals of Land Surveying Examination (8 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Principles and Practices of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Laws and Procedures of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	NOT AVAILABLE	

Apply at least six to eight months prior to an examination. Board approval must be given for anyone to be scheduled for an examination.

The applicant and the Board depend upon information provided by third parties in the processing of an application, therefore no assurance can be given that one will be scheduled for a specific examination.

Application Deadline date means that an application **must** be postmarked prior to or on the date specified so as to be given **consideration** for the examination. The Board may schedule an applicant for an examination later than that requested by the applicant. The Board cannot guarantee that the applicant will be scheduled for the examination initially requested.

7. Accepting benefits of any substantial nature or significant gratuities, from material or equipment suppliers, clients, contractors, their agents, or other parties:
 - A. Is permitted by Louisiana Statutes if less than one hundred dollars (\$100.00) in value
 - B. Is permitted by Board rules regardless of value
 - C. Is not permitted by Board Rules
 - D. None of the above
8. If a new corporation is formed for the purpose of offering to the public engineering services or land surveying services, or both, the corporation must file an application for registration with the Executive Secretary of the Board within:
 - A. Thirty (30) days after the Secretary of state issues a certificate of incorporation
 - B. Thirty (30) days after the application for incorporation is delivered to the Office of the Secretary of State
 - C. Forty-five (45) days after the governor signs the charter
 - D. Sixty (60) days
9. LAC 19-3:12 establishes rules of professional conduct as authorized by the Registration act. These rules apply to:
 - A. Only those engineers and land surveyors who are in private practice
 - B. All professional engineers and professional land surveyors
 - C. Any person or firm that has been licensed or certified for practice in Louisiana
 - D. Foreign corporations
10. When must a registrant of the Board place his seal on specifications, reports, plats, drawings, design information, and calculations?
 - A. Only when presented to a governmental agency
 - B. Only when requested by a client
 - C. Whenever presented to a client or any public or governmental agency
 - D. None of the above

See page 19 for the correct answers. I suggest to use the following criteria to evaluate performance:

Answers Correct

- 0-5 You should start to worry immediately because you probably are already in trouble and don't know it.
- 6-7 You **may** not be in trouble **yet**!
- 8-9 You are doing okay—or you may just be lucky!
- 10 You looked up all of the answers—don't get cocky until you memorize all of the law and rules of the Board.

I would like to close on a serious note. Ignorance of the law is not a satisfactory explanation for violating the registration law and rules which govern the practice of engineering. It is your responsibility as a registrant of the Board to abide by the law and the rules of the Board. Familiarize yourself with these two documents. If you need a copy of the law and the rules of the Board, please call the Board office at (504) 568-8540 and we will send you a copy. This information is also to be found in the 1986 Biennial Report of the Board.

JAMES C. WERNICKE, P.E. Continued from page 9

storage terminal, \$1.8 million 25,000 BPD produced water treatment facility, and \$1.3 million gas condensate separator addition.

In 1984 he formed Diversified Engineering Services, Inc. a mining, mechanical and forensic engineering firm. At DESI he has designed sewage pump stations up to 110 MGD, odor control and fugitive fume removal systems, cryogenic oxygen systems for sewage pretreatment and assisted in patent development for a sub-sea Artic pipelay trencher, a hydraulic drill string uncoupler and depressurization unit and a dry running mechanical slurry seal. His extensive involvement in the forensic aspects of engineering include over 30 cases. He has been accepted as an expert in Mechanical Engineering in Federal Court.

An avid user of computers, he has his own personal CAD system and has published two papers on personal CAD: "Selection and Use of a PC Based CAD System" and "Cost Justification of PC Based CAD Technology." He recently authored a paper entitled "Pipeline Gas

Condensate Explosion Due to Static Electricity" and coauthored a paper "Sewage Pretreatment with Cryogenic Oxygen." His most recent manuscript "Sewage Treatment with Cryogenic Oxygen" will be published in the spring.

Mr. Wernicke is a member of the Louisiana Engineering Society where he has served on various committees including consecutive terms as MATHCOUNTS Chairman, 1991 NSPE Winter Annual Meeting Chairman, Director and Secretary/Treasurer of the New Orleans Chapter. On the state level he is Vice-Chairman of the Intersociety Relations Committee and Vice-Chairman of the Private Practice Division. He has served as Chairman of the Teller's Committee and as a member of the Ad-Hoc Engineering Education Committee. Nationally, he serves as a member of the Professional Development Committee of the NSPE Private Practice Division.

He is active within many technical societies. Jim has served as Membership Development Chairman and is presently Member Interests Chairman for the New Orleans Chapter of the American Society of Mechanical Engineers. He is a member of the Society of Piping Engineers and Designers and recent Founder of the New Orleans Chapter. He belongs to the Water Pollution Control Federation and is on the Safety Committee of the Louisiana WPCF. Mr. Wernicke also belongs to the American Society of Heating Refrigeration and Air Conditioning Engineers, the Society of Computer Aided Engineers and the American Society of Safety Engineers.

In other areas, he was appointed by Governor Edwards as a member of the Louisiana Engineer's Selection Board, he is a Resource Engineer for the Scientific Research Institute, a national referral network for news media, a member of Mensa, Ltd., the international high I.Q. organization, the American Public Works Association and belongs to Phi Epsilon Pi and Zeta Beta Tau fraternities.

Mr. Wernicke is a lay minister, usher and member of the Parish Council for Our Lady of Good Counsel Catholic Church. He chairs the parish's Social Activities Committee and is a member of the Finance and Liturgical Committees. He has two sons, James Jr., 6, and Jacob, 2.

James C. Wernicke's outstanding contributions have demonstrated to a high degree capabilities in engineering indicating great potential for further advancement and leadership as a Professional Engineer, the ideals and criteria for the F. Hugh Coughlin Award.

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The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

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The Louisiana Engineering Society recognizes that economic hard times have fallen on the state and that many engineers are unemployed. As a service to the **Members of LES**, we will include a special feature in the April issue of the *Louisiana Engineer* magazine. We are making space available in that issue to print short resumes of those members of LES who are unemployed.

Resumes will be accepted until March 20, 1987 and publication will be limited to the first 100 resumes received, five lines per engineer.

Please send your name, address, telephone number, engineering discipline, registration, and number of years experience to the Editor, *Louisiana Engineer* P.O. Box 2683, Baton Rouge, LA 70821.

With circulation of the *Louisiana Engineer* now at 20,000 + every issue, the magazine has the potential of reaching many engineering employers. The April issue should be distributed by April 20, 1987.

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Continued on page 20

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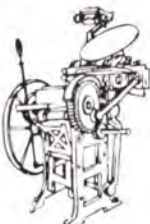
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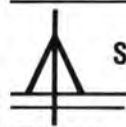
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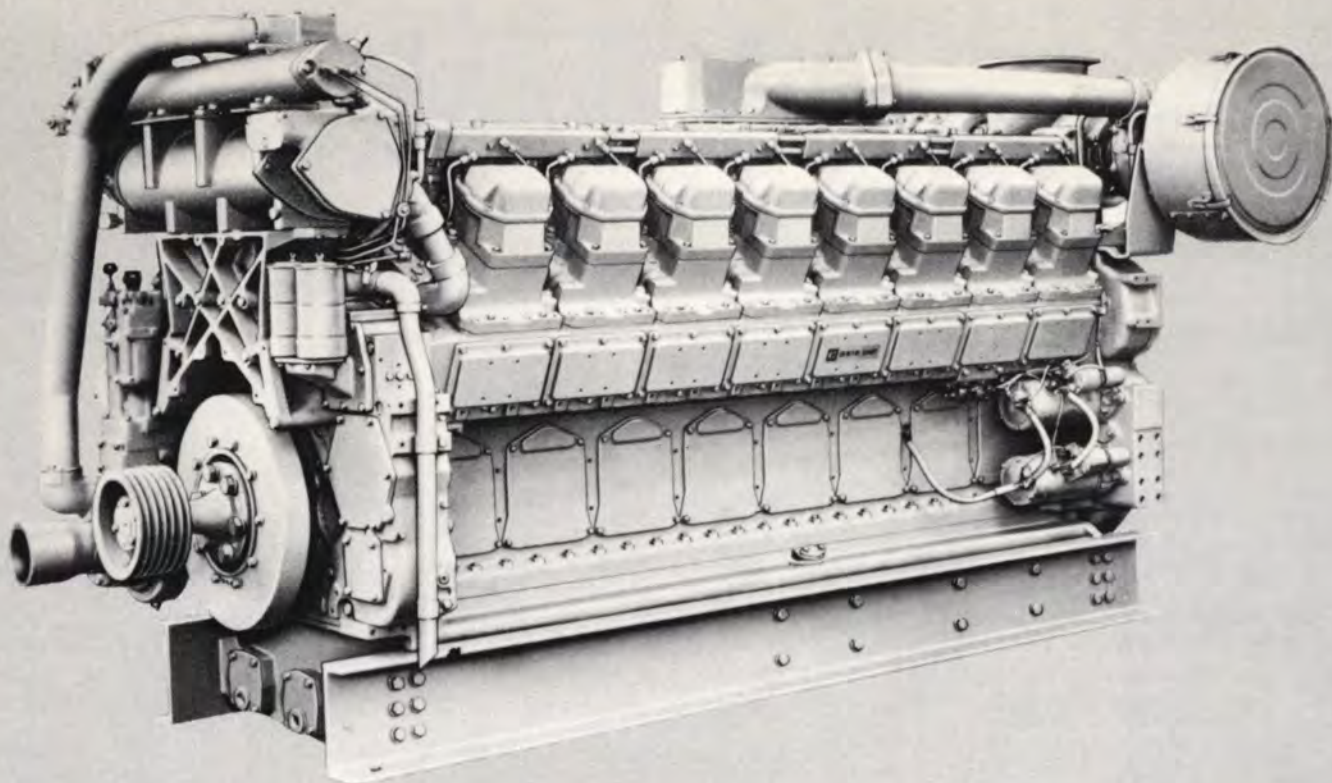
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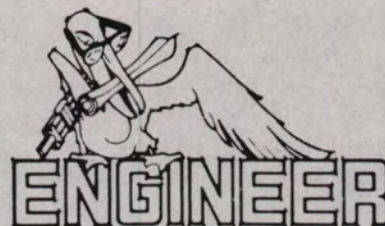
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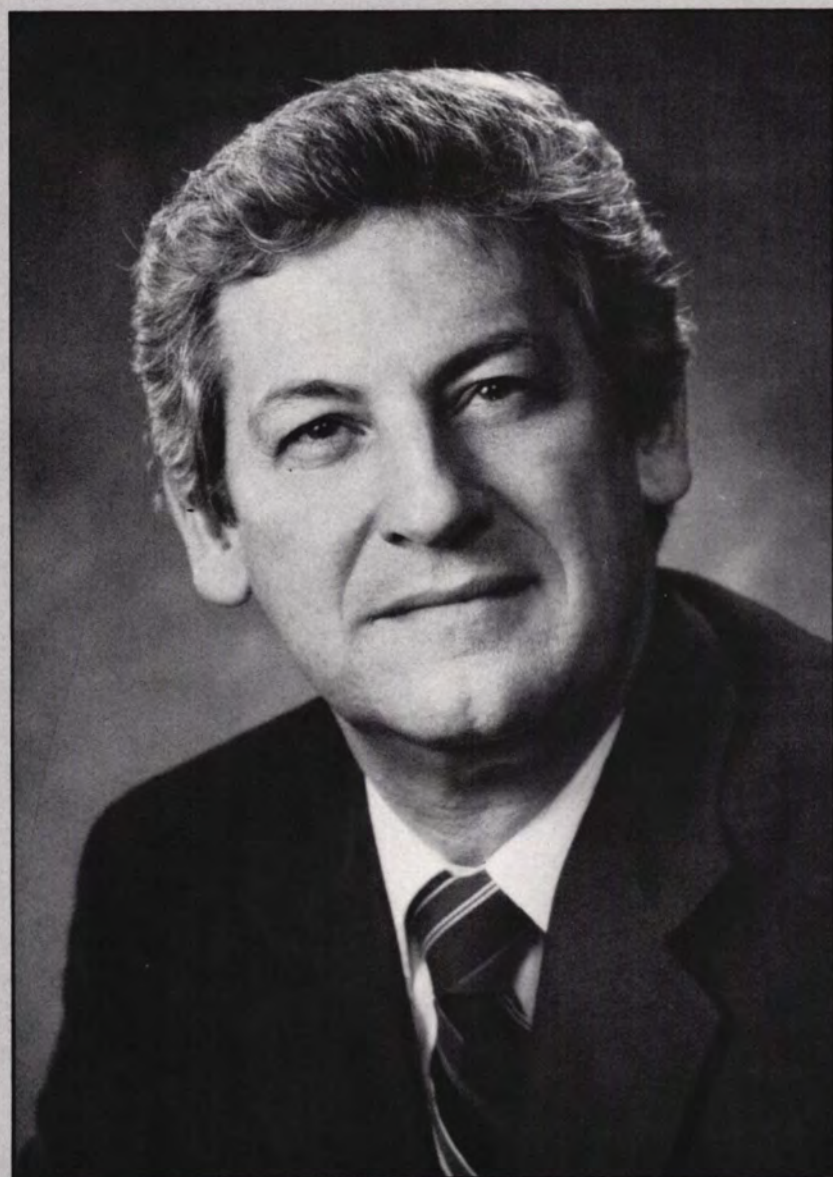
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ABOUT THE COVER

Pictured on this month's cover is Marion J. Chaney, P.E., Chairman of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.



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Committees Continue Activities



Robert P. Blanche, P.E.
President
Louisiana Engineering Society

We have passed the halfway point of the Society's administrative year. Behind us are the Engineering Education hearings, Engineers' Week, the chapter MATHCOUNTS activities, and the Annual Awards Meeting. In looking ahead, we have the State and National MATHCOUNTS competition, the Legislative Session and our Annual Meeting to be held in October in Shreveport.

MATHCOUNTS competition was held in all eight chapter areas, with over 280 schools registering and approximately 230 schools training and competing. The enthusiasm and cooperation exhibited by the students and the LES members involved was both exciting and gratifying. The state competition for the 27 winning schools and 36 top individual mathletes was held in Alexandria on April 4th, and was another successful competition.

The 1987 LES Annual Awards Meeting has just been completed and I would like to extend, on behalf of the whole Society, a great deal of thanks to the Monroe Chapter and Mr. Stu Farrell for arranging and coordinating this fine meeting.

Based on recommendations from our Long-Range Planning Committee, our meeting format was changed this year to allow for two seminars to be provided for the benefit of our membership. The PEI Division sponsored a seminar entitled

"Better Oral and Written Communication Skills for Engineers" and the Monroe Chapter, in conjunction with Louisiana Tech, sponsored a seminar entitled "Personal Computer Application for Professional Engineers." Both seminars were excellent and provided practical information and guidelines that could be put to use immediately by the engineers in attendance. The attendance was good and it is hoped that more of our engineers will take advantage of these seminars at our future meetings.

The Annual Awards Banquet provides an opportunity for the Society to recognize outstanding achievement by our fellow engineers, and my congratulations go to this year's recipients, Mr. Carter Brown, P.E.; Mr. Gerald Haydel, P.E.; Mr. Jim Wernicke, P.E.; and Mr. Jim Webb, P.E. Mr. Herb Koogler, P.E., past President of the National Society of Professional Engineers, spoke at our Awards Banquet and pointed out the Louisiana Engineering Society's active participation and strong leadership in the National Society of Professional Engineers through many of our past and present members. He also pointed out that LES has several ongoing programs that are recognized throughout the country as being innovative and effective.

The committee activities during the Monroe meeting ranged from minimal to very busy and active participation. The Ethics Committee has been busy investigating two separate charges of unethical conduct. One of the items has been determined to be trivial and without merit, and the other item is considered non-trivial and an investigation is continuing. It is my opinion that the Ethics Committee activities are extremely important to the Society, and show that we will evaluate all charges received and police the actions of our members. I feel this is healthy for our organization.

The Constitution and By-Laws Committee has been extremely active and has taken the lead in defining what needed to be done in order to change our administrative year from July 1st to October 1st. The results of these efforts will be voted

on by the membership later this year. They have also received additional assignments at the Board Meeting in Monroe.

The Legislative Committee has been working to finalize the Legislative Program for this year. Bills that will be submitted include hazardous waste liability, workmen's compensation, joint and several liability, and some revisions and clarifications to the registration law. The survey undertaken by LES to determine the feelings of the engineers throughout the state regarding the six-year vs. nine-year term of members of the Board of Registration for Professional Engineers and Land Surveyors indicated that there was not a preponderance of support for the nine-year program. Because of the fact that strong support was not received, it has been determined that the change to nine-year terms will not be pursued this year.

The Budget Committee has met several times in order to re-evaluate this year's budget in light of reduced income. We are watching the situation closely and taking appropriate steps to reduce costs in order to keep them closely in line with projected income. I would request that all LES members who have not yet paid their dues for 1987 please do so. Your Society needs the money in order to finance the activities and services provided.

The Board of Direction has assigned to the Long-Range Planning Committee the task of evaluating the purpose and activities of our standing committees, and to determine if any restructuring or redirection is required. It is hoped that this analysis will lead to a strengthening of our Society activities for the benefit of all our members. If any engineer has recommendations or thoughts on existing committee activities or future programs, please notify your chapter presidents or the State office.

I want to assure all of our members that we are trying to serve our membership in the best possible manner and that we request your comments and suggestions.

LOUISIANA ENGINEER/APRIL 1987

LES Board of Direction Minutes

December Meeting

The December meeting was held in the state headquarters in Baton Rouge with 21 Board members, 6 guests and the staff in attendance.

1. The October and November 1986 financial statements were accepted subject to the annual audit.

2. James Porter presented the membership report. With a third of the administrative year elapsed, we have recruited 26% of our quota, 139 new members.

3. The Board approved the firm of Easterly and Pittman as lobbyist for the Society.

4. The Legislative Committee is reviewing a number of proposed amendments to the Registration Law for Professional Engineers and Land Surveyors including a lengthening of terms for Board members. The State Board of Registration will prepare a position paper on this issue.

5. A letter will be written to the Department of Transportation and Development encouraging them to continue their joint funding agreement with the U. S. Geological Survey. The agreement funds the water resources data collection program and the mapping program.

6. A list of candidates to replace James W. Reeves on the State Board of Registration was submitted to the Governor for his selection.

7. Robert Blanche reported on the State Board of Regents public hearing concerning the state supported engineering schools in the state.

8. As of December 12, 259 schools have registered for the regional MATH-COUNTS competition. The state competition is scheduled for April 4th in Alexandria.

9. The Honors and Awards Committee submitted a report to the Board naming the 1987 award winners. The report was accepted unanimously. The winners will be honored at a banquet on March 20th.

10. Michael Flores was appointed as the Board's representative to the LES

Political Action Committee.

11. The Board voted to support the candidacy of Walter LeFevre, Ph.D., P.E., for NSPE President-Elect, 1988-89.

12. The Board voted to support Guy Cheek, P.E., for the NSPE Distinguished Service Award.

13. The NSPE Scholarship Selection Meeting will be held March 11-14, 1987. The Budget Committee will determine if LES should send a representative to this meeting.

14. The April issue of the *Louisiana Engineer* will publish resumes for those members of LES who are unemployed.

February Meeting

The Lake Charles Chapter hosted the February meeting with 16 Board members, 3 guests and the LES staff in attendance.

1. The Secretary-Treasurer presented the financial statements for December 1986 and January 1987 and reported that the Budget Committee had met on January 15 to review the financial situation to date. The committee will meet again prior to the March 21st Board meeting.

2. Porter presented the membership report. LES has gained 145 new members this administrative year.

3. At the request of the Legislative Committee, the Board heard opposing views on the proposal to extend the terms of members on the State Board of Registration. A survey, with position paper from both the State Board and a LES

member, will be distributed to chapter presidents to receive a consensus of the LES membership. The technical societies will also be contacted. Other proposals by the State Board to amend the registration law were also discussed by the Board. The comments will be forwarded to the State Board.

4. Robert W. Parks, P.E., a member of the State Board of Registration, expired on December 31. The LES must submit a list of candidates to the Governor to fill the unexpired term. A screening committee was appointed.

5. The LES Nominating Committee was appointed. Positions to be filled on the LES Board of Direction are: president-elect, 2nd vice president, secretary-treasurer, two state directors and one national director. The committee will meet on March 19.

6. Each year, LES's support is enlisted from candidates seeking office at the national level (NSPE). A screening committee was appointed to review nominations and make recommendations to the Board.

7. The Louisiana A.G.C., Highway, Heavy, Municipal-Utilities Chapter requested a contribution from LES to help support its legal efforts to have Acts 10 and 38 of the 1986 Special Session declared unconstitutional. LES is unable to contribute to this effort due to budget restraints. The information concerning this request will be forwarded to the practice divisions.

1987 IS AN ELECTION YEAR

SUPPORT LES - PAC

P.O. BOX 2683

BATON ROUGE, LA. 70821

BE A VOTING MEMBER BY
CONTRIBUTING \$25.00 OR MORE

Water Supply For Industry

By Dr. Frank Macdonald
Senior Consultant

Waldemar S. Nelson & Company

Louisiana is fortunate in having an abundance of fresh water in the form of streams, lakes, and groundwater for use by industry. Approximately 200,000 persons are employed by industry in Louisiana in the manufacture of chemicals, lumber and wood products, paper, petroleum refining, metal fabrication, glass and concrete textiles and machinery. The abundance of water in Louisiana has been a strong influence with industries considering locating in the state. Attached as Figure 1 is a partial list of industries located along the Mississippi River downstream from Baton Rouge. These industries are located in Louisiana largely because of the plentiful supply of water available in the Mississippi River. Similar conditions exist along the other major streams in the state.

Many industries require large volumes of water for manufacturing processes, cooling purposes, steam generation, drinking, sanitation, and fire protection. In many cases, the tonnage of water used exceeds the tonnage of raw material required in the production of the final product. Surveys for the availability of water supplies in an area are an important factor in selecting locations for new plants. In addition to considering the quantity of water available at plant site, studies are also made by industry of water temperature, chemical and bacteriological characteristics, variations in quality, and cost of water supply and purification.

It is the purpose of this article to present information on the quantity and quality of surface and groundwaters in some areas of Louisiana. With pending Federal legislation and other indications of a nationwide tightening of contamination control of water supplies, the availability in this territory of clean water for industrial purposes should be an increasing inducement for industry to settle here.

Surface Water

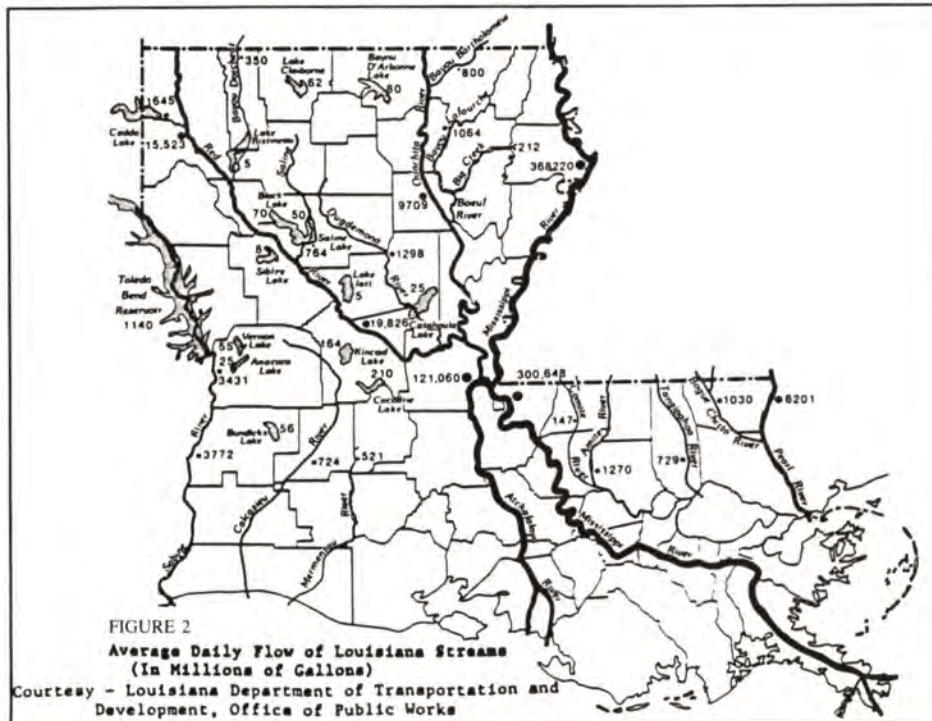
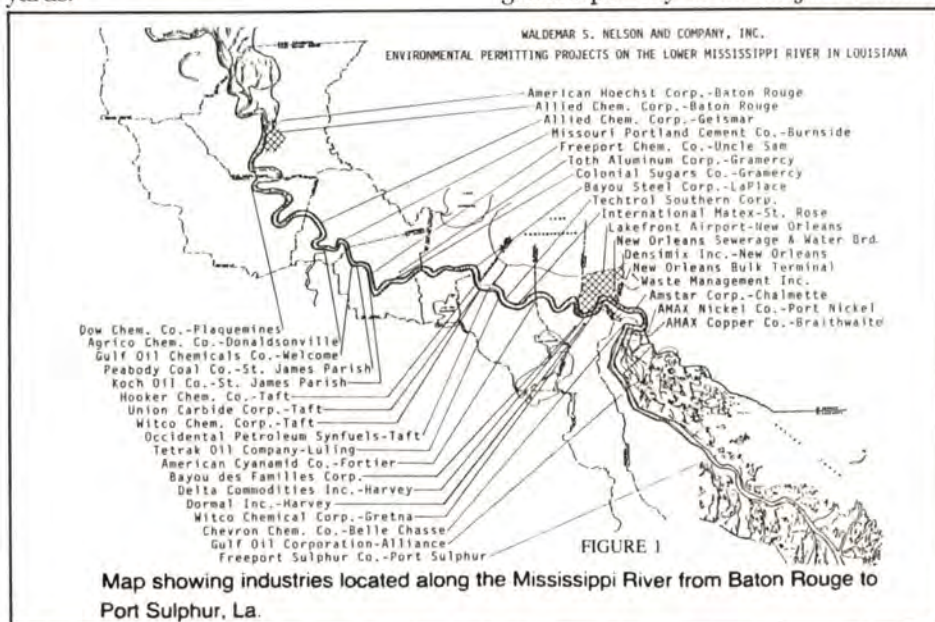
About six percent¹ of the state, or approximately 3100 square miles, consists of surface water. The principal stream in Louisiana is the Mississippi River with a basin that extends from New York to Idaho and from Canada to Louisiana. It passes through twenty-seven states, serving hundreds of cities and industries as a source of supply for drinking water and industrial purposes.

Together with its tributaries, the Miss-

issippi River drains most of the section of the United States between the Rocky and Allegheny Mountains, an area of 1,232,000 square miles, or approximately one-third of the total area of the United States. Thirteen thousand square miles of additional drainage area of the river lie in Canada. The drainage area of the Mississippi River is exceeded only in size by the Amazon and Congo Rivers. The annual discharge is approximately 785,190 million cubic yards and the average daily flow is 2,236 million cubic yards.

There are twenty-nine navigable rivers in Louisiana, the principal ones being the Mississippi, Atchafalaya, Ouachita, Pearl, Red and Sabine. There are also 150 lakes that have surface areas of one square mile or more. The largest of these is Lake Pontchartrain, a tidal estuary with a surface area of 621 square miles. The Toledo Bend Reservoir is the largest freshwater lake, located on the Louisiana-Texas border with an area of 185,000 acres.

The average daily flow in millions of gallons per day of the major Louisiana



streams is shown on Figure 2. The combined total discharge of these streams to the Gulf of Mexico is estimated to be 330 million acre feet per year.

The chemical quality of surface streams may change weekly and, in some cases, daily because of variations in the surface runoff and discharge. The water in the streams is readily adaptable to treatment and, in most cases, this consists of turbidity removal and softening. The streams are used extensively by industries for cooling purposes. Figure 3 shows a typical analysis of the Mississippi River water as determined in the New Orleans Water Treatment Plant. These are for a five-year period before and after purification. Similar chemical analysis are available for other major streams in Louisiana.

Intracoastal Seaway

A project that would have tremendous potential as a freshwater supply for industry is the Intracoastal Waterway, proposed for construction across southern Louisiana. This freshwater channel would extend from the Sabine River near Orange, Texas to Bayou Lafourche at Houma, Louisiana. Figure 4 shows the proposed location which generally follows the route of the Gulf Intracoastal Waterway for a distance of approximately 200 miles.

The project was conceived by the

Louisiana Intracoastal Seaway Association, Inc. and the Louisiana Department of Public Works. The association was organized in 1958, and its membership consists of police jurors, local organizations, and public spirited citizens of the southwestern parishes of Louisiana. A Preliminary Engineering Report, Economic Study and Feasibility Report were prepared by the firm of Waldemar S. Nelson and Company, Inc. in 1963. At

the time it was found that funds were not available for the construction of the Seaway. However, meetings within the past few months indicate a renewed interest in the proposal and reconsideration is being given to the possibility of construction of the waterway.

The construction of the Seaway would be of tremendous benefit to the economy of Southwest Louisiana. New industrial sites would be provided along the banks

All Values Expressed in Parts Per Million						
Except As Noted						
	MISSISSIPPI RIVER (Before Purification)			FINISHED WATER (After Purification)		
	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.
Dissolved Solids.....	342	183	263	280	165	226
Suspended Solids.....	748	38	323	-	-	-
Color (Scale Units).....	13	9	10	4	2	3
Conductivity (umhos/cm).....	506	187	349	418	194	298
Non-Carbonate Hardness (as CaCO ₃).....	77	24	48	69	25	47
Total Alkalinity.....	140	62	104	108	43	68
pH (Scale Units).....	8.61	7.65	7.98	10.98	9.19	10.12
Potassium (K).....	3.35	2.74	3.05	3.32	2.64	2.98
Turbidity (Scale Units).....	700	24	201	3.40	0.03	0.30
Carbon Dioxide (CO ₂).....	5	1.0	3.3	0	0	0
Silica (SiO ₂).....	6.2	1.2	4.2	5.8	1.5	4.2
Calcium (Ca).....	68.4	30.4	45.8	50.0	21.2	33.2
Iron (Fe).....	.023	.005	.012	.020	.001	.006
Magnesium (Mg).....	22.1	1.2	9.2	15.1	2.2	8.0
Sodium (Na).....	30.9	18.7	24.8	30.1	17.6	23.9
Chloride (Cl).....	40.0	8.0	23.2	47.0	15.0	25.8
Sulphate (SO ₄).....	64.8	30.7	46.6	67.5	36.2	48.2
Fluoride (F).....	0.68	0.16	0.33	0.97	0.24	0.81
Total Phosphate.....	1.49	0.22	0.64	1.61	0.24	0.70
Nitrate - Nitrogen.....	2.76	0.84	1.67	2.59	0.75	1.55

March 1963

FIGURE 3

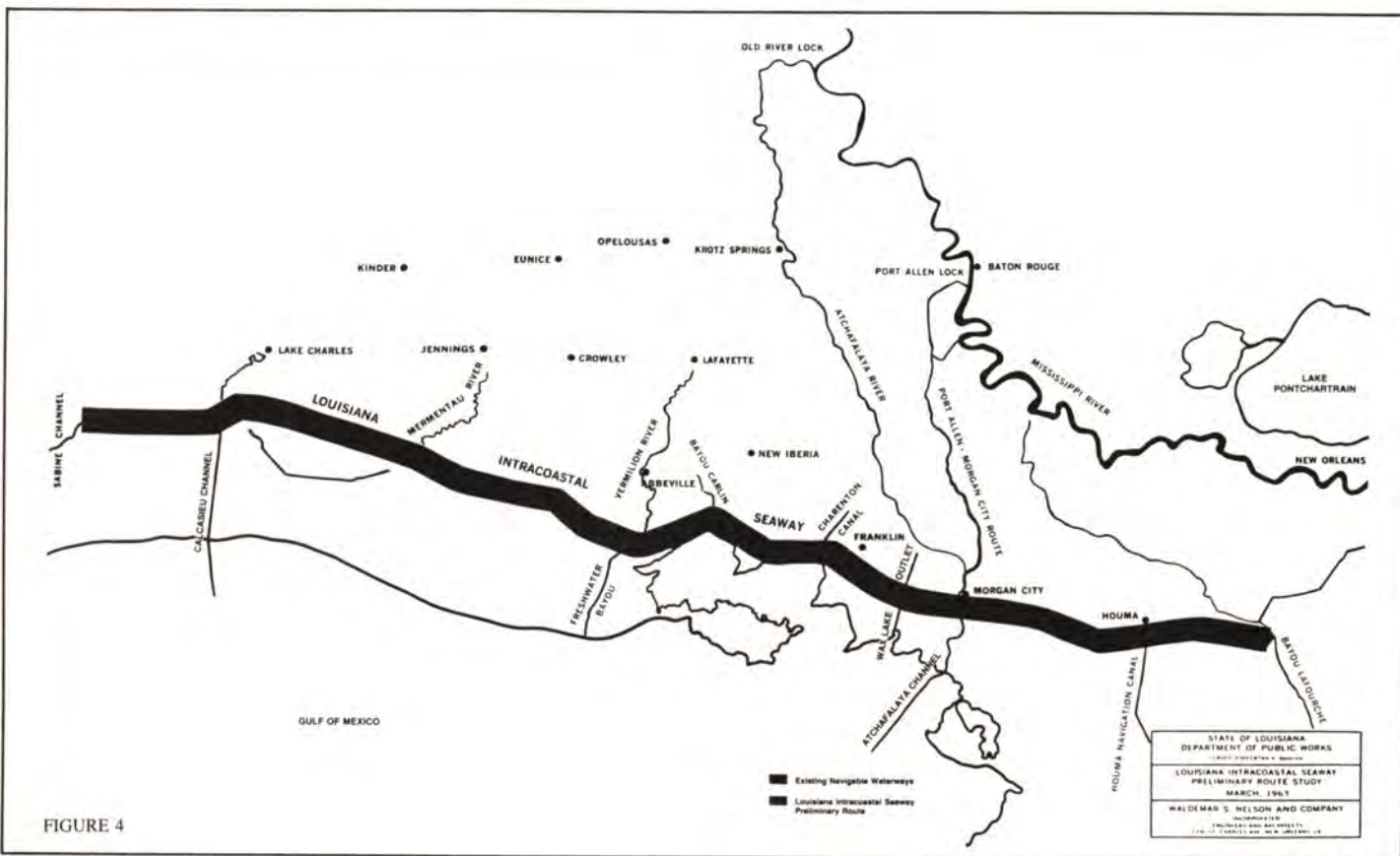


FIGURE 4

of the waterway. Freshwater would be available for industries, city drinking water supplies, and for agricultural uses. The channel would be 500 feet wide and have 50 feet depth. Barriers would be provided to prevent saltwater intrusion and locks would be located in channels to permit the passage of vessels. The principal source of freshwater to the Seaway would be rivers such as the Mermentau and Vermilion. Levees would be

located along the south side of the channel to protect the area from high tides and to maintain the fresh water supply.

Well Water

Well water is readily available in most sections of Louisiana, the exception being some areas of the coastal parishes. The majority of the incorporated communities in the state have wells as the source of the drinking water supply.

Wells are also used in Louisiana by industries for process purposes and for cooling, and are used extensively in agriculture areas for irrigation of crops.

Figure 5 shows the availability of freshwater from wells in Louisiana. Most of the productive water bearing aquifers consist of quaternary deposits and are found in about three-fourths of the state. Some wells obtaining water from these aquifers produce as much as 6000 gallons per minute.

The areas designated on Figure 5 as moderate to large quantities of softwater are ideally suited for domestic purposes. Many of the wells are under artesian conditions and have an average annual temperature of 69 degrees F. The waters are very soft with hardness in the range of 0 to 10 mg/l (as CaCO₃).

Well water supplies in southwestern Louisiana are mainly hard and high in iron. Many of the public water supply systems are provided with aeration for iron removal, softening with lime, and followed by filtration.

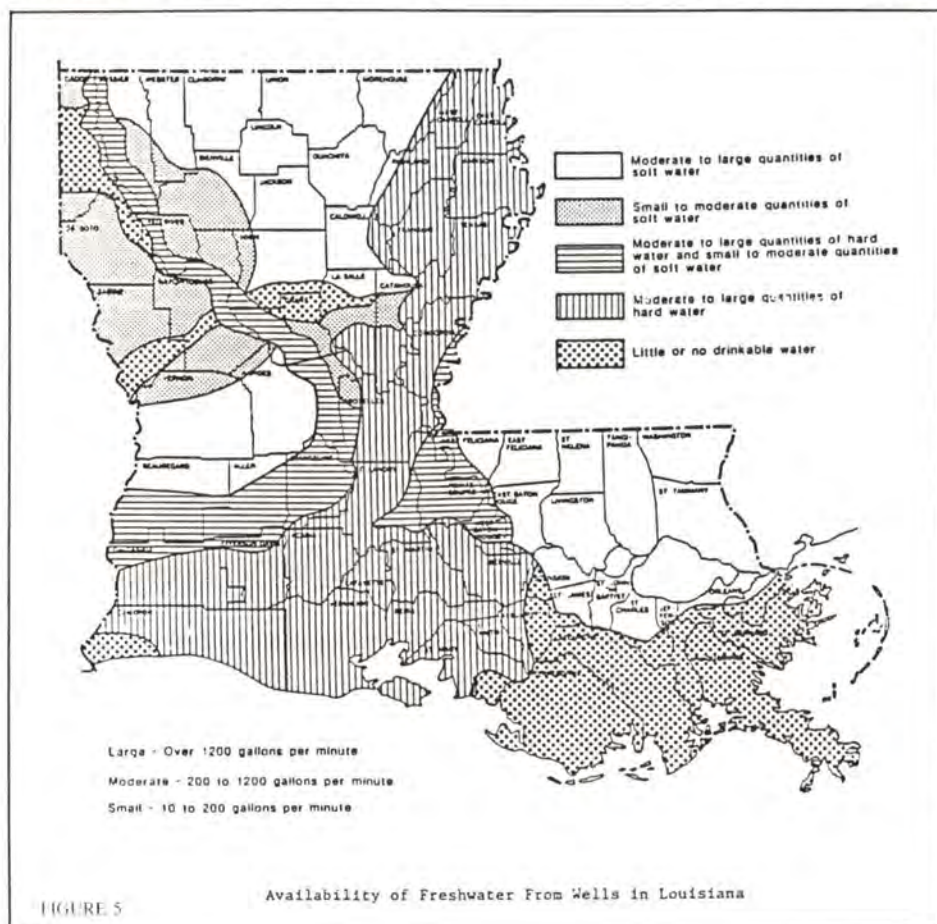
The only section of the state where potable well water is not available is in the New Orleans and southeastern areas. These aquifers have high color and chloride contents, and the quantity of flow is limited. There is a limited use from these wells by industry for cooling water purposes.

Figure 6 is a tabulation of the wells used for public water supplies in some of the areas of Louisiana. The exception is New Orleans where the NASA well in New Orleans East is used for industrial purposes.

Conclusion

The availability of water in almost all sections of the state, coupled with the large supplies of fuel in the form of petroleum or barged in coal indicate that Louisiana could support considerably more industry than is presently found here. Other assets are the great number of possible plant sites on navigable streams, an adequacy of labor of various types and grades, and a temperate climate. It is felt that this combination of potentialities will inevitably result in increased industry in Louisiana. With pending Federal legislation and other indications of a nationwide tightening of contamination control of water supplies the availability in this territory of clean water for industrial purposes should be an increasing inducement for industry to settle here.

(1) The Louisiana Water Resources Study Commission's Report to the 1984 Legislature. Prepared by the Louisiana Department of Transportation and Development Office of Public Works, May 1984.



CITIES									
Substance	Alex.	B.R.	Laf.	Lk. Chas.	Hammond	Ruston	Leesville	Slidell	N.O.**
Silica (SiO ₂)	49	36	44	49	58	33	67	20	7
Iron (Fe)	.07	.03	7.2	.05	.35	.52	.20	.07	0.38
Manganese (Mn)	0	0	.61	.34	.10	.02		.01	
Calcium (Ca)	0.7	.4	44	34	1.2	1.4	37	2.0	5.5
Magnesium (Mg)	0	.30	7	7.9	.7	.1	1.9	0	0.6
Sodium (Na)	93	67	12	104	51	62	19	91	
Potassium (K)	1.2	.4	1.9	3.5	.6	1.3	3.8	.4	
Bicarbonate (HCO ₃)	216	162	148	199	122	146	123	194	
Carbonate (CO ₃)	0	0	0	0	0	0	0	13	
Sulfate (SO ₄)	11	9.6	17	.2	9.1	2.2	11	17	
Chloride (Cl)	12	4	20	128	4.2	13	22	2.2	272
Fluoride (F)	1.0	0.1	.1	.1	.2	.4	.3	.5	
Nitrate (NO ₃)	0.2	1.2	.2	0	.1	0	0	.1	
Phosphate (PO ₄)	1.6	.1	.03	.7	1.5	.6		2.4	
Boron (B)	.31	.13	.04	.06	.09	.13		.02	
Total Solids	282	202	226	414	187	221	226	250	
Hardness (CaCO ₃)	2	2	139	118	6	4	100	5	
Color (Units)	0	0	5	0	5	30	0	30	120
pH	8.0	8.3	7.1	7.5	7.4	6.9	6.9	8.8	7.2
Well Depth (Ft)	1072	1605	225	729	2190	636	683	2411	565

* All values in mg/l except as indicated.

** NASA Michoud Plant.

FIGURE 6



Surveying - Past, Present, Future

By: Richard F. Griswold, P.E., P.L.S.

Surveying is as old as civilization. The ancient Egyptians certainly had a knowledge of geometry and astronomy. With this knowledge and a few simple tools they were able to lay out boundaries and even re-establish those boundaries. Every year after the Nile floods washed out farm boundaries, surveyors would mark out new ones.

One of the things that made the Roman Empire great was a refined system of land boundaries. The Romans developed a method of dividing land into a rectangular grid. Use of this grid allowed particular parcels of land to be specifically and uniquely identified. It is certain that persons with a knowledge of geometry were given the task of laying out the grids.

Even today surveyors perform the same tasks as these ancients. One of the most precious possessions that we have in the United States today is the right to own land. This right can only work in an orderly manner if this land can be uniquely identified. This unique identity arises from size, shape, and location, and it is the surveyor who makes the measurements that are necessary to quantify this identity. These measurements constitute the boundaries of the land and it is the task of the surveyor to determine the position of these boundaries and to perpetuate them.

Perhaps the basic task of the surveyor today has not changed since ancient times, but it has become more difficult. Contracts between persons that establish boundaries are much more complicated today, and the interpretation of these contracts is more and more subject to scrutiny. It is not enough that a surveyor have knowledge of mathematics, that person must have a knowledge of law, of physics, and, at times, of botany, hydrology, and metallurgy. That person must also have some mechanical ability and must be an effective communicator.

Not only has the task become more difficult, but the means of accomplishing the task have become more complex. The tools have changed. The knotted string and the measuring stick have given way to the compass and chain, then to the transit and tape, and now to the theodolite and electronic distancer. The development of these tools is progressing at what seems like breakneck speed and the next generation is on the horizon. Many surveyors are using satellite positioning systems now, and their use will grow quickly as cost declines. Maybe this is the mythical "black box" surveyors tool.

From all this it can be seen that the surveyors have a history and heritage, and that surveyors are needed. The future for surveyors will be dynamic and exciting.

Positions Wanted

Hilary C. Sanders, Jr., P.E.
114 Arthur Avenue
Shreveport, LA 71105
(318) 865-2150

Registered Mechanical Engineer in Louisiana: 32 years experience in plant and system design, project management and trouble-shooting as well as plant management of petrochemical plants. Experience in carbon black, iron oxide and chlorine-caustic soda processes.

R. N. Graham, Jr., P.E.
600 Washington St.
Natchez, MS 39120
(601) 445-2371

BS & MS in Mechanical Engineering, MBA: Registered in Louisiana & Mississippi. 20 years diverse project management experience on Gulf Coast & overseas.

James E. Thatcher, P.E.
Route 1, Box 103
Plaquemine, LA 71362
(318) 922-3926

Registered Civil Engineer in Louisiana and North Dakota: 22 years of experience in civil and mechanical including military construction.

Thomas M. Ashton, P.E.
146 Beverly Drive
Baton Rouge, LA 70806
(504) 387-5492

Registered Mechanical Engineer in Louisiana: project management construction management, power plants, oil refineries, industrial plant facilities: 30 years broad experience with major engineers constructors.

Keith R. Dugas
7241 Boston Drive
New Orleans, LA 70127
(504) 242-8067

B.S. in Chemical Engineering; 8 years experience in production and reservoir engineering.

Earl R. Koller
1599 London Circle
Benicia, CA 94510
(707) 746-5033

Registered Civil Engineer in Louisiana: 36 years experience including water resources, concrete soil-cement, underground utility construction, market development.

Registered Civil Engineer experienced in the design of civil engineering projects, teaching and research. Areas of specialization are: water supply, irrigation, highway engineering, surveying, geodesy, photogrammetry and remote sensing. Direct inquiries to P.O. Box 6665, Lake Charles, LA 70606.

Jeffrey J. Hymel
133 Dove Circle
Lafayette, LA 70508
(318) 981-4282

Registered Engineer-in-Training in Louisiana, Petroleum: Experience - 1 summer production.

Sam L. Sullivan, Jr. Appointed to State Board of Registration

Sam L. Sullivan, Jr., Ph.D., P.E., Associate Dean of Engineering and Associate Professor of Chemical Engineering at Tulane University in New Orleans, has been appointed by Governor Edwards to the Louisiana State Board of Registration for Professional Engineers and Land Surveyors. Sullivan was appointed to fill the unexpired term of Robert W. Parks, P.E., who passed away on December 31, 1986. Sullivan's term will expire August 2, 1991.

He graduated in 1963 from Texas A & M after receiving his Doctorate, Master, and Bachelor of Science degrees in Chemical Engineering.

Sullivan is a member of the Louisiana Engineering Society, the American Society of Engineering Education, and the American Institute of Chemical Engineers. He holds memberships in Tau Beta Pi, Omega Chi Epsilon, Phi Eta Sigma, Phi Kappa Phi, and Omicron Delta Kappa.

He has authored numerous publications and he's very active on both university and engineering committees at the college.

Daniel D. Reneau New President of Louisiana Tech University

Daniel D. Reneau, Ph.D., P.E., Vice President for Academic Affairs at Louisiana Tech University, has accepted the position of Tech President, succeeding retiring President F. Jay Taylor.

"I see Tech as an extremely high-quality-potential school," Reneau said when asked by the selection committee how he viewed Tech's future. "Tech can be a rising star, moving up to take its place among the great schools of the nation."

Reneau first went to Tech as a student majoring in chemical engineering, receiving his Bachelor's degree in 1963. He continued at Tech to obtain his master's in chemical engineering in 1964. He received his Doctorate in 1966 from Clemson University.

Reneau returned to Tech in July 1973 as the head of the Biomedical Engineer-

ing Department. He remained in this position until he was promoted to Vice President for Academic Affairs in July 1980, the position he will vacate in June.

A "well-rounded man" is how Reneau is best described by his peers. His scholarly activities vary. He has written and edited several books and journals in addition to establishing Tech's Biomedical Engineering Department.

De. Reneau is a member of the Louisiana Engineering Society, the American Chemical Society, the American Institute of Chemical Engineers, the American Society for Engineering Education, the Biomedical Engineering Society, the European Society for Microcirculation, and the Louisiana Teachers Association.

Testimony on Small Business Procurement Issues

Responding to an invitation from the Chairman of the Senate Small Business Committee, member of the Louisiana Engineering Society Board of Direction, former NSPE/PEPP Chairman and current Chairman of the Committee on Federal Procurement of Architectural and Engineering Services (COFPAES) Arthur A. DeFraites, Jr., P.E. testified before the Senate panel on February 25, 1987.

DeFraites, a consulting engineer from Houma, Louisiana noted that "... the A/E professions have encountered some problems in the procurement area, particularly in the designation of size standards whereby the vast majority of A/E firms are classified as small business." Added DeFraites, "the (current revised) size standard definition is not very helpful in assisting truly small and minority A/E firms in obtaining a fair share of government business."

Nonetheless, DeFraites applauded Congress for last year's passage of the Defense Acquisition Improvement Act (P.L. 99-661) which would permit all A/E firms to receive a fair share of Federal contracts. Under the new law, 30 percent of the value of contracts would be earmarked for A/Es classified as small business; all firms - large and small - would be entitled to compete for the remaining 70 percent of Federal A/E contracts. In addition, the new law would

direct the small Business Administration to adjust the size standard downward if more than 30 percent of the dollar amount of Federal A/E contracts were awarded under a set-aside. Said DeFraites, "We urge this committee to continue to support the Defense Acquisition Improvement Act."

DeFraites' testimony was in response to a February 6, 1987 letter from both Senate Small Business Committee Chairman Dale Bumpers and Ranking Minority Member Lowell Weicker, Jr. stating that the Senate panel was in the process of beginning to develop its legislative and oversight agenda for the next two years and noting that government procurement was one of the many issues the panel intended to focus upon.

A copy of Mr. DeFraites' full testimony may be obtained by contacting the NSPE Legal Department, 1420 King Street, Alexandria, VA 22314.

Biotechnology Center To Honor Boggs

One of Tulane's most ambitious and far-reaching projects — the creation of a center to help Louisiana meet the challenges of finding new energy sources, fighting pollution and improving health — got under way in July 1986.

The Lindy Claiborne Boggs Center for Energy and Biotechnology is scheduled for completion in the late fall of 1987.

The \$12-million facility, named for Newcomb alumna and longtime Louisiana Congresswoman Corinne Claiborne "Lindy" Boggs, will house the university's departments of biomedical, chemical and petroleum engineering, administrative offices for the School of Engineering and a centralized instrumentation facility.

The six-story structure will contain classrooms, teaching and research laboratories, workshops, storerooms, offices and general support area in 90,000 square feet of space. Its construction will allow for expansion of the computer science, civil, electrical and mechanical engineering departments in existing buildings.

The federal government has allocated \$5.8 million toward its construction. The university already has raised an addi-

LOUISIANA ENGINEER/APRIL 1987



Leta Bueto
Executive Director
Louisiana Engineering Society



tional \$3 million and plans to raise the remaining \$3 million of its cost through private donations.

The center will enable Tulane engineers to develop new technologies and promote their transfer to the private sector and to work on solving long-term, energy-related health and environmental problems. As part of the effort, the university's interdisciplinary biomedical engineering program will be enhanced and expanded.

Designed by Waldemar S. Nelson and Co., Inc., Engineers and Architects, and John Desmond and Associates, Architects and Planners, the center will have a brick face with cast stone and precast concrete panels on selected surfaces and an exterior plaza with ceramic tile or brick flooring, stairs and ramp.

Boggs, a Democrat, is serving her seventh term as Second District Congresswoman. She is the first woman elected to Congress from Louisiana and became, in 1976, the first woman to chair a major political party's national convention.

A 1935 graduate of Newcomb and one of its most devoted alumnae, Boggs serves at Tulane on the President's Council, the Business School Advisory Council and the Newcomb National Committee and will chair the Newcomb College Centennial Exhibition.

She has received an honorary degree from Tulane and is a past recipient of Newcomb's Outstanding Alumna Award. In 1985, she became the first woman to receive the university's highest alumni recognition award, the Distinguished Alumnus Award.

"It is altogether fitting that the center be named in her honor," said president Eamon Kelly. "She has evidenced extraordinary sensitivity to the university by supporting legislation beneficial to higher learning. It is a pleasure to be able to recognize her service and abilities, knowing the center will forever be identified with her uncommon dedication to the academic institution she loves."

High Thompson, Dean of the School of engineering, said "the success of this project was critically dependent upon the active interest and support of Congresswoman Boggs."

Through her dedication and foresight,

he added, "the center will be in a position to produce new technology for the economic development of New Orleans and the state of Louisiana which she has served so well."

Reproduced from Inside Tulane

Louisiana Engineering Foundation Memoriam

The Louisiana Engineering Foundation's Memoriam program is a most appropriate way to recognize our deceased engineers and other loved ones. Contributions are tax deductible and checks should be made payable to LEF.

A Memoriam Plaque hangs in the Foundation Headquarters building. The name of the deceased and his/her date of death is engraved on individual brass plates.

Every gift is spent wisely toward our goal of improving the engineering profession in Louisiana. In lieu of flowers send a contribution to LEF, P.O. Box 2683, Baton Rouge 70821. Letters of acknowledgment are sent to the donor and to the family of the deceased.

16th Congress International Commission on Large Dams

San Francisco, California
June 13-17, 1988

The U.S. Committee on Large Dams will host the 16th Congress of the International Commission on Large Dams in 1988. The Congress, which is held every third year, was last held in the United States in 1958. Approximately 3000 members of ICOLD and accompanying persons from more than 80 countries are expected to attend the Congress which will be held at the Fairmont Hotel and the Masonic Auditorium atop San Francisco's Nob Hill.

The technical program for the Congress will consider four separate questions:

- Reservoirs and the Environment - Experience in Management and Monitoring
- Embankment Dams: Impervious Elements other than Clay Cores
- New Developments in the Construction of Concrete dams

- Design Flood and Operations Control

Robert Polvi is the Chairman of the Steering Committee for the Congress and the American Society of Civil Engineers is providing conference-management services. Further information can be obtained by contacting:

ICOLD 88 Steering Committee
H. L. Bloom, Secretary
Bechtel Civil, Inc.
P.O. Box 3965
San Francisco, CA 94119
Telephone: 415-768-7607
International Telex: 184907 WATEK UT

Revised Commentary Now Available

The Engineers Joint Contract Documents Committee, consisting of the National Society of Professional Engineers, American Consulting Engineers Council, American Society of Civil Engineers, and the Construction Specifications Institute, is pleased to announce the publication of the long-awaited, revised "Commentary on Agreements for Engineering Services and Construction Related Documents" by John R. Clark, Esq.

The Commentary (EJCDC No. 1910-9 [1986 Edition]) is a "must" for users of the EJCDC documents and is a thorough revision of the 1981 edition that contains a wealth of background and guidance on all EJCDC standard forms of agreement for engineering and construction related services published since the earlier commentary. In particular, the new Commentary contains a thoughtful analysis of actual contract document language, practical alerts for items not covered in the documents themselves (e.g., joint ventures, limitations of liability, quality control, construction management, etc.), helpful and important suggestions for procedures when it becomes desirable or necessary to revise document language, and other essential information. The Commentary is the one document that no person who uses or wants to learn more about the EJCDC family of documents should be without.

Copies may be obtained by contacting NSPE Orders Desk, 1420 King Street, Alexandria, Virginia 22314-2715, (703) 684-2881. The price is \$20 each.

ANNUAL REPORT

Louisiana State Board of Registration For Professional Engineers and Land Surveyors For 1986

Regular meetings of the Board were held in January, March, June, 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.....	462
Applications disapproved.....	106
Applications withdrawn.....	8

Land Surveyors

Applications approved.....	14
Applications disapproved.....	19
Applications withdrawn.....	2

Engineers-In-Training

Applications approved for certification.....	579
Applications disapproved.....	252

Land Surveyors-In-Training

Applications approved for certification.....	18
Applications disapproved.....	18

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, 1986:

Professional Engineers.....	15,190
Land Surveyors.....	2,658
Engineers-In-Training.....	3,979
Public Employees.....	3
Land Surveyors-In-Training.....	49

Below is a tabulation of the number of Professional Engineers registered in the various branches as of December 31, 1986. (Some persons are registered in more than one branch.)

Agricultural.....	314
Chemical.....	1,236
Civil.....	6,115
Electrical.....	2,331
Industrial.....	138
Mechanical.....	3,962
Metallurgical.....	40
Mining.....	38
Petroleum.....	1,364

A total of 1239 written examinations were administered in 1986. Of these, there were 884 examinations in the fundamentals of engineering, 31 in the fundamentals of land surveying, 355 in the principles and practice of engineering, 12 in the principles and practice of land surveying and 19 in the laws and procedures of land surveying in Louisiana. Engineering examinations were administered at examination centers in Baton Rouge, Lafayette, New Orleans and Ruston in April and October. On the same dates, land surveying examinations were administered in New Orleans.

Annual Report to the Governor

Dear Governor Edwards:

Pursuant to the provisions of Act 568 of 1980, I submit the report of the transactions of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors for the fiscal year 1985. A duly certified audit and financial statement showing the receipts and disbursements for the fiscal year ending June 30, 1987 will be sent to you at a later date.

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors was created by Act 73 of the Legislature of the State of Louisiana at the regular sessions of 1950. The Act delegates to the Board the duty of registering qualified persons as professional engineers and land surveyors, and charges the Board with the responsibility of enforcing the provisions concerning violations.

The members of the Board and the expiration dates of their appointment are as follows:

James W. Reeves, January 24, 1987; Edward J. McNamara, July 31, 1987; Verdi Adam, February 7, 1988; Arthur R. Theis, July 29, 1988; H. L. Henry, Jr., July 31, 1988; Francis C. Roy, August 24, 1989; Marion J. Chaney, November 21, 1989; Rodger D. Phelps, September 14, 1990; Robert W. Parks, August 2, 1991 [Deceased December 28, 1986]; Robert D. Fenner, July 31, 1992.

At the annual meeting of the Board, held on January 27, 1987, the following officers were elected:

Marion J. Chaney, Chairman; Rodger D. Phelps, Vice Chairman; Robert D. Fenner, Secretary.

Very truly yours,

Verdi Adam

Chairman of the Board, 1986



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



1987 State Board of Registration members, staff, and attorney.

Back Row - left to right: Board Members - Ara Arman, Francis C. Roy, H. L. Henry, Jr., Verdi Adam, Arthur R. Theis, E. J. McNamara, Benjamin S. Harrison, Board Investigator. Front Row - left to right: Paul L. Landry, Executive Secretary; Rodger D. Phelps, Vice-Chairman; Julie Livaudais, Board Attorney; Marion J. Chaney, Chairman; Robert D. Fenner, Secretary.

Members of the Board

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:

Marion J. Chaney and Robert D. Fenner

Engineers in Government Employment:

Verdi Adam and Arthur R. Theis
Engineers Employed in Industry:
Edward J. McNamara and Francis C. Roy

Engineers Employed in Education:

H. L. Henry, Jr. and James W. Reeves

Professional Engineer and Land Surveyor Engaged in Land Surveying:

Robert D. Fenner

Professional Land Surveyor:

Rodger D. Phelps

Mr. Chris Demopoulos' term on the Board expired in July, 1986. Mr. Robert D. Fenner was appointed as his replacement.

Mr. James W. Reeves' term expired on January 24, 1987 and you recently appointed Mr. Ara Arman as his replacement.

Mr. Edward J. McNamara's term expires on July 31, 1987. His replacement shall be a Registered Professional Engineer employed in the field of industry.

Mr. Robert W. Parks, appointed to the Board in August, 1985, died on December 28, 1986. Within the next thirty (30) days, the president of the Louisiana Engineering Society will submit nominations to you for your consideration to complete Mr. Parks' term.

Promulgation of Board Rules

The Board of Registration is a state agency and "shall have the power to make, adopt, alter, amend and promulgate all bylaws and rules not inconsistent with the constitution and laws of this state, which may be reasonably necessary for the proper performance of its duties, and the regulation of the proceedings before it—." This quote is from the law, La.R.S. 37:688 A.

The rules promulgated by the Board are, in effect, an extension of the law. Procedures are specified by the Administrative Procedures Act as to how rules are to be promulgated. As a registrant of the Board of Registration, it is important for you to understand these procedures because the intent of the Administrative Procedures Act is for **you** to be a **party** to the rule-making process. Without going

into all of the legal technicalities of the law (there are many) let me outline the different steps which take place in the rule-making process:

(A) Someone complains, talks to a Board member, writes to the Board, or a Board member himself comes forth with a situation which needs to be **discussed**. In this phase you hear statements like, "That's wrong, why doesn't someone do something about that?"—, "It's not fair"—, "If we don't do something about that the Legislature will"—etc. I call this phase "**The Seed Is Planted**" phase. People talk, letters are written, unorganized heated debates may even occur between individuals, or groups or organizations. The individual Board members may even be a party to these discussions. This phase may go on for years.

(B) It finally "**Germinates**" to the next phase. That, by my definition, begins the day the Board officially recognizes the issue and does something about it. What do you do with something you are uncomfortable with? You find someone to give it to. At this point in the cycle of promulgating a rule, the Board cannot find anyone to give it to. The technical societies, professional societies, the universities, nor the public, want to have the responsibility of facing and solving the issue. So what does the Board do; it forms an ad hoc committee to study the issue and report to the Board. When is the ad hoc committee to report to the Board? No one knows because the **issue** or problem has not yet "**germinated**" to the point of clearly defining the problem.

(C) The next phase I suggest is the "**Proposal**" phase. The ad hoc committee of the Board reports back to the Board and makes a proposal—"This is what we suggest." Recommendations from the ad hoc committee may range from

"forget about it; it's not the Board's business" to a firm recommendation for a new rule, a change of an existing rule, or a deletion of an existing rule. Let's assume after much discussion by the Board, it accepts the ad hoc committee's recommendation for a change in a rule.

- (D) This then takes us to the **"Notice of Intent"** phase. The Board directs the Executive Secretary to take appropriate action to publish the Board's intent to change the rule in the *Louisiana Register* and in addition notify the appropriate societies. The publication of the board's "Notice of Intent" in the *Louisiana Engineer* and *L'Arpenteur Louisiane* may be your very first opportunity to learn about the proposed rule change. The "Notice of Intent" will furthermore state, "Interested persons may submit written comments or offer amendments to the pro-

posed rules to the Board office—, at any time prior to a specific date." It is also officially announced that the Board proposes to consider and take action on the adoption of this rule at a meeting in its office at a specific time on a specific date in the future. This is **your** opportunity to "speak up" or "forever hold your peace." A "Notice of Intent" published by the Board does not mean that it must or will adopt the rule. It does mean that it **intends** to adopt the rule. This is your opportunity to be heard, because bear in mind a rule of the Board if an extension of the law and you as a registrant of the Board must abide by the rule subject to disciplinary action. You should concern yourself with rule changes, additions, or deletions, because you will have to follow them—take them seriously.

- (E) The Board takes action to **"adopt"** or reject a rule change at a meeting as announced in the "Notice of Intent."
- (F) When the Board **"adopts"** a rule change, it also directs the Executive Secretary to publish its action in the *Louisiana Register* and notify the appropriate societies. The rule change becomes effective the date it is published in the *Louisiana Register*.

In summary, the rules of the Board apply to you. You can and should have input in the rule-making process. The Board seeks your input. You can **plant a seed** and assist in a **germination** process. It may be difficult for you to intervene during the **proposal** phase, but your inputs are solicited in the Notice of Intent phase up to the point of **adoption**. Like it or not, as a registrant of the Board, once the rule is published, you must abide by it.

One more line which I keep repeating—the law and rules of the Board exist for the protection of the members of the **Public** and not necessarily members of the **Profession**. This is not an opinion but a fact of law.

EXAMINATION SCHEDULE and APPLICATION DEADLINE DATES

EXAMINATION	SPRING		FALL	
	Application Deadline Date	Examination Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	Jan. 15, 1988	Apr. 16, 1988	Aug. 7, 1987	Oct. 31, 1987
Principles and Practice Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	Jan. 15, 1988	Apr. 16, 1988	Aug. 7, 1987	Oct. 31, 1987
Agricultural, Industrial, Metallurgical, Mining & Petroleum	NOT AVAILABLE		Aug. 7, 1987	Oct. 31, 1987
Fundamentals of Land Surveying Examination (8 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Principles and Practices of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Laws and Procedures of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	NOT AVAILABLE	

Apply at least six to eight months prior to an examination. Board approval must be given for anyone to be scheduled for an examination.

The applicant and the Board depend upon information provided by third parties in the processing of an application, therefore no assurance can be given that one will be scheduled for a specific examination.

Application Deadline date means that an application **must** be postmarked prior to or on the date specified so as to be given **consideration** for the examination. The Board may schedule an applicant for an examination later than that requested by the applicant. The Board cannot guarantee that the applicant will be scheduled for the examination initially requested.

Registration Board Notice of Intent

The following official notice was placed in the March 20, 1987 *Louisiana Register*:

In accordance with the Louisiana Revised Statutes 49:951, et seq, notice is hereby given that the Louisiana State Board of Registration for Professional Engineers and Land Surveyors intends to revise Louisiana Administrative Code 46-LX1 (formerly LAC 19-3) as follows:

Chapter 1.

§105 (B) changes to §105(B) (1) (formerly 19-3:2.2) and the last paragraph is deleted.

Add §105(B) (2) as follows:

"Teaching of engineering design" and the responsible charge of the teaching of engineering design shall be considered as the practice of professional

BOARD MEETING NOTICE

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

1987

June 2
July 28

Sept. 22
Nov. 17

engineering. Associate professors and those of higher rank teaching engineering design courses who become employed by a college or university in the State of Louisiana on January 1, 1990 and thereafter, shall be registered professional engineers of the Louisiana Board. Such professors who become employed on or after January 1, 1990 shall have a period of two (2) years in which to become registered. The associate professors and those of higher rank teaching engineering design courses in the employ of a college or university in the State of Louisiana prior to January 1, 1990 are exempt from professional engineering registration as long as they remain in continuous employment by a college or university in the State of Louisiana. Those persons who are exempt from professional engineering registration are exempt only for the purpose of teaching engineering design, and they may not present themselves to the public as engineers or professional engineers or provide or offer to provide engineering services as defined by L.A.R.S. 37:682 (8).

Add: \$105. G. "PROFESSIONAL IDENTIFICATIONS:"

- 1. Professional Engineers and Professional Land Surveyors** shall identify themselves as such on all of their business communications, business cards, advertisements, or signs by placing the letters P.E. and/or P.L.S. following their names.
- 2. Engineers-In-Training and Land Surveyors-In-Training** shall identify themselves as such on all of their business communications, business cards, advertisements, or signs by placing the letters E.I.T. and/or L.S.I.T. following their names. Engineers-In-Training and Land Surveyors-In-Training are not authorized to use seals or stamps (See Chapter 17 formerly LAC 19-3:10).

Interested persons may submit written comments or offer amendments to the proposed rules to the board office at 1055 St. Charles Avenue, Suite 415, New Orleans, Louisiana 70130, at any time prior to May 15, 1987. The board proposes to consider and take action on the adoption of these rules at a meeting in its office at 11:00 a.m. on June 2, 1987.

By order of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

Paul L. Landry, P. E.
Executive Secretary

IN MEMORIAM

Aylmer P. Batchelor, Jr., P.E.



Aylmer P. Batchelor, Jr.

Aylmer P. Batchelor, a Life Member of the Louisiana Engineering Society died on January 1, 1987. He was 66, a native of Shreveport and resident of Baton Rouge. He was a division head with the City-Parish Department of Public Works at the time of his retirement. He was a U.S. Army Corps of Engineers lieutenant colonel and veteran of World War II.

Mr. Batchelor was a member of the Water Pollution Control Federation and received the distinguished Hatfield Award in 1968. In addition to his memberships in LES and the WPCF, he was a charter member of Kappa Sigma fraternity at Centenary College, a member of the American Public Works Association, and krewed of Tumcumcari board member. He was a 1948 graduate of Louisiana State University.

The Board of Direction and members of the Louisiana Engineering Society express our deepest sympathy to his wife and family.

Aillet, Fenner, Jolly and McClelland, Inc. Names Principal Partner

Gary Fenner has been named a principal of the Shreveport engineering firm of Aillet, Fenner, Jolly and McClelland, Inc. The announcement was made by Edward M. Jolly, company president.

Fenner, a Registered Professional Engineer in Louisiana and Tennessee,



Gary Fenner

joined Aillet, Fenner, Jolly and McClelland in 1978. He is a graduate of Louisiana Tech University where he earned a Bachelor of Science degree in Civil Engineering. He is a member of the Louisiana Engineering Society, the American Society of Civil Engineers and the Construction Specifications Institute.

Since joining the firm, he has been responsible for structural concrete and steel design and analysis foundation design.

Aillet, Fenner, Jolly and McClelland, Inc., was founded in 1960 to provide engineering and planning services for federal, state and local government projects as well as for industrial, commercial, institutional and private clients.

Haydel Selected As Outstanding Tulane Alum

Gerald M. Haydel is one of five New Orleans residents selected as 1986 Outstanding Alumni of Tulane University.

A total of 11 men and women — one from each of the university's schools and colleges — were honored as Distinguished and Outstanding Alumni during Tulane's homecoming weekend Oct. 31-Nov. 1.

Haydel, a 1952 graduate of the School of Engineering, is founder, co-owner and chairman of the board of the consulting engineering firm of Walk, Haydel & Associates, Inc. He is also president of the board of advisors at Tulane's School of Engineering.

"Tax Reform," "Tax planning," "W-4 Forms," all have quickly become "buzz" words of 1987. They all pertain to the recently enacted Tax Reform Act of 1986, probably the most comprehensive tax reform since the mid 1950s and, for many, the most confusing. Just about every savings institution and tax consultant has published their own leaflets or brochures attempting to explain the sweeping changes and their effect on business enterprises. William Kraekel, Controller for Malcolm Pirnie, Inc., a member of the New York Association of Consulting Engineers, has written the following article that appeared in that association's newsletter, Compendium, in January, 1987.

The Business of Engineering

By William Kraekel, Controller
Malcolm Pirnie, Inc.

Most people are just recovering from the last minute scramble to plan their 1986 taxes, and are beginning to consider what to do from a tax standpoint in 1987 and beyond. Tax planning has been substantially more complicated than in prior years because of the sweeping tax reform enacted by Congress and signed by President Reagan in 1986.

The Tax Reform Act of 1986 (the "Act") was by far the most comprehensive tax reform since 1954. It represents a fundamental change in tax policy. In the past, much of our tax policy was designed to facilitate social and economic policy changes. This resulted in a maze of complex and often seemingly contradictory laws. The Act represents a fundamental reversal of this trend. Its purpose is to put all taxpayers on a nearly equal footing and deemphasize tax considerations in personal and business financial planning and decision making. While the concept may sound like tax simplification, it really is not (as tax accountants and tax attorneys will happily attest). In fact, the means utilized by Congress to effect this change are exceedingly complex and will necessitate many fundamental changes in the way business is done and substantial tax planning.

While the reforms included in the Act are many, there are three areas that will have a particularly significant effect on A/E firms which will require planning. These are tax rate changes, limited deductibility of travel and entertainment costs and various changes in the employee benefits areas.

By far, the most significant reform was the lowering of the maximum tax rates for individuals and corporations from 50% and 46% respectively to 28% and 34%, respectively, and the reduction in the number of individual brackets from five to three. For the first time ever, the maximum rate for individuals is below that of corporations, which makes doing business in a form where profits are taxed at the individual level, rather than at a corporate level, even more attractive than in the past.

Two forms of organization that are taxed at the individual level are S Corporations and partnerships. S Corporations are particularly attractive as they afford all of the benefits of corporate existence while all corporate profits pass through untaxed to the individual shareholders at the lower individual rates. This avoids the "double taxation" that occurs when taxes are paid by the corporation and again by the individual when dividends are paid. S Corporations may have no more than 35 shareholders, all of whom must be individuals.

Partnerships have the added benefit of not being limited in number of partners, and the fact that partners need not be individuals. The Act made these forms of organization even more attractive by continuing to allow them to report their income on a cash basis which usually results in lower liabilities. Corporations with gross receipts in excess of \$5 million must now report on the accrual basis. Corporations engaged in services such as engineering are exempted from this requirement and may report on the cash basis.

Travel and entertainment costs have been the subject of substantial debate for years. Congress perceived that there were substantial abuses of these deductions, and, accordingly, reduced deductibility for business meals and entertainment to 80% of actual costs in most instances. Meals and entertainment costs that are included in employees taxable income and meals served at employee morale functions will continue to be fully deductible. This law will require most businesses to revise their record-keeping to capture meal and entertainment costs separately in their accounting systems to identify the non-deductible portion. It will also require education of employees to ensure that they properly document

their expenses and properly classify them as fully or partially (80% or less) deductible.

Interestingly, for consultants, if the cost of meals and entertainment are broken out separately on bills to clients, the consultant will receive a full deduction and the client will be subject to the 80% deduction limitation.

Finally, the Act made several significant changes in the employee benefit areas which will require substantial consideration and planning in labor intensive businesses such as engineering firms. The most significant reform was the elimination of the Individual Retirement Account (IRA) contribution deduction for individuals who are members of other qualified retirement plans and a reduction in allowable employee contributions to 401K plans from \$30,000 to \$7,000 annually.

The Act also made several other changes to deductions allowed to individuals that employers may have to address. The two primary changes relate medical and unreimbursed employee business expense deductions. The medical expense deduction is now limited to the extent that unreimbursed medical expenses exceed 7.5%. Previously this amount was 5%. Employers may want to consider flexible benefit plans which allow employees to pay medical expenses not covered by group medical plans with "pre-tax dollars" where employers pay such costs directly and reduce employees salaries accordingly. The Act also limited deductions for unreimbursed employee business expenses to the amount that they exceed 2% of the taxpayers adjusted gross income. Accordingly, employers may wish to reformulate their reimbursement policies to ensure that employees and principals are being fairly treated.

"Something Is Missing"

By Peter B. Hawes

"Give us statistics about our claims," has been a constant call in recent months. "Tell us how you arrived at our premiums," is the companion question. We at DPIC have been hard at work answering these fair questions, culminating in our recent publication "Setting Insurance Rates for Design Profession-



Consulting Engineers Section
Warren J. Wilder
CEC/L Executive Director



als." Insurance companies need statistics to create pricing formulas needed to operate. But there's something missing. The "average firm" does not exist. Statistics seem meaningless when applied to the decision-making process for professional liability for *your* firm. Formulas don't apply. What works for the insurance company is not useful to the design professional firm wishing to *do something* about professional liability costs.

For years we have maintained that the underlying cause of most professional liability claims is something not easily quantified in numbers . . . the relationship between the design professional and his client. One of the constants is that on-the-job disputes, disagreements between parties . . . almost always precede claims for negligence against design professionals. The pages of *Communique* have been filled with discussion about this over the years.

But we still have not come up with an adequate answer to the question: How do you measure this cause of claims? How can it be identified and treated by risk management?

Evaluate Your Exposure

There ought to be a process for a firm to evaluate itself for this exposure so that it can formulate an action plan and do something about it.

We recommend a two-step process. First, introspection is needed. Literally, a design professional must sit down and contemplate his and her practice experience. How many projects have been trouble-free? How many completed on time, on budget? How frequently have disputes occurred? With owners? With contractors? What has been the frequency of errors or omissions or quality problems? The result of this process might be termed your "dispute index."

In step two, your firm's own experience must be put into the context of what is "customary and usual" . . . for your size firm, in your discipline, practicing in your territory, on projects similar to yours. To do this, we recommend two techniques. First, make it a point to seek out peers and engage them in discussion about their experiences measured in the same way you established your own "dispute index." Then, contact your DPIC

insurance agent. As a specialist, your agent talks with other design professionals on virtually a daily basis. He or she is certain to have an opinion about how your firm's "dispute index" compares with others and can pass this along without divulging confidential information.

Develop An Action Plan

Having now assessed your situation to the best of your ability, you can realistically address the questions: Is there room for improvement in client relationships? If "yes", the stage is set for action. More answers are needed. Is it obvious which owners or projects cause more trouble? Does lack of profitability correlate with problem projects? Is it possible one of your colleagues is at fault? Or is the problem with the client, or with you?

The end of this process should be a program to address the problems. It might be education. It might be simply avoiding obvious problem projects. Or, something bigger.

Many businesses have learned that in order to control their own destiny a new strategic plan is required. This process always starts with a careful analysis of existing and prospective client sources called "market analysis." It involves an assessment of your capabilities, your competition and the sources of work available to you for your services.

After such a process, more than one firm has shifted from, say, the general practice of architecture in a limited territory to practice as a *specialist* operating over a wide geographical area.

In effect, such firms abandon activities which are unprofitable or trouble prone, to concentrate on a more rewarding practice personally and financially.

No matter what solutions are called for, the moral of the story is: no insurance underwriter or actuary, even armed with all the statistics possible, can assess your professional liability risk accurately. Only you can do that, through self analysis in the context of your profession and community. Such a plan of action is bound to be one of your firm's most important loss prevention activities.

(Peter B. Hawes is President and CEO of Design Professional Insurance Corporation, a member of the Orion Group. This article appears in the February, 1987 issue of *Communique*.)

New Source Emerges for Planning and Design Quality Management Information

Seven easy steps to improve quality control are among the many highlights in the premier issue of the *Quality By Design* Newsletter, the NEW Planning and Design Professional's Quality Management Newsletter. The newsletter also includes a thirty-five point short form quality audit checklist; explains how to get your staff to commit when you are not there; and offers eight success points to consider when QA is asked to help QC document their program.

Concern is on the increase nationwide over rising liability premiums, increased claims and improving professional standards of care in design office practices. Now is the time to revitalize or establish your formal quality control plan. Quality assurance for the construction project starts in the designer's office.

Engineers and other design professionals need current how-to-do-it QA/QC information. For information on the *Quality By Design* Newsletter, contact the A/E Quality Management Association, P.O. Box 2822, Silver Spring, Maryland 20902. Call (301) 681-4285 and ask for Bill Hayden.

Business Practice Tip: Checklist for Beginning Marketers

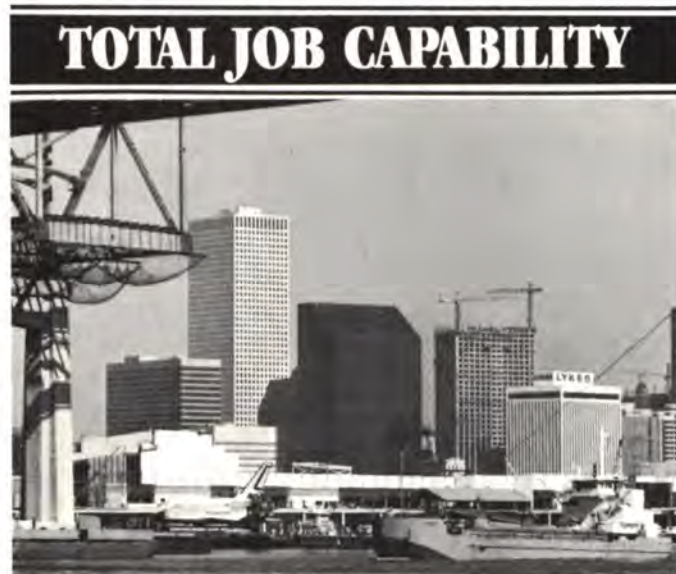
Consider the following suggestions when planning a new marketing campaign: (1) state your goal; (2) research your audiences; (3) set objectives; (4) brainstorm to establish strategies and techniques to obtain each goal; (5) analyze cost effectiveness; and (6) evaluate strategies during the process. Studies conducted by marketing researcher William J. Fanning suggest that profitability is clearly enhanced by a good marketing program. However, Fanning notes that programs with a definite focus are usually more successful than broadly defined ones, and that the most productive campaigns are those headed by a principal of the firm. For a free brochure, send a self-addressed stamped envelope to: Shirley Maly, Box 5041, Lincoln, Nebraska 68505.

New LES Members

NAME	GRADE	BRANCH	EMPLOYER
BATON ROUGE			
T. A. Arkol	EIT	PEC	
Samir S. Salmon	PE		D&S Consulting Engineers, Inc.
MONROE			
Leslie K. Guice	PE		LA Tech University
NEW ORLEANS			
Raymond G. Areaux	PE		
John L. Day	PE		Day & Associates
Badeaux & Associates, Inc.			
SHREVEPORT			
James A. Hagan, Jr.	EIT		Balar Associates

New Registrants Of State Board

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Leroy K. Jackson	Gary M. Swenson	Ralph A. Shubert
Pittsburgh, PA	Seattle, WA	Sulphur, LA
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Spartanburgh, SC	Jacksonville, FL	Slidell, LA
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Antioch, TN	New Orleans, LA	Monroe, LA
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Kenner, LA	Metairie, LA	
S. Dhamotharan	Mark B. Dubroc	
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Baton Rouge, LA	Maurice, LA	
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Lafayette, LA	Gretna, LA	
Ronald C. Kern	Jack H. Hingle	
Katy, TX	New Orleans, LA	
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Arlington, TX	New Orleans, LA	
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Jacksonville, FL	Gretna, LA	
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	Kenneth R. Schroeder	
	New Orleans, LA	



T.L. James hopper dredge ATCHAFALAYA steams alongside giant piers for the new Mississippi River Bridge at New Orleans (a T.L. James joint venture project).

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Steve D. Rolse	Baton Rouge, LA
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Kerry M. Dooley	Baton Rouge, LA

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James D. Collier	Lafayette, LA
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William N. Fallis	Metairie, LA
Harry M. Gates	Slidell, LA
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James H. Guenard, III	Metairie, LA
David F. Hackney	Shreveport, LA
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Michael L. Hogel	New Orleans, LA
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David M. Metz	New Orleans, LA
David T. Miller	New Orleans, LA
Arthur M. Nixon, III	New Orleans, LA
Fredrick L. Monus	Youngville, LA
William S. Orris	Gretna, LA
Gregory M. Pagett	Lafayette, LA
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Stephen F. Skrivanos	Bossier City, LA
Glenn P. Thibodeaux	Carencro, LA
Steven L. Thibodeaux	Scott, LA
Robert P. Verret, Jr.	Lafayette, LA
Zachary T. Van Voast	Metairie, LA
Nancy R. Watson	New Orleans, LA
Wallace S. Watson, Jr.	New Orleans, LA
Charles D. Whitson	Berwick, LA

ENGINEERS-IN-TRAINING

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Ronald W. Moore	Scott, LA
Randy Nunez	Creole, LA
Eugenie M. Oliver	Metairie, LA
Ronald G. Pennise	Breaux Bridge, LA
Lisa D. Perry	Crowley, LA
Dennis R. Potts	Breaux Bridge, LA
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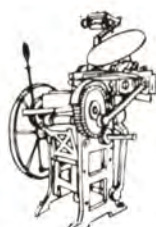
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As our native enterprises succeed and begin to influence new markets, the multiplication of jobs and opportunities follows.

The Louisiana Investor-Owned Electric Companies vigorously encourage ambitious home-grown companies. When a company outgrows its facility, our Area and Industrial Specialists are at hand to help find a new home. Our researchers compile confidential data defining site availability, transportation needs and access, local zoning and regulatory considerations, and much more.

Louisiana's Investor-Owned Electric Companies provide experts to design a tailor-made energy package that is supply-certain and cost-conscious, and Area Development professionals assist companies throughout the state in such important matters as finance, market research, loan packaging, cost control, and the like.

Promoting inner strength is a prime concern of Louisiana's Investor-Owned Electric Companies. It's a simple fact of business: as those among us prosper, we all share in that success in the long run.

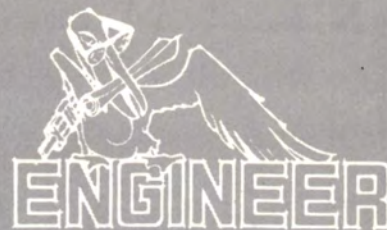
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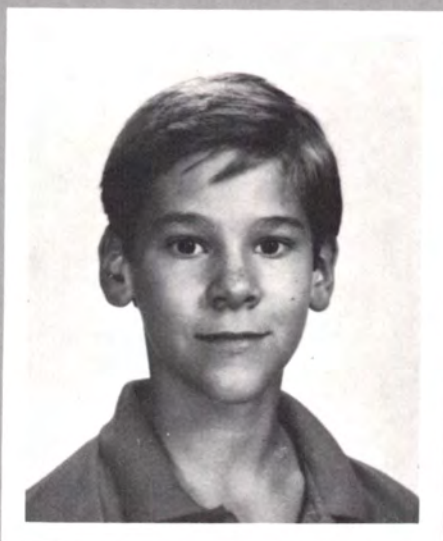


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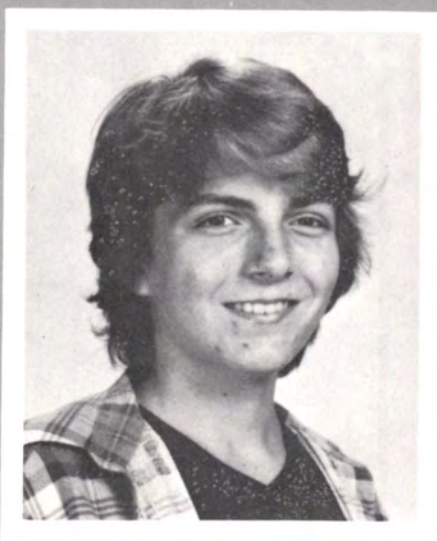


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JUNE, 1987



ABOUT THE COVER

Members of the Louisiana MATHCOUNTS Team are pictured on this month's cover. Story begins on page 8.

LOUISIANA ENGINEER

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A Busy Summer for LES



Robert P. Blanche, P.E.
President
Louisiana Engineering Society

In the past two months the Louisiana Engineering Society has been involved in finalizing the legislative bills that we will be handling this year, and in monitoring a number of other bills that can affect individual engineers and the practice of engineering by all of our professionals. The Legislative Committee has met with several groups proposing legislation which we felt was not in the best interest of the engineers, and has been able to convince these groups to change wording or amend their proposed legislation so that it would not be objectionable to us. To date, these efforts appear to be satisfactory.

The Liaison Committee with the State Board of Registration is again involved with the preparation of a list of nominees to be submitted to the Governor for appointment to the Board of Registration. Mr. Ed McNamara's term of office will be completed at the end of July. Because Mr. McNamara represents engineers in industry, that practice division has the initial responsibility of obtaining qualified candidates who are recommended to the Liaison Committee for its review and submittal to the Society's Board of Direction for approval and submittal to the Governor. This process goes down to the chapter levels and affords the opportunity for input and participation by our membership throughout the state.

As I reported last month, the Long-Range Planning Committee was assigned the task of evaluating the purpose and activities of the standing committees. Contact has been made with those who have served as committee chairmen over the past five years to obtain their true feelings on the purposes and functions of these committees. This is an initial step and everyone who has any thoughts or recommendations for improvements or changes should send this information to your Chapter President or directly to Dr. Reeves at USL.

MATHCOUNTS state and national competition was a huge success again

this year. The state competition in Alexandria was handled in an outstanding manner and the Louisiana team scored extremely well at the national competition in Washington. My congratulations to the team members and their coach and a special note of thanks to our MATHCOUNTS Coordinator Warren Boudreaux, and our State MATHCOUNTS Secretary Debbie Woodall. Their efforts throughout the year have been tremendous and resulted in a very special program. I am sure that next year's program will be even more successful, as our MATHCOUNTS Committee has already started working on the 1988 competition.

The ballots for the election of officers for the Society were mailed to the membership recently. Along with the ballot there are a number of changes to the Constitution which need to be made in order to adjust the start of our administrative year from July to October. The Board of Direction has approved these changes and requests that the membership likewise vote in favor of the changes. When returning your ballot, take the opportunity to also let the Board know of any special concerns or programs which you would like to see us undertake in the future.

On the national level, a study committee has been formed to review and report on the problem of political contributions in the engineering profession. There have been several very interesting articles in the professional publications regarding this subject, and we request that any engineer who has a concern about this problem and any thoughts on how it should be dealt with should express these thoughts to the Society. We are very concerned about this problem and hope that the profession can develop a remedy to the situation which exists, not only in Louisiana, but throughout the country.

The Society's Board is extremely interested in being responsive to the membership, so let us hear from you.

BALLOT TO ELECT LOUISIANA ENGINEERING SOCIETY MEMBERS TO ENGINEERS SELECTION BOARD

Act 721 passed in the 1975 legislature amended Chapter 10 to Title 38 of the Louisiana Revised Statutes of 1950 by adding thereto a new Part VII, Selection of Professional Services for Public Contracts. Three Boards - Architect, Engineer and Landscape Architect Selection - are authorized under this Act. Each Board selects persons or firms to perform certain professional services for public contracts.

The Act refers to the Louisiana Engineering Society, specifying the following: The Louisiana Engineers Selection board shall be composed of seven members. Two members shall be named in an election conducted by the Louisiana Engineering Society at which all properly licensed engineers residing in the state of Louisiana may vote for positions to be filled. LES has two positions to fill this year, one with term ending June 30, 1988 and one ending December 31, 1988.

The LES Board of Direction nominates Kerry M. Hawkins, P.E., Baton Rouge, for the June 30 position and J. M. Drake, P.E., New Orleans, for the December 31 position.

Each Louisiana Registered Professional Engineer working and living in the state is eligible and urged to VOTE. Space on the ballot is provided for write-in candidates. A write-in candidate must be a Louisiana registered professional engineer and must have agreed to serve if elected. No member or firm of which a member is an associate, employee, or stockholder shall be eligible to receive

agency contracts during the term of his service, and for a period of two years thereafter.

LES ENGINEER SELECTION BOARD

1. Mark and return to LES, P. O. Box 2683, Baton Rouge 70821, by July 15, 1987. LES is not responsible for late delivery of mail.
2. Make sure your name and address is on the envelope that forwards the ballot to LES. Ballot signature is not required.

Vote for One Candidate in Each Position

POSITION ONE (Term July 1, 1987 - June 30, 1988)

☐ Kerry M. Hawkins, P.E., Baton Rouge, LA

☐

For write-in

POSITION TWO (Term January 1, 1988 - December 31, 1988)

☐ J. M. Drake, P.E., New Orleans, LA

☐

For write-in

PLEASE VOTE. RETURN TO LES, P. O. Box 2683, Baton Rouge 70821 prior to July 15, 1987.

(CUT ON DOTTED LINE)

BALLOT TO ELECT CONSULTING ENGINEERS COUNCIL OF LOUISIANA MEMBERS TO ENGINEERS SELECTION BOARD

INDIVIDUAL PRINCIPAL'S BALLOT

Qualifications of voting eligibility.

Act 721, A (2) "The Louisiana Engineers Selection Board. It shall be composed of seven members. Two members shall be named in an election conducted by the Consulting Engineers Council of Louisiana, Inc. at which all properly licensed engineers, who are principals of firms with offices in Louisiana, may vote for the same number of candidates as there are positions to be filled," . . .

One nominee will be elected to fill the position whose term begins July 1, 1987 and ends June 30, 1988.

One nominee will be elected to fill the position whose term begins January 1, 1988 and ends December 31, 1988.

The CEC/L Board of Governors has nominated the following engineers who have expressed a willingness to serve during the stated terms below.

Vote for One Candidate in Each Position

Mark this ballot and return to CEC/L, P. O. Box 1549, Baton Rouge, LA 70821. Replies must be received by noon, July 15, 1987 to be counted.

POSITION ONE (Term beginning July 1, 1987 and ending June 30, 1988)

☐ Jim H. Bruce, P.E., Baton Rouge, LA

☐

For write-in

POSITION TWO (Term beginning January 1, 1988 and ending December 31, 1988)

☐ George R. Stucker, Jr., P.E., Baton Rouge, LA

☐

For write-in

Trucks Versus Highways

By James C. Porter, P.E.

The National Society of Professional Engineers has recently taken an ill-advised step backward through a policy position on the advice of some of our highway engineer members. This policy calls for a moratorium on increasing the maximum legal size and weight of trucks using our nations highways. It can be shown that this policy is inconsistent with the political, practical and technological realities now and in the near and distant future.

The engineers in our highway industry began approximately thirty years ago designing bridges for the Interstate Highway System using design vehicle weights and configurations based on vehicles in service prior to 1944.⁵ This inconsistent practice still persists in most states today

fore their time. This will be attributable to the lack of our predecessors' foresight and our indecision. The tragedy of this situation is that it could have been, and can be, averted during the initial construction by the additional expenditure of less than two percent of the total construction cost at each bridge site involved. In most cases, little can be done to alleviate structural deficiencies this economically after a bridge is in place.

It is surprising that the technology of the highway industry has developed independently of the technology of the trucking industry. Their only contact until recently has been in the contentious, political environment of the legislative committee rooms in the various state capitols and in Washington. While

capable mode of transportation, the highway system, simply exacerbates the need for more, larger and heavier vehicles on our highways. This problem is exemplified by the fact that railroad facilities have been historically designed to carry heavy, bulk cargoes while highways have become through default or the inaction of their knowledgeable constituency more suitable for the transport of passengers and light cargoes of relatively high unit worth. In order to accommodate the heavier cargoes of low unit worth which railroads can no longer competitively carry, the trucking industry is seeking heavier legal vehicle weights and sizes to accommodate this unnatural market expansion.



as we begin the massive, federal bridge replacement and rehabilitation program. It is revealing to realize highway bridges are designed to accommodate predicted traffic volumes for twenty years in the future¹ and a series of forty-year-old vehicle configurations. Two-thirds of the state transportation officials in the United States realize the problem of continuing to design and construct an inventory of highway bridges which are structurally deficient for current statutory vehicle size and weight regulations in many states but they are unable to agree on a solution for nation-wide implementation.^{2,3}

Several states have independently increased their design loads to a level somewhat consistent with their current vehicle size and weight regulations but without provision for future growth over the seventy-year future we precariously predict for the service life of a highway bridge. Our successors will be left to muddle through a morass of technological and fiscal problems resulting from the legacy of an inventory of bridges which will be structurally deficient be-

space-age metallurgy, precision machining and other technology has made incremental increases in vehicle weight and size practical and desirable for several years, the 1944 thinking regarding vehicles in the highway industry for designing highway bridges has created a severe dilemma. The federal government has significantly contributed to this dilemma. It has historically allowed automobile drivers to subsidize a large portion of the highway construction and maintenance costs which are directly attributable to trucking needs and use. The economic effect has been to continuously drive other modes of transportation out of existence which would otherwise be competitive. In particular, the railroads, which must bear the entire cost of the use of their own rail beds and tracks, are disappearing when they would be the most efficient and economical way to transport many bulk commodities if trucking was not as heavily subsidized.

The shifting of the transport of bulk commodities to a less efficient and a less

The political realities are that the trucking industry did not obtain favorable government regulations and subsidy by accident or fate, but through the influence of well placed political contributions and lobbying. With the huge profits at stake for transporting the commodities once transported by rail, it is almost certain the political forces of the trucking industry are being or have been mobilized. The 140,000 pound plus twin and possibly triple trailer vehicle combinations (truck trains) are not far from being a reality. It would appear to make more sense to prepare for the inevitable than to fight against it at this the eleventh hour.

The only realistic recourse left is to mitigate the long-term problems we face before they occur through education of the public regarding the cost of highways and who pays for them. With strong voter concern, our representatives will have greater difficulty supporting continued subsidies for the trucking industry. Engineering organizations and government employed, highway engineers cannot

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compete with the trucking interests at the state or federal level based on similar tactics. They must compete from their own strengths, knowledge, reason and reasonableness.

In the realm of practical reality, the province of Ontario, Canada designs highway bridges to accommodate a 158,000 pound design load based on the vehicle combinations which were using its highways over ten years ago.⁴ It provides no margin for future growth in vehicle size or weight. By contrast, the nationally accepted standard design vehicle for most bridges in the United States is a 72,000 pound vehicle combination with the redeeming feature of a short (28 foot) wheel base when compared with the fifty-foot wheel base of most trucks of this weight using the highways.⁵ Ontario designed its bridges according to the United States standards until it successfully implemented its more responsive bridge design specifications. We in Louisiana experienced vehicle combinations hauling gravel with typical gross weights over 120,000 pounds with relatively short wheel bases

accept its fair share of the highway construction and maintenance costs instead of continuing to maintain and seek unfair subsidy.

A perplexing but solvable problem which has resulted from neglect and/or inaction on the part of highway engineers is the larger inventory of older, structurally deficient highway bridges originally designed for 30,000 pound vehicles and sometimes less. Even when operated at a significant overstress, many of these highway bridges require regulatory weight limits at their site even if statutory weight limits were consistent with the current standard design loads in the United States. Most, if not all, of these highway bridges in our national inventory have been structurally evaluated. Unfortunately, there exists no uniform regulatory signing practice to limit vehicle weights on highway bridges which utilizes this information in a consistent way to avoid significant overstresses.⁷

It is now past time to resolve this problem along with the problems of deficient truck weight enforcement and oversize truck permitting practices. These are se-

loaded to actually produce the design stresses assumed.

The actual stresses can be better approximated by performing more rigorous analyses. Consideration should be given to allowing moderate overstressing to minimize or avoid the need for strengthening or replacing these bridges. While strength will likely be sufficient, fatigue, a largely uncertain science for most bridges, could be a significant factor in reducing their remaining service lives.

Tranquilizing our highway engineer members with policy platitudes which will be ineffective in terms of the political, practical and technological realities is pointless and regressive. Can the NSPE have an important role in this seemingly intractable problem? The answer is a definite yes! NSPE should, through policy and action, promote progress on all fronts of the problem. It should encourage communication and cooperation between the trucking and highway industries and strong support of fair highway user taxation dedicated to a highway trust fund.



of forty feet until we improved our weight enforcement activities.

Most highway systems in developed countries have been designed for loads which anticipate the need to accommodate heavier and larger vehicles that have been a practical and/or an actual reality for more than thirty years. Experience has shown that our concerns about the reduced operating safety of larger and heavier vehicles is legitimate. But early results indicate that the reduced number of larger vehicles on the highways will produce an aggregate safety record superior to that of a larger number of smaller and lighter vehicles transporting the same volume of commodities.⁶

Highway pavements, which have been ignored in this discussion, will suffer more rapid deterioration with the heavier loads. Preliminary indications are that the profits anticipated by the trucking industry will be at least an order of magnitude larger than the incremental increase in cost of pavement maintenance expected. The increase in vehicle size and weight is justifiable if, and only if, the trucking industry is prepared to

serious operations safety problems which are contributing to the structural deficiency of the highway bridges in the larger part of the nation's inventory.

Technologically, a review and research of current bridge design analysis practice in the United States appears promising but it will not be a cure-all. The problems of accommodating larger, and particularly longer vehicle combinations on highway bridges designed for the current, standard, 72,000 pound vehicle combination may not be as severe as it appears on the surface as was discovered in Ontario. Long span (over 200 feet) bridges designed for current loads may be adequate to accommodate significant increases in legal vehicle size and weight. Short span bridges in the twenty-foot span range have a small enough load tributary that they may not be significantly affected by increases in gross weight and moderate increases in axle weight for legal loads. The considerable number of intermediate span highway bridges designed by current standards with conservative and simplified techniques in stress analysis can be more heavily

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MATHCOUNTS

LOUISIANA ON THE MOVE

By Kerry J. LaBauve, P.E.

NSPE's MATHCOUNTS Draws Whitehouse Recognition

Vice President George Bush was on hand in Washington D.C., to present awards to the top Mathletes in the nation, on May 15, 1987, recognizing them for their excellence in mathematics.

This year's Overall Top Individual honors went to Russell Mann of Clarksville, Tennessee, with Second place going to Jason Hughes of Alabama, and Third place to Ashley Reiter of North Carolina.

First Place Team Standing was one by New York, Kentucky was second, and Tennessee finished third.

Top Scorer in the National Written Round was Michael Lin of Minnesota.

Miss Ashley Reiter of North Carolina won the Special Topic Oral National Competition.

N.S.P.E. Headquarters reports that the school registration for the 1986-87 competitions totalled 7,668 in all 50 states, the District of Columbia, Guam, Puerto Rico, and the Department of Defense. In comparison to the 1985-86 enrollment of 7,413, the 255 school enrollment increase represents a low 3.5% growth rate, far below that expected by MATHCOUNTS officials.

Contrary to the published growth figures, the number of first-time participants was significant, indicating that many of the veteran schools have discontinued their efforts to participate in the competitions.

A program directed at determining the reasons for the lack of repeat performances of the participating schools has been developed by N.S.P.E. and will be implemented soon. Coordinators, coaches, and Mathletes will be interviewed through questionnaire regarding their views of the pros and cons of the MATHCOUNTS Program.

MATHCOUNTS Foundation President Donald Weinert, P.E. reported that the financial posture of the National Program is excellent, with new corporate contributions and sponsorships growing. This year, General Motors donated \$30,000 to the National MATHCOUNTS Foundation, marking the largest grant to date made by an industrial corporation.

AT&T continued its pledge of \$45,000 for the third consecutive year, showing its belief that MATHCOUNTS is a benefi-

cial program for the education of the nation's youth. Other contributors to the National Foundation include: the American Honda Foundation donating \$25,000. The Tandy Corporation with \$5,000, and an in-kind sponsorship from Texas Instruments Corporation.



Vice-President George Bush at National MATHCOUNTS Competition in Washington, D.C.



National MATHCOUNTS Competition Washington, D.C.



Louisiana State MATHCOUNTS Team being interviewed by media at national competition in D.C.



Louisiana State MATHCOUNTS Team-1987-Coach, Claudia Allums; Team Members: Ben Owen-McKinley Middle Magnet School; Jeremy Frens-McKinley Middle Magnet School; Etienne DePoortere-McKinley Middle Magnet; Aimee Crago-St. Catherine of Siena.

Louisiana MATHCOUNTS A Sweet Showing in D.C.

The Louisiana MATHCOUNTS Team was coached by Mrs. Claudia Allums of Baton Rouge, and was comprised of Ben Owen, Etienne Depoortere, and, Jeremy Frens of McKinley Middle Magnet School of Baton Rouge, along with Miss Aimee Crago of St. Catherine of Siena, New Orleans. They competed in the 1987 National MATHCOUNTS Competition, May 15, and made a grand showing. We Louisianians can be proud of our children who endured the heat of battle and placed 13th out of 54 teams competing for top honors. Individually, three of our Mathletes ranked in the top 25 of 216 competitors, with our fourth team member close behind.

Our Mathletes have been making steady improvement over the past four years, gaining the confidence needed to take us to the top. The key to a successful and victorious competition is hard work and dedication by the students, coaches, parents, and supporting organizations. The challenge for a National Team Coach, often dealing with students he or she has never met before, is to pull the team together technically, emotionally and physically and prepare them for the trip to Washington, D.C., where they will meet and compete with hundreds of seventh and eighth graders from around the United States.

Thank you, Claudia, Aimee, Ben, Etienne, and Jeremy for showing America that Louisiana is on the move and MATHCOUNTS!

State and Regional Activities

The number of schools in Louisiana registering with N.S.P.E. this year totalled 264, a slight increase of 1.5% over last year's total of 260. This enrollment of 264 represents approximately 35% of our 750 school potential. The trends in our state parallel the national problem of new enrollment being offset by declining veteran retention.

All nine L.E.S. Chapters hosted their Regional Competitions, fielding their top three teams, which came to Alexandria in April to compete in the State Competitions. The state activities were headquartered at the historic Hotel Bentley,

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Teachers at Teacher's Seminar at State Competition in Alexandria, Louisiana.

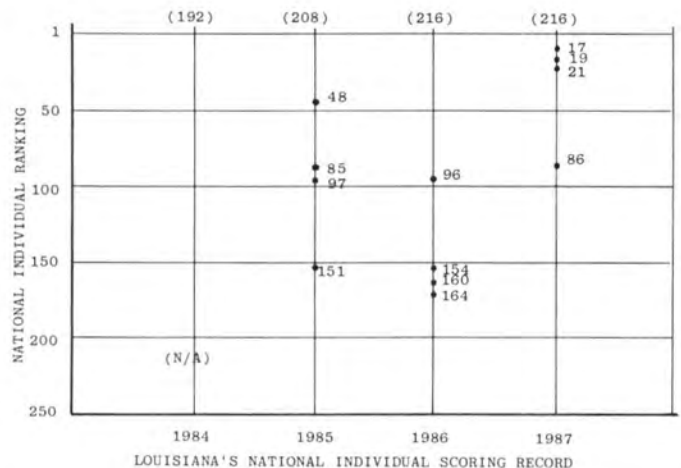
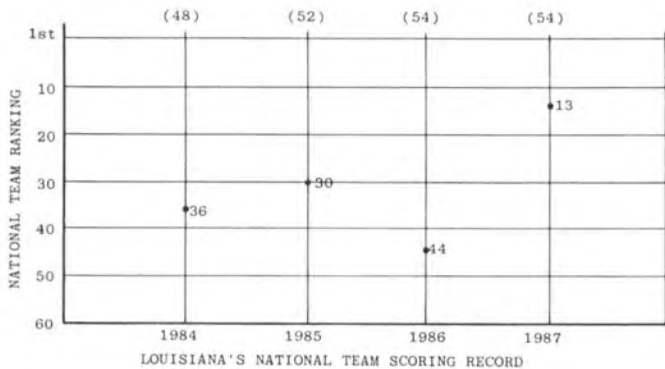
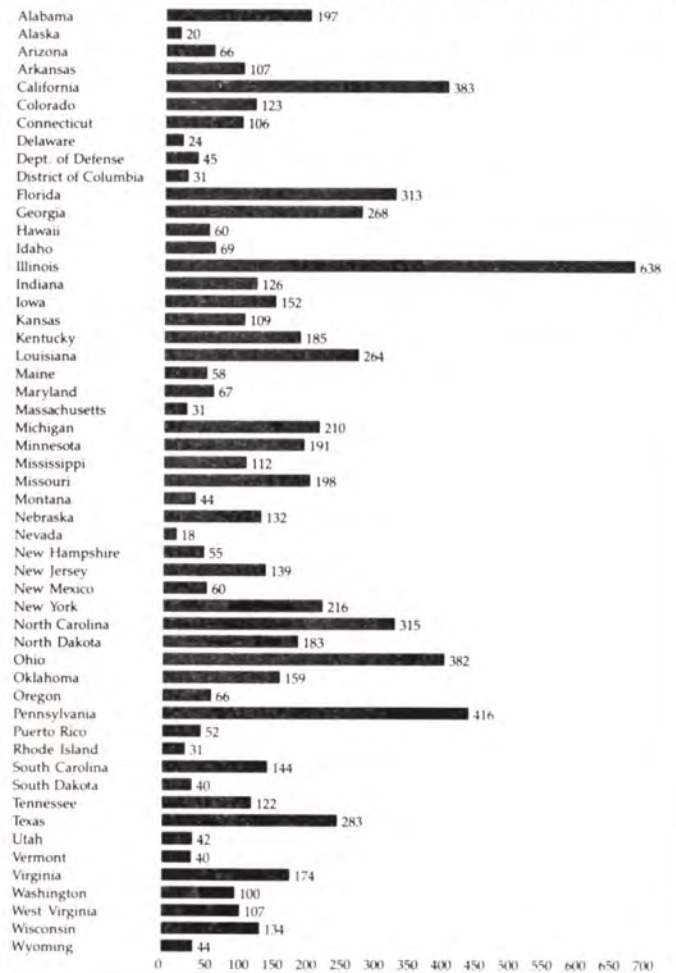


1987 State MATHCOUNTS Team from left to right: Front row: Claudia Allums, State Coach; Ben Owen, Etienne DePoortere, Jeremy Frens, Aimee Crago, Melanie Hirschfeld, Coach. Back row: LES President Robert P. Blanche, P.E., Senator Armand Brinkhaus, Senator Joe McPherson, State MATHCOUNTS Coordinator Warren Paul Boudreaux, P.E.



Displaying MATHCOUNTS shirt, from left to right, Kerry J. LaBauve, P.E., Chairman MATHCOUNTS Steering Committee; Robert P. Blanche, P.E., President LES; Senator Armand Brinkhaus; Senator Joe McPherson; Warren Paul Boudreaux, P.E., State MATHCOUNTS Coordinator.

MATHCOUNTS School Registration by State





MATHCOUNTS State Coordinator presents MATHCOUNTS T-shirt to Governor Edwin Edwards during lunch at the Governor's Mansion.



Governor Edwards displays card tricks to mathletes.



Governor Edwards and Senator Brinkhaus welcome the Louisiana State MATHCOUNTS Team and their coach to the Governor's Mansion for lunch.



Grang Ringle, CLECO, presents a check for \$15,000, a contribution from LA. Investor-Owned Electric Companies, to Kerry J. LaBauve, P.E., Chairman MATHCOUNTS Steering Committee.

with an outdoor get-together on the levee of the Red River. The competitions went off like clockwork thanks to the excellent planning and preparation by Warren Boudreaux, State MATHCOUNTS Coordinator; Debbie Woodall, State MATHCOUNTS Secretary; Chapter Coordinators; Keith Hillman, P.E., of Alexandria; Jim Ragland, P.E., of Baton Rouge; Edgar Benoit, P.E., of Bayou Chapter; Barry Bleichner, P.E., of Lafayette; Curtis Dyle, P.E., of Lake Charles; Foy Gadberry, P.E., of Monroe; David Chandler, P.E., of New Orleans; Gerald Nuss, E.I.T., of North Lake Chapter; Ronnie Poole, P.E., of Shreveport; and the Alexandria Chapter along with its Ladies Auxiliary. Hats off to the L.E.S. volunteers for a job well done.

The ranking of the top Louisiana Teams and Individuals Include:

Top 10 Schools

- | | |
|------------------------------|-------------|
| 1. McKinley Middle Magnet | Baton Rouge |
| 2. Paul Breaux Middle School | Lafayette |
| 3. St. Catherine of Siena | New Orleans |
| 4. Brother Martin | New Orleans |
| 5. Episcopal High School | Baton Rouge |
| 6. Youree Drive Middle | Shreveport |
| 7. St. Martin's Episcopal | New Orleans |
| 8. Caddo Middle Magnet | Shreveport |
| 9. Krotz Springs Elementary | Lafayette |
| 10. Westminster Christian | Lafayette |

Top 10 Individuals

- | | |
|-----------------------|-------------|
| 1. Ben Owen | Baton Rouge |
| 2. Etienne DePoortere | Baton Rouge |
| 3. Jeremy Frens | Baton Rouge |
| 4. Aimee Crago | New Orleans |
| 5. Joey Olivier | New Orleans |
| 6. Homer Lin | Baton Rouge |
| 7. Brian Yeh | Lafayette |
| 8. Buster Kantrow | Baton Rouge |
| 9. Rachel Cailleff | Shreveport |
| 10. John Kaiser | Lafayette |

One of the objectives of the Louisiana MATHCOUNTS Program is to bring to light the fact that the citizens of our state have the potential to learn and excel if offered the properly structured educational opportunities and a challenge to achieve obtainable goals. It becomes clear that the time and energy invested by our voluntary individual and organization interests, coupled with private financial support has made a definite impact on Louisiana's image in the eyes of America.

Finally, we are catching the eyes and ears of our National and State political leaders. This year, the top Louisiana Mathletes received their awards from the honorable Senators Armand Brinkhaus of Sunset, and Joe McPherson of Alexandria. Our national team was invited to a special luncheon hosted by Governor

Edwin Edwards at the Governor's Mansion to pay tribute and honor them for the grand showing in Washington, D.C.

Without the financial support of the MATHCOUNTS Sponsors in Louisiana, our program would not be successful and the opportunities which have been created for our children would not exist. Let us take this opportunity to express our sincere thanks to these sponsors:

- Louisiana Investor-Owned Electric Companies:
 1. Gulf States Utilities
 2. Louisiana Power and Light Company
 3. New Orleans Public Service, Inc.
 4. Southwestern Electric Power Co.
 5. Central Louisiana Electric Co.
- Dow Chemical Company, Baton Rouge
- Consulting Engineers Council of Louisiana
- AMOCO Oil Company, New Orleans
- Louisiana Engineering Society
- Louisiana Engineering Foundation



Leta Bueto
Executive Director
Louisiana Engineering Society



Engineering Technician and Technologist Certifications Programs

The National Institute for Certification in Engineering Technologies (NICET) was formed in 1981 to replace the Institute for the Certification of Engineering Technicians (ICET) and the Engineering Technologist Certification Institute (ETCI). ICET was founded in 1961 by the National Society of Professional Engineers to serve the career needs of technician members of the engineering team. ETCI was established in 1977 to provide a meaningful certification program for technologists that did not conflict with either the state-administered registration processes for engineers or the ICET certification programs for technicians.

The certification programs have continually changed to keep abreast of technology, manpower application practices, and educational trends. NICET's objective is to support a viable career path for engineering technicians and technologists, thereby improving the quality and quantity of engineering services deliverable per dollar of cost.

The Institute is an examining body whose function is to evaluate the qualifications of those who voluntarily apply for certification. Personal recommendations, written examinations, and verification of the applicant's work experience, competency, and knowledge are all part of the evaluation process. As evidence of satisfactory attainment of its criteria, the Institute grants and issues certificates and maintains a registry of holders of such certificates.

The NICET certification programs for technicians and technologists are being developed as a nationally applicable, individualized, job-competency-based, non-discriminatory certification system which can be interfaced with educational/training resources and a variety of personnel systems.

The "engineering technologist" is qualified to practice engineering technology by reason of having the knowledge and the ability to apply well-established mathematical, physical science, and engineering principles and methods of technological problem-solving which were acquired by engineering technology education and engineering technology experience. The engineering technologist will usually have earned a baccalaureate degree in

engineering technology or gained considerable technical experience on the job.

The technologist is a member of the engineering team which will normally include technicians and engineers and, for special projects, may include scientists, craftsmen, and other specialists. The configuration of technical personnel possessing complimentary capabilities that facilitate the engineering process is,

LES to Host 1987 NSPE Regional Meeting

The Royal Sonesta, in the fabulous French Quarter of New Orleans, will be the site for the 1987 NSPE Southwest Regional Meeting, September 23-26, 1987.

We extend an invitation to all members of the Southwest and Southeast Regions to join us in Louisiana for this meeting. Preliminary plans for the meeting include a seminar entitled "Efficient Writing for Supervisors," practice division meetings; a riverboat cruise on the Mississippi; and, of course, there is the magic of the French Quarter to entertain and delight.

A special rate of \$78 a night for single or double occupancy has been arranged. Reservations may be made by calling The Royal Sonesta at (504) 586-0300.

by necessity, peculiar to each situation. The technologist is expected to have a thorough knowledge of the equipment, applications, and established state-of-the-art design and problem-solving methods in a particular field.

An "engineering technician" is one who, in support of engineers or scientists, can carry out in a responsible manner either proven techniques, known to those who are technically expert in a particular technology, or those techniques especially prescribed by engineers.

Performance as an engineering technician requires the application of principles, methods, and techniques appropriate to a field of technology, combined with practical knowledge of the construction, application, properties, operation, and limitations of engineering systems, processes, structures, machinery, devices or materials, and, as required, related manual crafts, instrumental, mathematical, or graphic skills.

Under professional direction, an en-

gineering technician analyzes and solves technological problems, prepares formal reports on experiments, tests, and other projects, or carries out functions such as drafting, surveying, designing, technical sales, advising consumers, technical writing, teaching, or training. The education of an engineering technician places great emphasis on mathematics and applied physics with intensive laboratory work in which the technician develops practical knowledge and skills. Technicians differ from craftsmen in the extent of their knowledge of engineering theory and methods, and they differ from engineers by reason of their more specialized technical background and skills.

The Institute presently offers two methods for technicians to obtain certification: The job task competency certification programs and the general knowledge certification programs. The Institute presently has many certification programs available for technicians. Two of particular interest to Louisianians are the Fire Protection/Automatic Sprinkler System Layout and Transportation/Bridge Safety Inspection.

For more information on the certification programs available, contact the NICET, 1420 King Street, Alexandria, Virginia 22314, (703) 684-2835.

IN MEMORIAM

Earl Joseph Martel, P.E.

Earl Joseph Martel, P.E., a member of the Louisiana Engineering Society since 1958, expired on March 24, 1987.

Mr. Martel, a native of Franklin, had lived in Lafayette since 1974. He was 81 years of age.

He was a graduate of Springhill College of Mobile, Alabama, where he received his degree in civil engineering. He was a veteran of World War II, serving in the U.S. Army.

A resident of Vicksburg, MS, for many years, he worked for the U. S. Corps of Engineers until he later joined the Louisiana Department of Transportation where he worked for 30 years until his retirement in 1970.

He was a former member of the AARP of Lafayette, the Baton Rouge Kiwanis Club, and recently received Springhill College's Gautrelet Society Award.

The Board of Direction and members of the Louisiana Engineering Society express our deepest sympathy to his wife, Marjorie, and children.

Statistical Summary of Complaints/Investigations - 1986

The calendar year of 1986 was a busy year for the Board Investigator. The overall complaint/investigative file openings for the year increased by 39 percent over 1985 openings.

Of the complaints handled during the year, there was an increase in complaints received from registrants and the public versus Board initiated inquiries. This was a reversal from complaints/investigations in 1985 when just the opposite was true. Such a change confirms that the Board is receiving increased support from registrants reporting situations that appear to be violations of the registration statutes or Board Rules. It is such support and interest that helps the Board do a better job in protecting the public through its enforcement program. Keep up the good work!

Many times registrants or members of the public who provide information regarding potential violations do not appear to understand or agree with the corrective action taken by the Board.

Regulation of the engineering and land surveying profession consists of two (2) important functions. Each must be exercised judiciously. Registration of the professional engineer and land surveyor assures that applicants are minimally qualified to practice their profession. Enforcement assures that registrants are performing their professional services in conformity with the intent and purpose of the law and related rules of professional conduct. The Board's enforcement program is directed, in all appropriate cases, to first obtain compliance on a voluntary basis. If the latter can not be achieved, then the Board takes whatever action is necessary under the disciplinary provisions in the statutes against an offender to attain future compliance. Most violations can be resolved amicably and do not warrant formal disciplinary hearings or formal legal action in a civil court.

Know the **Law** and **Rules** of the Board — avoid becoming a statistic!

The following is a statistical summary of complaints/investigations for calendar year 1986:

Complaint files pending from 1985	26
Complaint files opened in 1986	143
Complaint files disposed of in 1986	150
Complaint files carried over into 1987	19
Investigations carried over from 1985	01
Investigations initiated from Complaints	06
Investigations disposed of in 1986	06
Investigations carried over into 1987	01
Total case load for 1986	176
Board Hearings held during 1986	02
Investigations/complaints resolved with cease and desist affidavits	04
Investigations/complaints referred to District Attorney	0
Number of Board Disciplinary Actions	02
New Firms registered as result of Investigative Action	30

Renewal of Your Registration

When does your driver's license expire? Do you get a notice that your driver's license is about to expire? What happens if you don't renew your driver's license on time? Is it okay to drive with an expired driver's license? Is there a penalty or late fee for renewing your driver's license after it expires?

I think that you all know the answers to these questions. It is your responsibility to renew your driver's license before it expires. You receive **no** notice that it is about to expire. You pay a penalty fee to have it renewed for the privilege of driving an automobile.

Why should your certificate of registration with the Board for the privilege of being a registrant of the Board be treated any different than a driver's license? I believe that over the last six years I have heard about every argument or excuse possible—

"I didn't get my renewal notice."

"I had a change of address."

"The clerk forgot to mail the check."

"My husband told me to mail his renewal fee and I misplaced the envelope. I found it today—can't you accept it even though it is a little late?"

One engineering registrant of the Board sent me copies of seven years of cancelled checks he had from the Louisiana Engineering Society to serve as proof that he had always paid his renewal fees on time. Gentlemen, Ladies, PLEASE—the Registration Board is **not** the **Louisiana Engineering Society** (LES) or the **Louisiana Society of Professional Surveyors** (LSPS), and the LES and LSPS are **not** the Registration Board.

"I just got back from overseas."

(A number of remarks that I would like to share with you cannot be legally printed here.)

When does **your** certificate of registration as a Professional Engineer or Professional Land Surveyor, or your certification as an Engineer-In-Training or Land Surveyor-In-Training expire? Pull it out of your pocket to check. The expiration date you should find is either September 30, 1987, March 31, 1988, September 30, 1988, or March 31, 1989. If it is not one of



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



those dates you cannot offer to provide or provide engineering services, nor can you present yourself as an engineer.

If the expiration date is one of the above dates listed, you should receive a renewal notice about sixty days prior to the expiration date of your registration or certification. If you don't receive your renewal notice, you and I could have a problem. I don't enjoy these kind of problems and you probably don't either, be-

cause it is a no win situation for both of us.

How Can It Be Avoided?

By me doing what the law says I should do. Louisiana Revised Statute 37:697 states in part: "It shall be the duty of the Executive Secretary of the Board to notify by letter to his last known address, every person and entity registered or certified under this chapter of the date of expiration of the certificate and the

amount of fee that shall be required for its renewal; such notice shall be mailed at least one month in advance of the expiration of such certificate."

I will do that, plus I would like to give you a few hints of how you can avoid paying a late renewal fee.

Here Are The Hints:

- (1) Keep the Board advised of your change of address.
- (2) If the mailing label of this magazine has your registration or certification number listed above your name, this magazine and your renewal notice is mailed to you using this address as officially recorded by the Board of Registration. The Louisiana Engineering Society distributes the magazine to individuals and firms other than registrants of the Board, and in those cases a number is **not** shown above the mailing name. Registrants of the Board receiving the *Louisiana Engineer* magazine six times each year can be assured that we have your correct mailing address.
- (3) Make a note on your calendar, the date your renewal certificate expires minus thirty days. If you have not received a renewal notice thirty days prior to the renewal date on your certificate, do one of two things. Either mail your renewal fee to the Board with a short note identifying yourself (including your registration number) or call the Board office. By checking around with your associates you can usually determine what your renewal fee is. Upon receipt of your renewal fee we will mail you your renewal license card.

Continued on page 18

EXAMINATION SCHEDULE and APPLICATION DEADLINE DATES

EXAMINATION	SPRING		FALL	
	Application Deadline Date	Examination Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	Jan. 15, 1988	Apr. 16, 1988	Aug. 7, 1987	Oct. 31, 1987
Principles and Practice Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	Jan. 15, 1988	Apr. 16, 1988	Aug. 7, 1987	Oct. 31, 1987
Agricultural, Industrial, Metallurgical, Mining & Petroleum	NOT AVAILABLE		Aug. 7, 1987	Oct. 31, 1987
Fundamentals of Land Surveying Examination (8 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Principles and Practices of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Laws and Procedures of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	NOT AVAILABLE	

Apply at least six to eight months prior to an examination. Board approval must be given for anyone to be scheduled for an examination.

The applicant and the Board depend upon information provided by third parties in the processing of an application, therefore no assurance can be given that one will be scheduled for a specific examination.

Application Deadline date means that an application **must** be postmarked prior to or on the date specified so as to be given **consideration** for the examination. The Board may schedule an applicant for an examination later than that requested by the applicant. The Board cannot guarantee that the applicant will be scheduled for the examination initially requested.

BOARD MEETING NOTICE

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

1987

July 28

Sept. 22

Nov. 17



Walk Honored At Annual Meeting

Frank H. Walk, P.E., partner in the multi-discipline engineering firm of Walk, Haydel and Associates, Inc., with offices in New Orleans, Baton Rouge and Mobile, was honored recently at the CEC/L Annual Meeting by being named 1987 recipient of the coveted A. E. Wilder, Jr. Award.

The award was established in 1976 in memory of A. E. Wilder, Jr., CEC/L's previous Executive Director, who passed away suddenly in January of that year. It is presented to an individual member, who is not a member of the current Board of Governors, and who has made outstanding contributions to the Council over the years. Although Walk was unable to attend the Annual Meeting in March, he was present at the April New Orleans Chapter meeting to receive the award. Making the presentation was Wilder's son, Warren, who is currently CEC/L Exec.

Of Frank Walk, Wilder said during the presentation, "Our recipient this year, as are all of the past recipients, is and has been a worker and a doer. He helped forge the strength and vitality of the organization by serving as its president in 1973-1974. During his administration, CEC/L coordinated the completion and distribution of the Manual of Practice. The council addressed the problem of moonlighting university professors. Activities in this area culminated in a position letter being sent to all Louisiana universities. As president, he was responsible for the printing and distribution of the CEC/L Membership Directory. While he was overseeing these projects, the Monroe-West Monroe Chapter was established. Our recipient has served for several years on ACEC's Political Action Committee and he continues to support this activity. He was also nominated for the office of ACEC Vice President. He is an ACEC Fellow, which is in itself an indication of his devotion and concern for the Council.

Another outstanding, and often overlooked, contribution our recipient has made to CEC/L is his willingness to allow his associates to participate in Council activities by serving at the board level. We have had another president emerge from this firm and a current Member-at-Large who is serving his third year."

Past recipients include H. Nash Ogden, Baton Rouge (1976); C. Carter

Brown, Baton Rouge (1977); A. W. "Bill" Holland, Baton Rouge (1978); Emery Domingue, Lafayette (1979); Chris Demopoulos, Shreveport (1980); Ralph Crosby, Baton Rouge (1981); Warren G. Moses, New Orleans (1982); Alfred G. Rayner, Baton Rouge (1983, deceased); Fielding H. Johnson, Baton Rouge (1984); Easton Stewart, Baton Rouge (1985); and Robert W. McKenzie, Baton Rouge (1986).

CEC/L Participates in Consulting Congress '87

Several members from CEC/L, including William Read, Vernon Meyer, Red Aucoin, Larry McKee, and Warren Wilder, recently went to Washington, D.C. and participated in ACEC's Consulting Congress '87.

There was a total of about 200 ACEC members that participated. The event allowed ACEC members to visit with their state congressional delegation and talk about the many concerns facing the profession and the professional.

On the first day there was a White House briefing with a couple of the president's special assistants and the Execs and Presidents of the Member Organizations. This was followed by an ACEC briefing on the issues.

The next day was devoted to the congressional visits. We made a lot of good contacts with the delegation but of equal importance we met a lot of their staff members. One highlight was the kick-off reception at which Rep. Jack Brooks of Texas addressed the group. Brooks is the author of the famous bill that established the qualifications based procurement method. Interestingly, Brooks was from Crowley, La. and was very receptive to our Louisiana ACEC members.

All told, the event was a great success, a chance to air our views to our delegation, to meet our delegation face to face, and to visit with old and new friends! You should not miss this event next year.

Louisiana CEC Presents Check To HSEP At Scotlandville Magnet

Consulting Engineers Council of Louisiana recently presented the High School of Engineering Professions housed at Scotlandville Magnet High School, Baton Rouge, with a check for \$500.

Larry A. McKee, P.E., president of Consulting Engineers Council of Louisiana, presented the \$500 to Henry McMahon, coordinator of the engineering program at HSEP.

The HSEP was developed as a partnership between the East Baton Rouge Parish School Board and local industry through the Greater Baton Rouge Chamber of Commerce to provide a preparatory program for the college-bound student who would like to major in some phase of engineering.

An Advisory Council, composed of local business people, educators, and parents, provide guidance for the program and administers donations which support these special needs. As of May 1986, \$50,000 had been provided from private sources, as well as \$100,000 in equipment and other materials.

HSEP was established in 1983 and had its first graduating class last year. The first HSEP graduates were accepted by engineering schools across the country, including General Motors Institute of Engineering, Georgia Tech, West Point, the U.S. Naval Academy, Louisiana State University and Louisiana Tech University.

Structural Engineers Coalition Formed Out of Insurance Crisis

In one of W. C. Fields' poker-playing films, a man walks up and asks, "Is this a game of chance?" Fields' reply: "Not the way I play it."

That is the attitude of some 400 structural engineering firms interested in forming CASE, the Coalition of American Structural Engineers. Structural engineering is not a game of chance despite its designation as "high risk" by some insurance companies. CASE will work to lower that designation by examining alternatives to conventional insurance including captive insurance companies and options in the recently passed Risk Retention Act, implementing a technical peer review program and publishing guidelines to encourage sound structural engineering practices.

CASE held its inaugural meeting in conjunction with the American Consulting Engineers Council's annual convention May 18 at the Minneapolis Marriott City Center. For more information, contact Ed Bajer or Sally Hanlon at ACEC. (202) 347-7474.



**Consulting Engineers Section
Warren J. Wilder
CEC/L Executive Director**



An Unwelcome Surprise From the Federal Government

It came on little cat feet like the fog in the night. No one was paying attention. Suddenly it was there. It all started when the Defense Contract Audit Agency (DCAA) discovered what the rest of us have known since 1984. Professional liability insurance premiums were rising at an alarming rate.

The problem was that some of these costs were being passed on to the Government in the form of allowable overhead. Something had to be done to protect the Department of Defense from this unacceptable turn of events. DCAA's solution was a simple one. It decided to shift the costs to you.

Stroke of a Pen

In policy memorandum 86-PAD-145, dated September 9, 1986, DCAA instructed its regional offices as follows: "A pro-rata allocation of . . . professional liability insurance costs to all work does not appear to meet the causal beneficial test discussed in FAR 31.201-4, CAS 416.40(b), and CAS 418.40(c), namely 'The allocation of insurance costs to cost objectives shall be based on the beneficial or causal relationship between the insurance costs and the benefitting or causing cost objective.'"

If you have trouble making sense of this, what it means in English is that DCAA has directed its auditors to find a way to disallow some or all of your professional liability insurance costs. How? First you will be asked to "require" your professional liability insurer to ". . . segregate its premium costs between commercial and Government risk exposures so that the relationships can be demonstrated and evaluated." Because there is no such differentiation in rates, this is a requirement that no professional liability insurer can meet.

Alternatively, DCAA auditors have been instructed to consider your own, individual loss experience on commercial and Government work in evaluating your "proposed" allocation of premium costs. In other words, the burden of justifying any such allocation falls on you. It does not appear to matter that what you pay to insure against losses on Federal work has nothing to do with the fact that you may have been fortunate enough to avoid such losses in the past.

Burying the Rational

How did DCAA come to the conclusion that the Federal Government ought somehow to be shielded from the cyclical nature of the insurance industry and the ravages of the tort liability system in the United States? Here is the reasoning it advanced in 86-PAD-145:

1. "Historically, A&E contractors have rarely incurred insurance claims or losses on its (sic) Government contract activity." This assertion has no basis in fact. Victor O. Schinnerer & Co. reports that, in the 30 year history of its insurance program for architects and engineers, it has never been able to establish a causal relationship between client type (i.e., Government vs. commercial) and the frequency and severity of claims. Of some concern, on the other hand, is the eventual impact of a 1977 General Accounting Office (GAO) report which recommended that Federal agencies more aggressively pursue the recovery of costs attributable to negligence in design. Either GAO's recommendations have been roundly ignored, or Government claims are actually on the increase.

2. "This problem is similar to the professional liability insurance carried by CPA firms . . . (in that) third parties do not use or rely on work performed by CPAs on Government contracts. Accordingly, the third party exposure . . . is minimal or non-existent . . ." Just how DCAA came up with this notion is beyond imagination. It is patently false. Contractors, sub-contractors, workers on the job-site, and users, including Government employees, all have a legal right to rely on the services performed by architects and engineers on Government projects. They have not hesitated to assert that right in the past, and there is no reason to assume they will do so in the future.

3. Indemnification of architects and engineers is not an acceptable alternative to the reduction or elimination of professional liability insurance costs because, ". . . this alternative may expose the Government to substantial liability . . ." Probably, but more than anything else, this conclusion illustrates how hopelessly vague DCAA's guidelines are. An acceptable allocation of costs apparently falls somewhere between those associated with "substantial liability" and those associated with "rarely incurred insurance claims." The idea that either of

these abstractions has anything to do with (or can reasonably be quantified on the basis of) the individual loss experience of a single firm borders on the ridiculous.

Fortifying the Battlements

DCAA does not seem to be bothered by the fact that its rationale is unfounded and, for the most part, specious. It has taken the position that Department of Defense quality assurance procedures and its readiness to step forward with changes to the construction contract to correct design deficiencies significantly reduce the risk of loss on Government work. Therefore, in its view, a pro-rata allocation of insurance costs is inappropriate. DCAA has produced no data to support this contention, and it does not appear to be willing to do so. It has expressed an unsubstantiated opinion aimed at reducing Government costs, and it has neatly shifted the burden to you.

The Professional Services Management Association (PSMA) has established a task force to formulate a response to DCAA, and the National Society of Professional Engineers (NSPE) has initiated an effort to engage DCAA in a dialogue about the position it has taken. To this point, NSPE has been met with a solid wall of resistance. It may be that only a concerted effort involving all of the professional societies will provide the critical mass necessary to bring DCAA to the point at which it is willing to address the issue seriously and in good faith.

None of this will solve your immediate problem if you are engaged in projects which fall under DCAA's watchful eye. At your next audit, you are going to have to provide compelling evidence that whatever allocation of premium costs you have made is consistent with DCAA guidelines. Ask for a copy of 86-PAD-145, and do what you can to compile data from your own records to support your position. On new work, you might investigate the possibility of establishing an allocation agreement, in advance, under the provisions of FAR 31.109. This, at least, will let you know where you stand before you finalize your fee negotiations with the Government.

(From: The Professional Liability Perspective, April, 1987, a newsletter distributed by Alexander & P. Sanders, Baton Rouge)

LES Award Winners



James C. Wernicke, P.E., right, receiving the F. Hugh Coughlin Young Engineer Award from Robert A. Brossette, P.E.



Waldemar S. Nelson, P.E., left, presenting the A. B. Paterson Award to Gerald M. Haydel, P.E.



Bobby E. Price, P.E., left, and Leo M. Odom, P.E., right, presenting the Leo M. Odom Award to C. Carter Brown, P.E., center.



Kerry J. LaBauve, P.E., left, presenting the Charles M. Kerr Public Relations Award to James C. Webb, P.E.

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Note From the Louisiana Engineering Foundation to Members of the Louisiana Engineering Society and Other Friends of the Profession:

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Of which L.E.S. is a principal renter.*

*And since our golden goose is lost,
We asked you to help defray the cost
Of roof and ceiling and wall repair
So Leta and Doc would not despair.*

*The roof is tight, the floor is dry,
A joy to members passing by.
And though the ceiling's no longer wet,
Each month we still must pay the debt.*

*For to complete the work we made a loan.
Each month the interest makes us groan.
Though members gave with a right good will,
'Twas not enough to pay the construction bill.*

*So we ask if you didn't give before
To help the Foundation this once more
And send your gift marked "Fix the Roof".
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Dwayne H. Vidrine	EIT		
Steven L. Smith	EIT	ME	
Thomas M. Ashton	PE	ME	
BAYOU			
Randall L. Sutton	EIT		Partek Laboratories
LAFAYETTE			
Travis L. Cummins	PE		United Gas Pipeline
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Structural Engineers Make a C.A.S.E.

As fellow Structural Engineers, you are certainly aware of not only the extremely high cost of professional liability insurance, but also the increasing difficulty of obtaining such insurance at all. The day approaches soon when we must decide between paying ever-increasing insurance rates, going bare, or, the gloomiest alternative, closing our doors. This problem must be challenged head-on and solved by the professionals directly involved.

The Coalition of American Structural Engineers, CASE, is an organization in its formative stage founded by several ACEC members working directly with the major insurance underwriters to seek a solution to the professional liability woes of practicing structural engineers.

A meeting of the Charter Members and interested structural engineers was held on May 18, 1987, during the ACEC 32nd Annual Meeting in Minneapolis, Minnesota. The purpose of the meeting was to establish goals of the organization and a schedule of events and milestones required to achieve a successful program.

Louisiana's structural engineers must

respond to this challenge and support the efforts of CASE through active membership and positive contribution of ideas and individual experiences which will aid in molding the solution to our insurance problems. It is imperative that Louisiana's voice be loud and clear representing the interests of as many engineers as possible.

Take time now and join the move. We need to know who you are, where you are, and what your needs and ideas are. Please write to:

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- Individual's name, address, telephone number
- Interest in joining CASE
- Which organization in Louisiana should represent our group?

Louisiana Engineering Society
 CEC/L
 ASCE
 LA-CASE (New Group)

NOTRE METIER Continued from page 13

The fee you are charged for the privilege of working in your profession is most reasonable when compared to other professions. Paying your renewal fee on time will help to keep our cost down. You also have an incentive to pay your renewal fee on time, because a late renewal fee must be assessed if you are late in paying your fee. I thank you for your understanding.

What's In It For Me?

How many times have you heard that one lately?

The following list of twenty-eight individuals did not ask that question. I am listing these people here because I am of the opinion you should go out of your

way to meet them and get to know them. I will list them first and explain later, Why? Pick at least one person in your vicinity and get to meet him; you will not be wasting your time.

Allen, Todd R.	Metairie
Bartell, John B.	Lafayette
Dao, Thi H.	Gretna
Derby, Joel E., III	New Orleans
Drewes, Mark Richard	Metairie
Dubroc, Mark B.	Lafayette
Erwin, Kay	New Orleans
Folse, Steve D.	Baton Rouge
Gallodoro, Dale Victor	Kenner
Hingle, Jack Henry	New Orleans
Hugele, Michael Paul	Metairie
Irwin, Bill R.	Denham Springs
Jordan, Bruce Max	New Orleans
Langlinais, John	Lafayette
Mogharehabed, Hossain	Metairie
Morecraft, Andrew J.	New Orleans
Norris, John D.	LaPlace
Prewitt, Charles E.	New Orleans
Roseboom, Kenneth Wayne	Broussard
Savoy, Mark	Breaux Bridge
Schroeder, Kenneth Ray	New Orleans
Speck, Gerald E.	New Orleans
Sunderland, Jeffrey John	Youngsville
Tran, Canh N.	New Orleans
Venable, Scott	Church Point
Wafer, Doug	Baton Rouge
Wheeler, Gerald E.	Slidell
Willis, Jeffrey S.	Lafayette

Do you know any of these people? What did they do? Why am I suggesting that you get to know them? The answer to the above is — **They did not ask the question—what's in it for me?** That's the bottom line—end of the story. **[Full Stop].**

I did say I would explain later why you should meet these people. Later will be the next issue of the *Louisiana Engineer* (August 1987). In the meantime, do yourself a favor and figure out what all of these individuals have in common besides not asking the question, "**What's in it for me?**" — [To be continued in the August issue of the *Louisiana Engineer*.]

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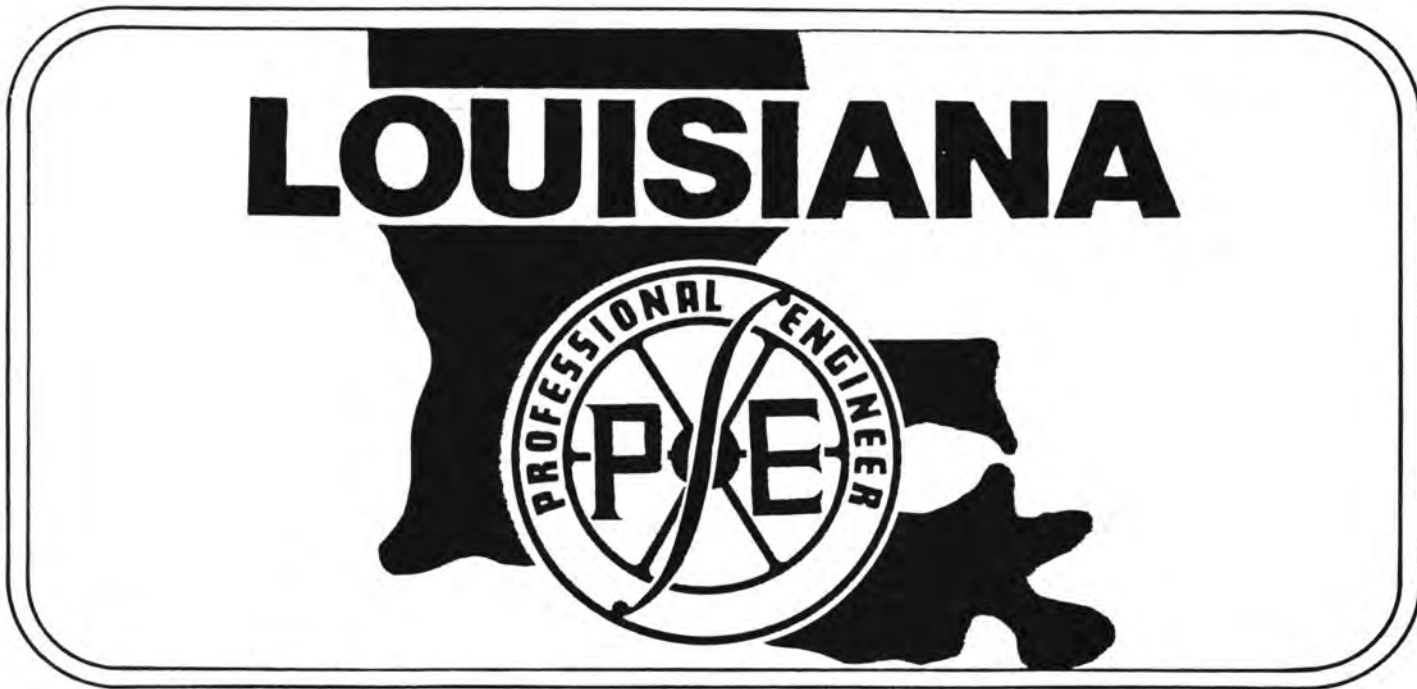
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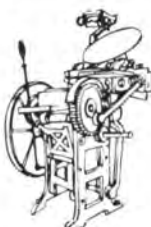
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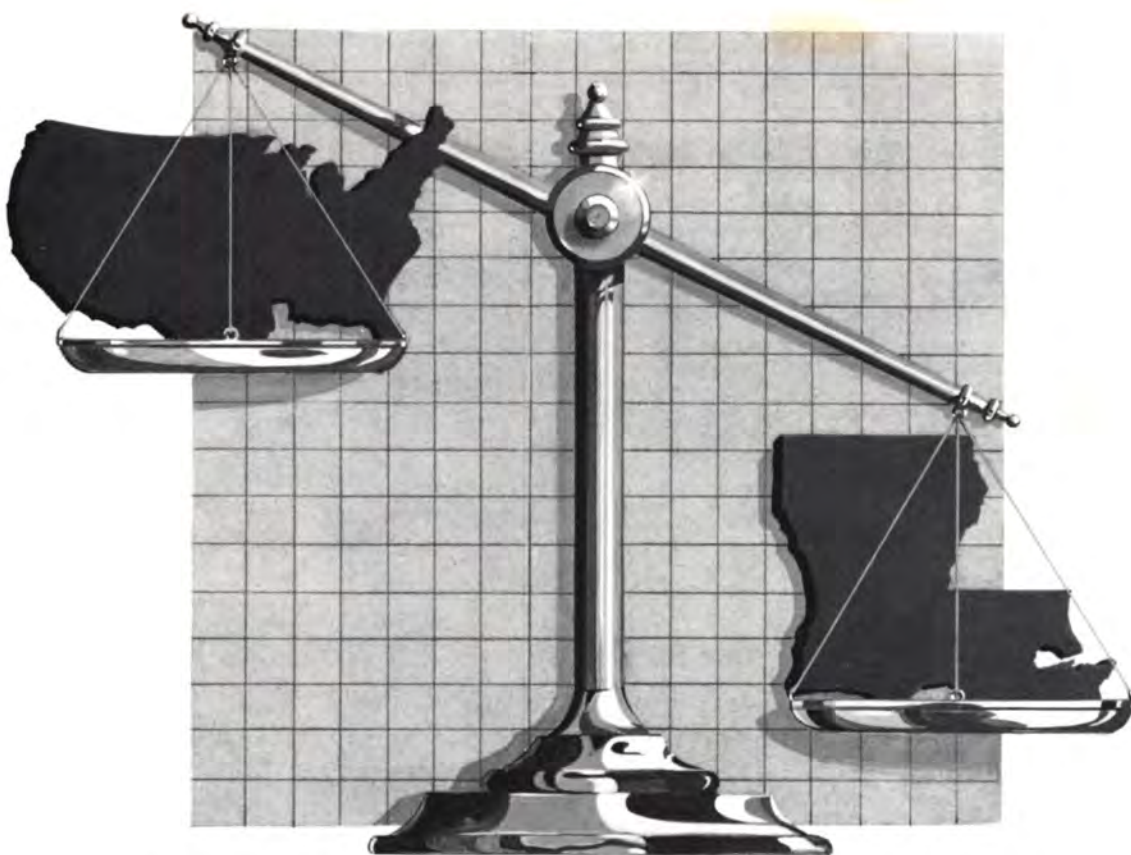
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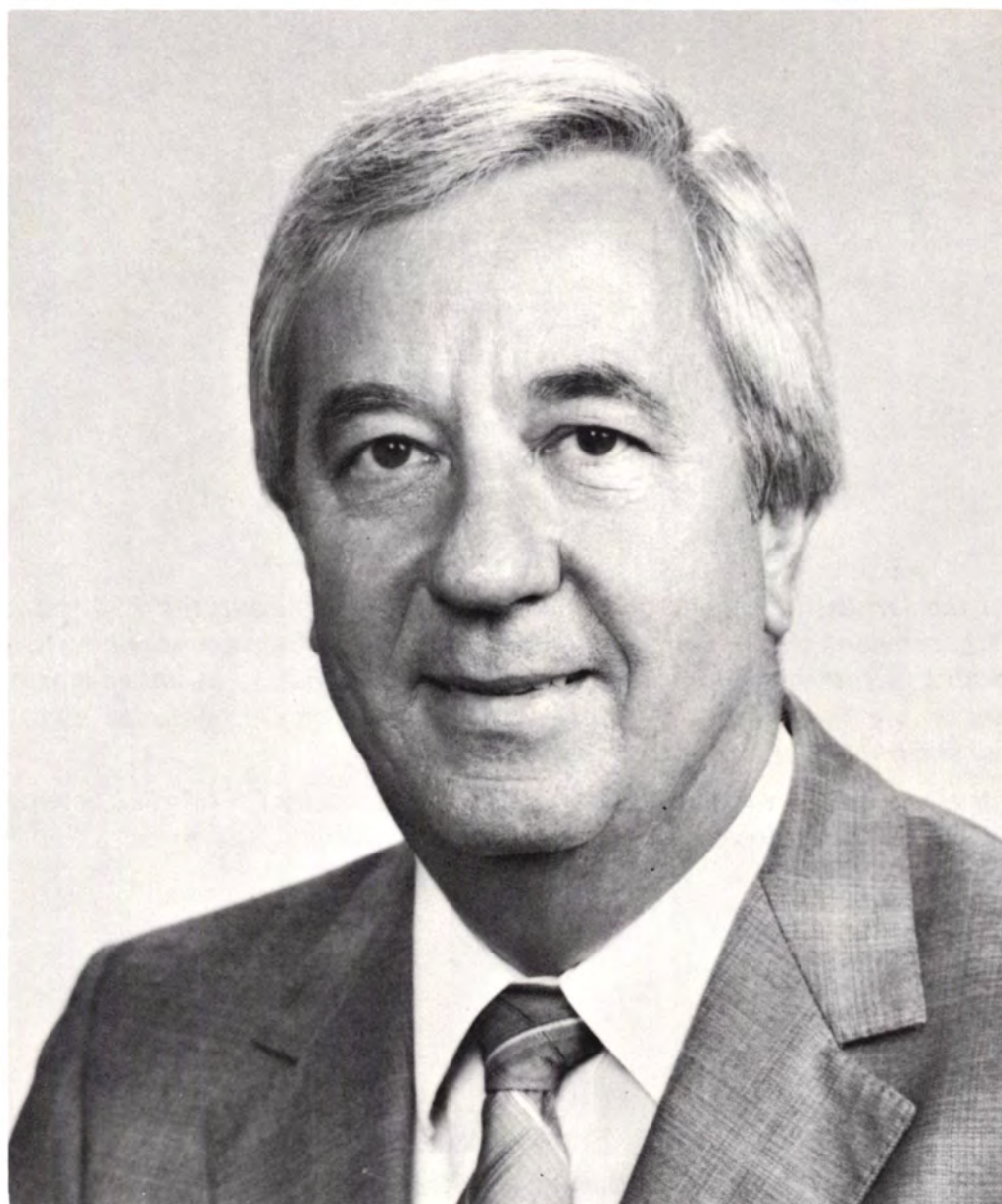
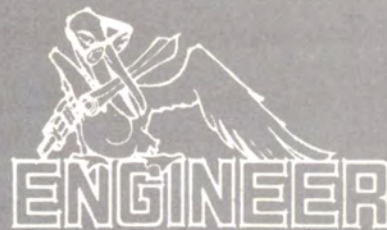
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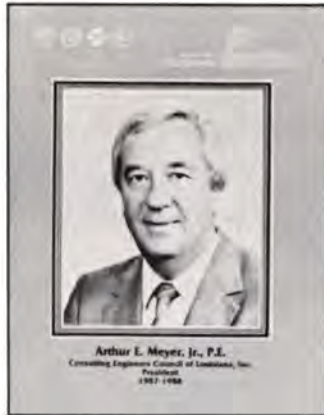


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Our cover this month features
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Summer Continues To Be Active For Louisiana Engineering Society



Robert P. Blanche, P.E.
President
Louisiana Engineering Society

The Legislative sessions are complete for this year and we know of no specific legislation that was passed that would adversely affect the engineering profession. The bills that were submitted on behalf of the State Board of Registration were approved and should provide assistance to the Board in administering their important duties on behalf of the public and the engineering profession.

The Board of Direction approved, and forwarded to the Governor, the list of nominees to replace Mr. Ed McNamara, P.E., whose term of office was completed at the end of July, and the governor has appointed Mr. Malcolm A. Hurstell, P.E. One good Mac replacing another good Mac.

The Teller's Committee has met and counted the votes for the election of officers, as well as the changes in the Constitution that were required to adjust our administrative year from July to October. All of the constitutional items on the ballot were approved by the membership and we will, therefore, adjust our administrative year from October 1st to September 30.

I would like to extend my congratulations to the Society officers who were elected for the upcoming year. They are: Dr. Bobby E. Price, P.E., President; Dr. James W. Reeves, P.E., First Vice-President; Mr. Blaise M. Carriere, P.E., Second Vice-President; Mr. Kerry J. LaBauve, P.E., Secretary-Treasurer; Mr. James L. Meyer, P.E., NSPE National Director; Mr. Andy Craig, P.E., State Director; and Mr. Glynn Gautreau, P.E., State Director. I know that this group of officers will continue to serve the profession with the same dedication as the past officers and board members have. The election of Kerry LaBauve to the office of Secretary-Treasurer requires that

he give up his position as a State Director. His replacement will be made by the Board as required by our Constitution.

The Long-Range Planning Committee has met and continues in its task of evaluating the standing committees' function and purpose, with the idea of improving the operations of the Society. Anyone who has suggestions should send them to Dr. Jim Reeves at USL.

The MATHCOUNTS Committee met in Alexandria on July 31st, and started planning for next year's MATHCOUNTS program. We hope that this outstanding Society activity will continue, and even expand, in participation and interest. Each year affords us the opportunity to expose a new crop of 7th graders to the importance of mathematics in their future education. It is gratifying to see the total support from around the state towards this program.

Plans are underway for the Society's Planning Conference to be held in Alexandria on Friday, September 18th. This conference is extremely important in assisting the new chapter officers and committee chairmen in developing their plans and programs for the upcoming year. This is a one-day conference and we look forward to seeing all of the incoming officers and committee chairmen participating.

The Society is also hosting the NSPE Southwest Regional Meeting in New Orleans on September 24th and 25th. This meeting is hosted by different states in order that the membership can attend and learn about the national society's activities.

Registration forms for these two meetings are available for your use and are enclosed in this month's magazine. Make plans to attend and participate in your professions activities.

LES Board of Direction Meeting Highlights

March Meeting

The March meeting was held in Monroe with 18 Board members, seven guests and the LES staff present.

1. The February 1987 financial statement was accepted, subject to the annual audit.

2. The Legislative Committee presented a report as to the current status of each bill LES is planning to introduce into the session this year.

a. The Worker's Compensation bill — A final draft has been prepared and ready to file.

b. Technical changes to the State Board of Registration Law — A number of technical changes have been proposed to the State Board of Registration Law. Each change was discussed in detail. The Legislative Committee and the Board of Registration came to terms on the changes and the Board's attorney will submit new language for the committee's purusal.

c. Terms and appointments on the State Board of Registration — After a survey was distributed to the chapters concerning a change in the members terms on the State Board of Registration from the current six year term to a nine year term, the Legislative Committee felt there is no support for this change from the engineering community and, therefore, will not pursue changes this legislative session.

3. The state office was given authorization to purchase a new computer system and accompanying software. The practice divisions were asked to make interest-free loans for this purchase.

4. The Constitution and Bylaws Committee reviewed a request to omit the publishing of dropped members in the *Louisiana Engineer* magazine. A motion carried to omit this procedure. Procedures will be initiated in the chapters to amend the Constitution and Bylaws.

5. The Ethics and Professional Conduct Committee reviewed two complaints against members of the Louisiana Engineering Society. One complaint was determined to be "trivial" and was dropped by the Board. The second complaint was determined to be "not trivial" and will be investigated by the Ethics Committee.

6. Candidates to fill the unexpired term of Robert W. Parks on the State Board of Registration were submitted to the Governor on February 26, 1987.

7. The LES Nominating Committee submitted its slate of officers for the 1987-88 Administrative Year. They are: President-Elect, Bobby E. Price, P.E.; 1st Vice President, James W. Reeves, P.E.; 2nd Vice President, Blaise M. Carriere, P.E.; Secretary-Treasurer, Kerry J. LaBauve, P.E.; State Directors, Andy Craig, P.E. and Glynn Gautreau, P.E.; and National Director, James L. Meyer, P.E. The slate of officers was accepted by the LES Board.

8. Candidates for the Engineers Selection Board were named. They are Kerry Hawkins, P.E. and J. Madison Drake, P.E.

9. Kerry J. LaBauve, P.E. reported on the status of the regional MATHCOUNTS competitions. All chapters participated. The State Competition is scheduled for April 4. Debbie Woodall will attend the National Competition in Washington.

10. After receiving several bids for professional audit services, the Society elected to stay with the CPA firm we are now using, but to use a compilation this year rather than a full audit.

11. After a request was made to the LES Board, the Liaison Committee with the State Board of Registration was directed to look into questions regarding the Registration Law for Land Surveyors.

12. After a meeting of the chairmen of the state standing committees, the Long Range Planning Committee was charged with the task of evaluating the current definitions and charges of responsibilities of the standing committees listed in the present orientation handbook and evaluate their historical track records of accomplishments to determine if these committees are fulfilling those charters.

13. A number of structural engineers are pulling together to form a coalition to lower liability insurance. Permission was granted for an article to appear in the *Louisiana Engineer* regarding this coalition.

May Meeting

The May meeting was hosted by the Bayou Chapter with 15 board members, one guest and the LES staff present.

1. President Blanche reported in the absence of the Treasurer Blaise Carriere that the Executive Committee had met a number of times since December to evaluate the current financial status of the Society. After reviewing and reducing expenses as much as possible on every line item, the Executive Committee reached the decision to lay off a member of the staff. The March and April financial

statements were accepted subject to the annual audit.

2. The Legislative Committee has continued to work with other associations and groups to work out acceptable language on bills that the committee felt was not in the best interest of the engineering profession.

3. The Society has only obtained 33% of the 15-month quota established by the Membership Committee.

4. Webb reported that the Society had acquired the computer recommended at the Monroe Board of Direction meeting. Cost incurred thus far is \$1,745. The Board approved the purchase of a letter-quality or 24-dot matrix printer to better serve the Society needs.

5. LaBauve submitted an annual report and financial statement on the MATHCOUNTS program for 1986-87. Chapter coordinators will be sent copies of the report for distribution to the schools. NSPE has determined that many of the veteran schools are no longer participating in the program and a questionnaire is being prepared by NSPE to address this issue.

6. The Long Range Planning Committee is collecting data regarding track records, etc. of the state standing committees. A meeting is scheduled for June to review material received.

7. Blanche reported that the ethics case determined to be "non-trivial" at the Monroe meeting is still being investigated. Final recommendations will be submitted after the investigation is completed.

8. The practice divisions reported their chairmen for 1987-88. PEC — James A. Dunn is seeking support from his company to serve as chairman. PEE — Stuart Ferrell, P.E.; PEG — Robert S. Jones, P.E.; PEI — John E. Ritter, P.E.; and PEPP — James C. Wernicke, P.E.

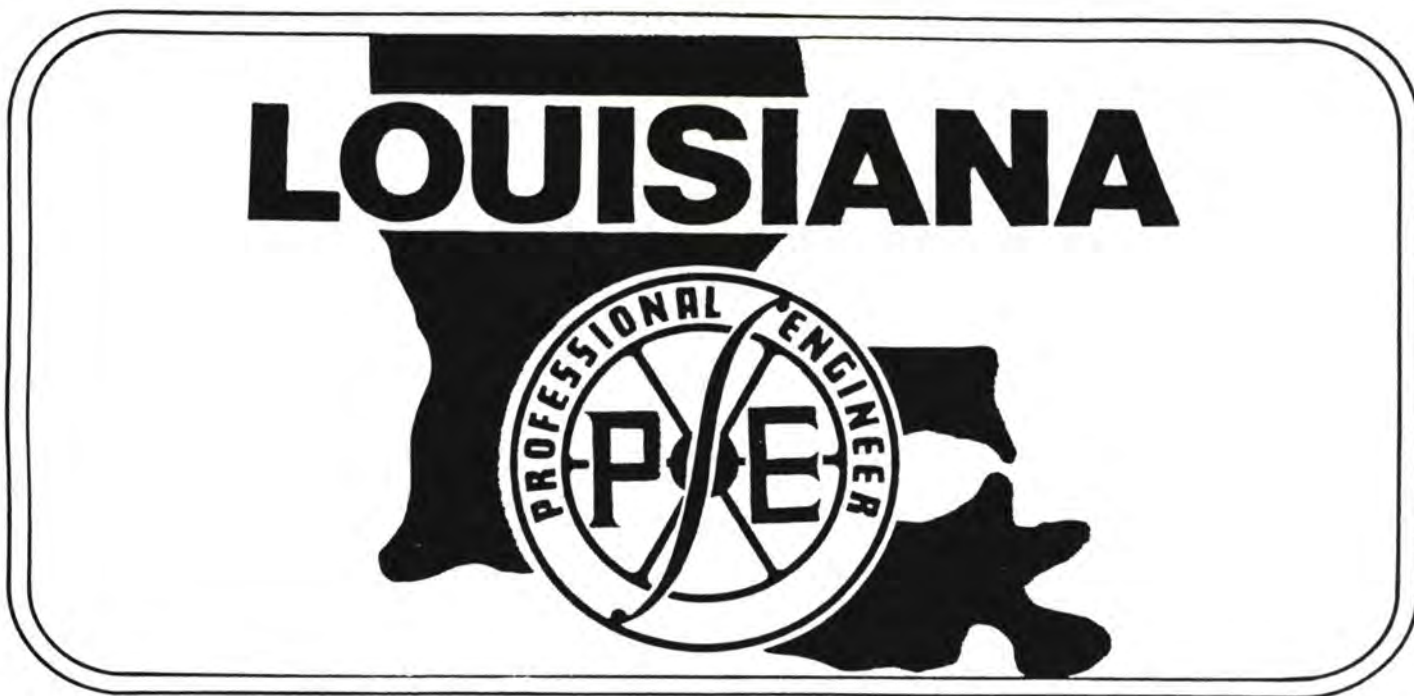
9. PEPP has agreed to join with CEC/L on a "friend of the court brief."

10. Bueto reported that the Engineers Selection Board ballot for both LES and CEC/L will appear in the June issue of the *Louisiana Engineer*.

11. The NSPE Southwest Regional Meeting will be held September 23-25, 1987, at the Royal Sonesta in New Orleans. All members of LES are urged to attend.

12. The Planning Conference will be held on September 18 and the LES Board of Direction meeting on September 19 at the Hotel Bentley, Alexandria.

Continued on page 20



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Political Contributions

In January of this year, in Orlando, Florida, the NSPE-PEPP Board of Governors, comprised of representatives from each of the states, took unanimous action to adopt and commend NSPE for adoption and implementation of a white paper on political contributions. This NSPE-PEPP Ad Hoc Committee report includes some far-reaching recommendations. As a member of this six member committee, I was challenged and stimulated by some very thought-provoking considerations. Having had the opportunity to review significant background information regarding relationships between political contributions and public contract awards, I can say in all sincerity that the engineering profession is facing a growing dilemma, and if not adequately addressed, could result in dire consequences for engineers.

The alarming rate at which campaign spending is growing is putting more and more pressure on our profession to give big dollars — and the news media are watching. There are many irrefutable statistics available which draw direct correlations between the amounts given, by whom, and who receives public work.

It was not intended that this white paper address the patently illegal *quid pro quo* transaction in which a contribution is given in exchange for a specified gain. This paper was prepared to address the perfectly legal situation in which engineers are placed under economic pressure to give in order to remain eligible to receive public work. In very simple terms, the profession is participating in a type of legal lottery in which giving regularly keeps you eligible to receive public work. In some instances, it clearly boils down to the more you give, the more you get. That campaign contributions from engineers are increasing disproportionately, compared to other professions, is consistent with the competitive public environment in which we work. This finding is also consistent with the fact that engineers do substantially more contract work with the public sector than do most other professions.

Ethical credibility is strained by this system. It is reasonably concluded that, within this all-together legal framework, the award of public sector contracts is all too often guided by political contributions, and it is widely recognized that a lot of political contributions are being made for the general purpose of obtaining public contracts. The public, and especially the news media, have no sym-

By Thomas D. Hixson, P.E., P.L.S.
Vice Chairman
NSPE-PEPP Southwest Region



pathy for our predicament and, to the contrary, have drawn and will continue to draw some erroneous and very damaging conclusions. Codes of ethics in our professional organizations do not adequately address or control the problem. Enforced codes of ethics would only penalize those who choose professional society affiliation and place them at an economic disadvantage.

On the whole, we have been lucky so far, but we are truly kidding ourselves if we think we can continue to operate with relative immunity from damaging charges against the profession. Engineers are big hitters in many political campaigns and are becoming bigger hitters as the cost of campaigns increase.

To date we have survived acquiring a moniker such as "shyster" or "quack", but unless we make our profession what we want it to be, then we will have to accept what others presume we are, by what they see and hear.

Our efforts to make the necessary changes in the system should not be misconstrued as taking away the rights of engineers to participate in the political process, but because of the nature of our work with public bodies and our vulnerability to suspicion, we must of necessity impose and live within some acceptable guidelines. We must not back away from the issue in timidity or be overwrought and subdued by arguments that we are messing with a constitutional right to participate in the political process. We, the profession, must solve this problem. If the effort to solve this problem is killed

or stymied, let us make sure that it is not killed from within the profession. Our credibility is in the balance.

Many newspaper articles across the nation draw the very erroneous conclusion that the solution to the problem is the bidding of professional services. The uninformed and the uninitiated perceive bidding as a quick and clean cure. We know that this is not the case, and it is incumbent on this profession to take action on the political campaign contributions issue and use the issue to strengthen our position for qualification-based procurement, instead of continuing to be forced to participate in a procurement system based in large part on campaign contributions.

The recommendations included in the NSPE-PEPP white paper are controversial and far-reaching. They are only a starting point from which we must move forward with open dialogue toward a resolution of this growing problem. There are four main recommendations included in the report. They are as follows:

1. NSPE, with the requested assistance and support of the National Council of Engineering Examiners and other engineering and architectural societies, undertake a concerted effort to effect the incorporation of rules by all state boards of registration to place limits on political contributions.

Comment: There are those who set forth the argument that state boards of registration and NCEE should not be involved in this matter and are charged primarily with the protection of public health, welfare and safety. What could be more potentially damaging to the public health, welfare and safety than the award of a contract to an engineer on the basis of how much money he contributed to a political candidate or party?

2. Where state campaign contribution reporting limits are not established by law, each respective state society shall initiate immediate action through its state legislature, with the assistance of NSPE, and with coordination through the society's intersocieties relations committee, to enact campaign practices acts which include political contribution reporting limits.

Continued on page 20

Louisiana Engineering Society One-Day Planning Conference September 18, 1987 Hotel Bentley, Alexandria, LA

PROGRAM

FRIDAY, September 18

10:00 a.m. - 10:10 a.m.

10:15 a.m. - 12 Noon

OPENING REMARKS

Bobby E. Price, P.E.

COMMITTEE MEETINGS

MATHCOUNTS Steering Committee
Engineering Education
Career Guidance
Young Engineers
Ethics & Professional Conduct
Honors & Awards
Inter-Society Relations
Legislative
Membership
Public Relations
Scholarship
Liaison With State Board of Registration
Constitution & Bylaws
Long Range Planning

Warren Boudreaux, P.E.
Marion E. Council, P.E.
J. Michael Bridges, P.E.
Jedd Lewis, P.E.
Robert S. Jones, P.E.
Vincent A. Forte, P.E.
James Wernicke, P.E.
Lamon Moody, P.E.
Neil Klock, P.E.
Michael W. Flores, P.E.
Robert Brossette, P.E.
James L. Meyer, P.E.
Houston K. Huckabay, P.E.
James W. Reeves, P.E.

12:00 Noon - 1:15 p.m.

1:30 p.m. - 3:00 p.m.

LUNCH (On your own)

PRACTICE DIVISION MEETINGS

Construction
Education
Industry
Government
Private Practice

Larry Smith, P.E.
Houston K. Huckabay, P.E.
John E. Ritter, P.E.
Robert S. Jones, P.E.
James Wernicke, P.E.

3:10 p.m. - 4:30 p.m.

4:45 p.m. - 5:30 p.m.

GENERAL SESSION

1987-1988 CHAPTER PRESIDENT'S CONFERENCE

(Incoming Presidents)

Each Committee and Practice Division Chairman is requested to give a three to five minute presentation on his goals and objectives for the 1987-88 administrative year.

SATURDAY, September 19

7:45 a.m. - 8:15 a.m.

8:30 a.m.

BREAKFAST

LES BOARD OF DIRECTION MEETING

REGISTRATION COUPON - ONE-DAY PLANNING CONFERENCE HOTEL BENTLEY / ALEXANDRIA / SEPTEMBER 18, 1987

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Building New Orleans, The Engineer's Role

It was in 1984 that Waldemar S. Nelson and Company published a limited, private edition of selected articles that had appeared in the company's newsletter, the CONSULTANT. This periodical, which is sent to company employees, clients and to many members of our profession, contained articles mostly by employees, many of which pertained to engineering accomplishments in New Orleans or its vicinity. The ones that appeared in the 1984 edition were selected from those written by James S. Janssen, a Senior Consultant, who has been with Nelson and Company since 1973, and has been editor of the CONSULTANT since 1974. This edition appeared under the title of "A Collection of Writings by James S. Janssen as published in the Waldemar S. Nelson and Company newsletter, the CONSULTANT."

At the suggestion of numerous engineers who have received this newsletter over the years, the company decided to publish a new edition which will be available to the engineering profession



and to the public in general. Since much has been written about New Orleans, it was decided to limit the articles or chapters to those pertaining to the engineer's role in the development of the city. The book is called "Building New Orleans, The Engineer's Role." A few articles of a general nature that appeared in the original publication have been dropped and a few of engineering interest have been added. It is expected that the new edition will appear in October of this year.

The author's lifetime residency in New Orleans, his engineering career there, and his interest in local history, made him a logical person to write and to compile these articles into such a book. Jim Janssen is well known in local engineering circles because of his membership in the Louisiana Engineering Society (a past president) and other professional groups, his long career with New Orleans Public Service and with Nelson and Company, and his participation in local civic affairs.

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BUILDING NEW ORLEANS, THE ENGINEER'S ROLE

A collection of writings by James S. Janssen, first published by Waldemar S. Nelson and Company in its newsletter, the CONSULTANT, will be available in book form in October. Copies may be ordered directly from the publisher by using the order form below or may be secured at several New Orleans book stores.

Waldemar S. Nelson and Company
1200 St. Charles Avenue
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LES Annual Meeting Registration Radisson Hotel — Shreveport, LA October 21-24, 1987

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Friday Luncheon	\$10.50	_____	_____
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Saturday Breakfast	\$ 7.75	_____	_____
Ladies			
Thursday - Day at the Races with Lunch	\$10.00	_____	_____
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	TOTAL	=====	=====

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Shreveport, LA, October 21-24, 1987**

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General Program

REMEMBER: October 24, 1987 is Election Day. You may want to vote absentee.

Wednesday, October 21, 1987

- 11:00 a.m. - 5:00 p.m. Registration
- 11:30 a.m. - 5:00 p.m. Golf Tournament, Huntington Park Golf Course
- 2:00 p.m. - 5:00 p.m. Tennis Tournament, The Riverside Swim & Tennis Club
- 6:30 p.m. - 7:30 p.m. Cocktails - Hosted by Shreveport Chapter
- 7:30 p.m. Dinner on your own

Thursday, October 22, 1987

- 8:00 a.m. - 5:00 p.m. Registration
- 8:30 a.m. - 10:00 a.m. Seminar: "Getting What You Ask For—The Engineer and Specifications." Conducted by Construction Specifications Institute (CSI)
- 10:30 a.m. - 12:00 Noon Seminar: "Computer Aided Design," Conducted by ARKLA Energy Resources, Inc. and The Trane Company at ARKLA's new Training Center
- 10:30 a.m. - 3:00 p.m. Council of Deans
- 12:00 Noon - 1:30 p.m. Lunch on your own
- COMMITTEE MEETINGS
- 1:30 p.m. - 3:00 p.m. Membership
- 1:30 p.m. - 3:00 p.m. Engineering Education
- 1:30 p.m. - 3:00 p.m. Career Guidance
- 3:00 p.m. - 3:30 p.m. Coffee Break
- 3:30 p.m. - 5:00 p.m. Liaison State Board of Registration
- 3:30 p.m. - 5:00 p.m. Public Relations
- 3:30 p.m. - 5:00 p.m. Ethics and Professional Conduct
- 3:30 p.m. - 5:00 p.m. Political Action Committee
- 3:30 p.m. - 5:00 p.m. Long Range Planning Committee
- 6:30 p.m. - 7:30 p.m. Cocktails - Hosted by Red River Supply Inc., and Kohler Company
- 7:30 p.m. Dinner on your own

Friday, October 23, 1987

- 8:00 a.m. - 2:00 p.m. Registration
- 8:30 a.m. - 10:00 a.m. Seminar: "Stamp This For Me" - Scenarios involving proper use of the P.E. seal, Conducted by Paul Landry, P.E., Executive Secretary, State Board of Registration
- 10:00 a.m. - 10:30 a.m. Coffee Break
- COMMITTEE MEETINGS
- 10:30 a.m. - 12:00 Noon Inter-Society Relations
- 10:30 a.m. - 12:00 Noon Constitution and Bylaws
- 10:30 a.m. - 12:00 Noon Legislative
- 10:30 a.m. - 12:00 Noon Young Engineers
- 10:30 a.m. - 12:00 Noon Scholarship
- 12:15 p.m. - 2:00 p.m. Luncheon - Speaker: T. Dudley Hixson, P.E.
- 2:15 p.m. - 4:15 p.m. Practice Division Meetings
- 4:00 p.m. - 5:00 p.m. Louisiana Engineering Foundation
- 4:30 p.m. - 5:00 p.m. Chapter President's Conference
- 6:30 p.m. - 7:30 p.m. Cocktails (Cash Bar)
- 7:30 p.m. Installation Banquet

Saturday, October 24, 1987

- 8:00 a.m. - 9:30 a.m. Breakfast (Ladies and Men)
- Combined Breakfast and General Membership Meeting
- 9:30 a.m. LES Board of Direction Meeting

Ladies Program

Wednesday, October 21, 1987

- 11:00 a.m. - 5:00 p.m. Registration
- 11:30 a.m. - 5:00 p.m. Golf Tournament, Huntington Park Golf Course
- 2:00 a.m. - 5:00 p.m. Tennis Tournament, The Riverside Swim & Tennis Club
- 6:30 p.m. - 7:30 p.m. Cocktails
- 7:30 p.m. Dinner on your own

Thursday, October 22, 1987

- 8:00 a.m. - 5:00 p.m. Registration
- 8:00 a.m. - 5:00 p.m. Hospitality Suite Open
- 11:00 a.m. - 4:00 p.m. Ladies Day at the Races - Louisiana Downs*
- 6:30 p.m. - 7:30 p.m. Cocktails - Hosted by Red River Supply Inc., and Kohler Company
- 7:30 p.m. Dinner on your own

* Luncheon at Louisiana Downs - Deli sandwiches and fruit in suite with a cash bar. The mini-bus will depart from the hotel at approximately 11:00 a.m. and return following the 6th race, approximately 4:00 p.m. Proper attire is required (no jeans or tennis shoes, please).

** Polynesian buffet luncheon at Kon Tiki Restaurant with cash bar. Following the

Friday, October 23

- 8:00 a.m. - 2:00 p.m. Registration
- 8:00 a.m. - 5:00 p.m. Hospitality Suite Open
- 11:00 a.m. - 3:30 p.m. Luncheon and Tour**
- 6:30 p.m. - 7:30 p.m. Cocktails (Cash Bar)
- 7:30 p.m. Installation Banquet

Saturday, October 24, 1987

- 8:00 a.m. - 9:30 a.m. Breakfast
- 8:00 a.m. - 12:00 Noon Hospitality Suite Open
- 9:00 a.m. - 10:30 a.m. Arts & Crafts (Ideas for your home)

luncheon will be a tour of the American Rose Center.

Join us in the hospitality suite. Door prizes will be drawn on Thursday and Friday. The hospitality suite will remain open during activities away from the hotel for anyone not attending planned activities.

LES Sponsored Seminars for 1987

"Getting What You Ask For—The Engineer and Specifications"

Speakers from the Construction Specifications Institute (CSI) will present this seminar tailored to familiarize the engineer with the availability of standardized documents for project control. Specifications, whether formally written or not, are the basis for *all* purchases. Display will include both printed and electronic versions of the system as well as correlations to various cost estimation methods and the Sweet's Catalog System.

"Computer Aided Design"

This seminar will be conducted by representatives of ARKLA Energy Resources, Inc. and the Trane Company at ARKLA's new training center and will familiarize the engineer with various computerized design, drafting and HVAC automation equipment and software.

Demonstrations will include design of piping, ductwork and control systems and use of that information to prepare design drawings and specifications. Also the Trane Trace Economics program will be used to estimate life cycle cost and energy consumption of equipment selected.

"Stamp This For Me" - Scenarios involving proper use of the P.E. Seal

Paul L. Landry, P.E., Executive Secretary to the Louisiana State Board of Registration for Professional Engineers and Land Surveyors will explain the proper use of the professional engineer's seal, its legal significance when properly affixed to documents, and answer questions concerning the proper use of the seal.

Specific questions should be submitted in scenario form and with sample documents if appropriate at time of registration for convention.

Program

Wednesday, September 23, 1987

4:00 p.m. - 6:00 p.m. Registration
6:00 p.m. - 7:30 p.m. Welcome Reception
7:30 p.m. Dinner on your own

12:00 Noon - 1:30 p.m. Luncheon
1:30 p.m. - 5:00 p.m. Seminar - "Efficient Technical Writing"
7:00 p.m. - 10:00 p.m. Riverboat Cruise

Thursday, September 24, 1987

8:00 a.m. - 12:00 Noon Registration
8:30 a.m. - 9:00 a.m. Welcome, Louisiana Engineering Society
9:00 a.m. - 9:30 a.m. Report on Annual Meeting
9:30 a.m. - 10:30 a.m. Report on NSPE Legislative Activities
10:30 a.m. - 10:45 a.m. Coffee Break
10:45 a.m. - 12:00 Noon Discussion on Tort Reform

Friday, September 25, 1987

9:00 a.m. - 11:00 a.m. State Report, Practice Division Reports, General Discussion
11:30 a.m. - 1:00 p.m. Lunch on your own
1:00 p.m. - 4:00 p.m. Young Engineer Forum
4:00 p.m. - 4:15 p.m. Wrap Up and Adjourn

Ladies Program

Thursday, September 24, 1987

8:00 a.m. - 5:00 p.m. Hospitality Suite
9:30 a.m. - 11:00 a.m. French Quarter Tour
Lunch on your own

Friday, September 25, 1987

8:00 a.m. - 4:00 p.m. Hospitality Suite



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Fracture Mechanics

Theories of material failure, especially new materials such as ceramics and fiber reinforced composites. Typical practical problems of light structures in aerospace and electronics. Mondays and Wednesdays, 7:00-8:15 p.m.

Radiation Heat Transfer

A classical course incorporating the latest research in the field. Radiative properties of surfaces and participating media, interaction with conduction and convection and analytical methods for computing transfer between surfaces. Tuesdays and Thursdays, 5:30-6:45 p.m.

Tulane

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Robotic Systems I

Classification, terminology and evaluation of robotic systems. Kinematic description, coordinate systems and machine vision. Path planning, dynamics and control of robot systems. Economic and sociologic considerations. Mondays and Wednesdays, 5:30-6:45 p.m.

Power Plant Technology

The hydro-thermodynamics of electrical power plants. The maximum-work function. Heat exchangers and the thermodynamics of fuel combustion. Steam generators, condensate-feedwater and circulating water systems, turbines, gas turbines and combined cycles, energy storage and environmental considerations. Tuesdays and Thursdays, 5:30-6:45 p.m.

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Terry Gaudet & Associates, Inc.
Lafayette, La.



Alexandria Chapter President
R.L. "Rick" Nowlin, P.E.
Nowlin, Peterson, Farmer &
Associates, Inc.
Natchitoches, La.



Monroe-West Monroe Chapter President
Jerry M. Madden, P.E.
S.E. Huey Co.
Monroe, La.



Shreveport Chapter President
Joe E. Roach, P.E.
BaLaR Associates, Inc.
Shreveport, La.



Lake Charles Chapter President
W. J. Lechtenberg, Jr., P.E.
Lechtenberg Engineers, Inc.
Lake Charles, La.



Consulting Engineers Section Warren J. Wilder CEC/L Executive Director



Arthur E. Meyer, Jr., P.E. - A Profile

Arthur E. Meyer, Jr., P.E., Alexandria, was installed as the 1987-1988 president of Consulting Engineers Council of Louisiana, Inc. (CEC/L) at the organization's recent Annual Meeting in New Orleans.

Meyer is Secretary-Treasurer and Civil Division Director of Meyer, Meyer, LaCroix & Hixson, Inc., Consulting Engineers and Land Surveyors, Alexandria, Louisiana. He received his Bachelor of Science degree in Civil Engineering from Louisiana Polytechnic Institute in 1956 and served as a Civil Engineering Officer in the United States Air Force in the latter 1950s. Meyer is a Registered Professional Civil Engineer in Louisiana and Texas and is a Louisiana Registered Land Surveyor. He is also a certified fallout shelter analyst. He has served on the CEC/L Board of Governors as president of the Alexandria Chapter, Member-at-Large, Secretary, Treasurer, Vice President, and President-Elect and has served on several important committees during those years including Ways & Means Committee (chairman), the Legislative Committee, Rule 1 Ad Hoc Committee, and the Joint Professional Societies (CEC/L - LES - ASCE) Committee. He is a member of the National Society of Professional Engineers and the Louisiana Engineering Society (past president of the Alexandria Chapter). Meyer is past state chairman of the Louisiana Engineering Society's

Engineers in Private Practice division and LES/PEPP Wage Determination Committee and is active in the American Society of Civil Engineers. He is a past member of the NSPE Construction Grants & Loan Committee and served on the Budget Finance Committee of the American Consulting Engineers Council in 1984 and 1986. He is a professional member of the Construction Specifications Institute, associate member of the Society of Military Engineers, and a member of the Louisiana Airport Manager's Association. He is certified to perform value analyses of engineering projects.

Meyer is a member of the Central Louisiana Chamber of Commerce. He is chairman of the Streets & Highways Committee and is past chairman of the Chamber's Aviation Committee. He is a member of the Alexandria Exchange Club (board member, 1987-1989) and the Alexandria Golf & Country Club (president, 1980 and 1981). He was recently honored as the 1987 Executive of the Year by the LaPine Chapter of Professional Secretaries International. He is a licensed active private pilot. Meyer and his wife, the former Karen K. Burnham, have five children.

"Art Meyer assumed the presidency of this Council on June 1st. He jumped right in to provide the continuity of activity that is essential in any association," says Warren Wilder, CEC/L's Executive

Director. "Since the administrative year begins in early June, it is a difficult task for the new officers to maintain this continuity because of the level of involvement of the Council at that time, especially with regards to the legislative session which, by June, has shifted into high gear. Art never batted an eye and immediately appointed several active committees and advised them to carry on. He has some excellent mentors and apparently learned well from the experiences of several of our past presidents. He has the best interest of the Council in mind and has taken the reins to ensure that CEC/L does not stall."

Meyer has informally indicated several priorities this year, one of which is membership development. He has already "encouraged" his Membership Committee and the Exec to aggressively solicit new members to sustain the Council. Wilder has mentioned, "Louisiana is still suffering through difficult economic times and the design community is no exception. This makes membership retention and development a most challenging task, but with Art's enthusiasm, the task takes on a positive perspective. He wants his board to work for the membership, to set positive examples for the members. Positive is the one word, I believe, that sums up Art Meyer. He accepts nothing less."

Biographical Sketches of the Board Members

CHARLES S. HEDGES, P.E. is Chief Engineer of Soil Testing Engineers, Inc., Baton Rouge, Louisiana, a multi-discipline consulting firm specializing in geotechnical engineering, groundwater engineering, and waste engineering. He was graduated from Georgia Institute of Technology in 1956 with a Bachelor of Civil Engineering and in 1961 with a Master of Science in Civil Engineering. He specializes in geotechnical engineering. Hedges has been elected to serve CEC/L as its President-Elect. He has served in the past as president of the New Orleans Chapter, Member-at-Large, Secretary, Treasurer, and Vice President. He is a member of the Louisiana Engineering Society, the American Society for Testing and Materials, International Society for Soil Mechanics and Foundation Engineering, American Society of Civil Engineers and American Society for Quality Control. He is also a member of Sigma Xi, honorary research fraternity. He and his wife, Patricia, a practicing attorney, have three children. Hedges is a licensed engineer in Louisiana, Mississippi, Illinois, Georgia and Florida.

GERALD A. DUBROC, P.E., is president of Sellers, Dubroc & Associates, Inc., Lafayette, Louisiana, a consulting engineering firm specializing in civil engineering, planning and land surveying. He has been elected to serve CEC/L as Vice President. Dubroc received his Bachelor of Science degree in Civil Engineering from the University of Southwest Louisiana, Lafayette, in 1960. He holds membership in the Louisiana Engineering Society, National Society of Professional Engineers, LES/PEPP, Louisiana Society of Professional Surveyors, American Public Works Association, and the Water Pollution Control Federation. Dubroc is also a member of Tau Beta Pi and Phi Kappa Phi. He is a

former member of the Lafayette City and Regional Planning Commission and is a member of the Greater Lafayette City and Regional Planning Commission and is a member of the Greater Lafayette Chamber of Commerce. He has served on the CEC/L board as Lafayette Chapter president for two consecutive years, Secretary, and Treasurer. Dubroc served on the Professional and Ethical Conduct Committee of the American Consulting Engineers Council. He is a member of the USL Alumni Association and the USL Ragin' Cajun Club and holds membership in the City Club of Lafayette, Oakbourne Country Club and LeTriomphe Country Club. He and his wife, Diana, have six children. Dubroc is registered to practice engineering in Louisiana and Mississippi, and surveying in Louisiana.

RALPH W. JUNIUS, JR., P.E., has been elected to serve on the Board of Governors as Treasurer, having previously served as Secretary and Member-at-Large. Junius has been Chairman of the Legislative Committee for the past three years and is a past president of the New Orleans Chapter. He is a partner in long established New Orleans consulting firm of Linfield, Hunter and Junius, Inc. The firm provides a wide range of engineering and architectural services to industry, government, and commercial businesses as well as expert services to insurance companies and attorneys. Junius was graduated from Tulane University in 1970, University of Illinois in 1972 and Louisiana State University in 1974 with degrees of Bachelor of Science in Civil Engineering, Master of Science in Engineering and Juris Doctor respectively. He is a member of the Louisiana Engineering Society, National Society of Professional Engineers, American Society of Civil Engineers, American Society of Testing and Materials, and Tau Beta Pi Association. He is also a

member of the Louisiana Bar Association and Southern Yacht Club. He and his wife, the former Sandra Perrone, have five children.

CHARLES G. COYLE, P.E., has been elected Secretary of CEC/L. He has served two terms on the Board of Governors as Member-at-Large. He is president of Coyle Engineering Co., Inc., Bossier City, Louisiana. He was graduated from Louisiana Tech University in 1968 with a Bachelor of Science degree in Civil Engineering and is licensed to practice in Louisiana. He is a member of the Louisiana Engineering Society and the National Society of Professional Engineers. He and his wife, Sheila, have two children. Coyle serves on the Board of Directors of the Greater Bossier Economic Development Foundation, a member of the North Bossier City Levee District, and is an elder of the Cottage Grove Presbyterian Church. Coyle's firm specializes in the design of streets, roads, drainage, water collection distribution and treatment facilities, surveying and foundation design and structural design.

LARRY A. MCKEE, P.E., is concluding several years of service on the CEC/L Board of Governors by serving as its National Director. Last year, he was president of the Council. McKee is owner and Chief Executive Officer of Professional Engineering Consultants Corporation, a multi-discipline, Baton Rouge based consulting engineering firm specializing in civil engineering for municipalities, and structural, sanitary, drainage, flood control, highways, and bridge projects. He was graduated from Louisiana State University in 1958 with a Bachelor of Science degree in Civil Engineering and holds professional licenses in Louisiana, Mississippi, Missouri, Texas, and Alabama. McKee holds membership in a number of other professional organ-

izations including the American Society of Civil Engineering (Past President, Louisiana Section), Louisiana Engineering Society, American Society of Military Engineers, and the Water Pollution Control Federation. He served as 1983-1984 Baton Rouge Chapter president of the Louisiana Engineering Society and has served this Council as Secretary, Treasurer, Vice President, President-Elect, and President. He is also an honor member of Chi Epsilon. McKee served on the Board of Directors for the Baton Rouge Chamber of Commerce and was chairman of the Education Committee for the Chamber. He is a member of the Advisory Committee of the LSU Department of Civil Engineering, a member of St. John's United Methodist Church, and the Baton Rouge Rotary Club. McKee served last year as chairman of the LES Legislative Committee. He and his wife, B. J., have two children.

RICHARD A. VAN WOOTTEN, P.E., is Senior Vice President - Engineering Operations of Walk, Haydel & Associates, Inc., New Orleans, Louisiana, a multi-discipline consulting engineering firm specializing in industrial plant designs, and the design of deep water terminals, fertilizer facilities, docks, paper and pulp mills, and petroleum and gas producing facilities. Walk, Haydel & Associates, Inc. maintains branch offices in Baton Rouge, Louisiana and Mobile, Alabama. A registered Louisiana civil engineer, Van Wootten was graduated in 1957 from Rensselaer Polytechnic Institute, Troy, New York, with a Bachelor's degree in Civil Engineering. He holds membership in the Louisiana Engineering Society, National Society of Civil Engineers, and the American Society of Civil Engineers. Van Wootten is married to the former Linda McIlvain and they have a son, Peter, and a daughter, Wendy. Previously serving on the 1984-1985 board as New Orleans Chapter president, he has been reelected to serve CEC/L a second year as Member-at-Large.

MORGAN M. WATSON, P.E., was born in St. Joseph, Louisiana in 1943, and attended public schools in Tensas Parish, graduating from Tensas Rosenwald High School as Valedictorian in 1961. He attended Southern University on an academic scholarship, graduating in 1966 with a Bachelor of Science degree in Mechanical Engineering. While in college, he participated in various activities including a full year as co-op student at Marshall Space Flight Center, Huntsville, Alabama, honor student, and was selected for *Who's Who Among Students in American Colleges and Universities*. After passing his EIT in 1966, Watson became a P.E. in 1971, and organized MEL, Inc. in 1972 after realizing that absolutely no opportunities existed for blacks and minorities as engineers in private practice. Presently, MEL, Inc. is among the four largest minority-owned consulting engineering firms in the country, and among the largest in the state of Louisiana. Watson is married to the former Helen Johnson of Newellton, Louisiana, and is the father of their three children. He has served on the CEC/L Board of Governors as Member-at-Large and as the Baton Rouge Chapter president for two consecutive years. He has been elected this year to serve again as Member-at-Large.

JAMES M. POCHÉ, P.E., has been elected Member-at-Large after having served on the board as the Lafayette Chapter president for the past two years and another term several years ago. He received his Bachelor of Science degree in Mechanical Engineering from the University of Southwest Louisiana, Lafayette, Louisiana, in 1970. Poché is president of Poché Associates, Ltd., a Lafayette engineering firm offering services in energy management and mechanical and electrical engineering for private and public residential, commercial, educational, institutional and industrial buildings and complexes. He is also affiliated with ASHRAE, AEE, the Louisiana Engineering Society, National Society of Professional Engineers, and the Louisiana Architects Association. Poché is a member of the Lafayette Chamber of Commerce, was United Givers Fund Section Chairman, and is an

active member of the American Consulting Engineers Council's Energy Committee. Two years ago, he served as chairman of the Louisiana Engineers Selection Board, a board empowered to award state agency contracts to engineering firms. Poché is married to the former Linda DeRousele and they have two teenage children.

H. DARRYL MILLER, P.E., has been elected to serve on the Board of Governors as Baton Rouge Chapter president. He is president of Ecotech, Inc., a Baton Rouge based consulting firm specializing in geohydrology, groundwater monitoring, environmental engineering and design and preparation of permit applications. Areas of expertise are solid and hazardous waste. Miller was graduated from Youngstown State University and West Coast University with a Bachelor of Engineering in 1962 and a Master of Science degree in 1970 respectively. He is a member of several other professional organizations including the American Society of Civil Engineers, Water Pollution Control Federation, and the American Society of Military Engineers. Miller is licensed to practice engineering in Louisiana, Texas, Mississippi, Ohio, and New Jersey. He and his wife, Molly, have two children.

FRANK C. FROMHERZ II, P.E., is Vice President of Fromherz Engineers, Inc., New Orleans, La., a multi-discipline consulting firm in the fields of civil, structural, mechanical, and electrical engineering. He was elected to serve as the New Orleans Chapter president and represents that chapter on the Board of Governors. He was graduated from Tulane University in 1970 with a Bachelor of Science degree in Civil Engineering and from the University of Florida in 1971 with a Master of Engineering degree in Environmental Engineering. A Registered Civil Engineer in Louisiana, Fromherz is a member of the American Society of Civil Engineers, National Society of Professional Engineers, and the Air Pollution Control Association. He is a member of LaFreniere Kiwanis Club, an officer in the United States Air Force Reserve, a member of Tau Beta Pi, and a former Fellow to the Salsburg Seminar in American Studies. Fromherz and his wife, Sally, have one child.

J. TERRY GAUDET, P.E., Lafayette, Louisiana, was elected president of the Lafayette Chapter and is that chapter's representative on the Board of Governors. He is president of Terry Gaudet & Associates, Inc., a firm offering mechanical and electrical engineering services. Gaudet was graduated from Louisiana State University in 1959 with a Bachelor of Science degree in Mechanical Engineering. He is licensed to practice engineering in Louisiana, Mississippi, Texas, and Oklahoma. Gaudet is a member of the National Society of Professional Engineers, ASHRAE, Louisiana Engineering Society, American Hospital Association, American Jail Association, and the American Institute of Architects. He is a member of the Rotary South Club, Fatima Knights of Columbus, City of Lafayette Air Conditioning Board, and the Dioceses of Lafayette Building Review Board. From the latter 1960s to the mid 1970s, Gaudet served several consecutive years on the board as Lafayette Chapter president. He and his wife, Beverly, have two children.

R. L. "RICK" NOWLIN, P.E., has been reelected as Alexandria Chapter president to serve his second year on the Board of Governors. He is president of Nowlin, Peterson, Farmer & Associates, Inc., Natchitoches, Louisiana, a multi-discipline consulting engineering firm that offers general engineering services including feasibility studies, design, planning and supervision on all commercial, industrial and municipal projects, including power generation, transmission and distribution, and sanitary landfill facilities. Nowlin was graduated from Louisiana Tech University with a Bachelor of Science degree in Electrical Engineering in 1971 and a Master's degree in Business Administration in 1972. He is affiliated with the National Society of Professional Engineers, the Louisiana Engineering Society, and IEEE PES. He is married to the former

Brenda Barr and they have two children. Nowlin is a member of the Natchitoches Rotary Club, Past Master and Secretary of Simcoe Walmsley Lodge No. 359, F. & M.A., Flora, Louisiana. He is on the Natchitoches Electrical Board, and is a member of the Natchitoches First Baptist Church. Nowlin's firm serves as City Engineer for Natchitoches.

JERRY M. MADDEN, P.E., is an Associate and Senior Civil Engineer and Architect in the firm of S.E. Huey Co., Monroe, Louisiana, an established consulting engineering firm offering route and property surveys, commercial and industrial buildings, bridges, highways, industrial and municipal water and waste treatment, and land development. He has been reelected by the Monroe-West Monroe Chapter to serve as its president, a position he held several years ago. Madden was graduated from Louisiana Tech University in 1966 with a Bachelor of Science degree in Civil Engineering. He is licensed to practice engineering in Louisiana, Texas, Mississippi, Oklahoma, and Arkansas, and is a licensed architect in Louisiana. He is also a Registered Land Surveyor in Louisiana, Texas, and Arkansas. He is a member of the Louisiana Engineering Society, American Society of Civil Engineers, A.C.I. Construction Specifications Institute, and the American Institute of Architects. He holds membership in Tau Beta Pi. Madden is married to the former Gloria Camp and they have one child.

JOE E. ROACH, P.E., is Vice President of BaLaR Associates, Inc., a Shreveport, Louisiana based consulting engineering firm offering general civil engineering including structural and sanitary engineering. He was reelected to serve on the Board of Governors as the Shreveport Chapter president. Roach is a graduate of Louisiana State University with a B.S. degree in Civil Engineering. He is a Registered Professional Civil Engineer in Louisiana, Arkansas, and Texas and has been practicing civil engineering since 1960. After graduation, his experience background included the United States Corps of Engineers and the American Oil Company prior to joining J.S. Boyd and Associates, Consulting Engineers in 1962. J.S. Boyd and Associates was later reorganized as BaLaR Associates, Inc. in 1968, and at that time he became a partner in the firm. His specialties include structural design, water and sanitary sewerage facilities design, and paving and drainage designs. He is a Registered Land Surveyor in the State of Louisiana and is a member of the American Society of Civil Engineers, Louisiana Engineering Society, National Society of Professional Engineers, Professional Engineers in Private Practice, American Water Works Association, Water Pollution Control Federation, Construction Specifications Institute, and the Louisiana Conference on Water Supply and Sewerage and Industrial Waste.

W. J. LECHTENBERG, JR., P.E., is President of Lechtenberg Engineering, Inc., and a partner in D L & L Computer Drafting Service, both in Lake Charles, Louisiana. He was graduated from McNeese State University with a Bachelor of Science degree in Electrical Engineering. Since graduation he has worked with four engineering firms in private practice serving industrial, commercial, and institutional clients. He worked as Area Manager for an Electrical Construction company for three years prior to going into private practice in 1981. Lechtenberg's professional affiliations include the National Society of Professional Engineers, Louisiana Engineering Society (Past Chapter President), ISA, IES, and is currently serving on the Board of Directors for the Chamber/Southwest and has held many committee assignments. He is currently Chairman of the Examining Board for Electrical Contractors for the City of Lake Charles. Lechtenberg has worked with community industrial development serving on facility committees for the Navy Homeport Project and the reactivation of the Chennault Industrial Airpark/Boeing Project. He is married to the former Donna Myers of Sulphur and they have three children.



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



1987 Legislative Report

The 1987 Regular Session of the Louisiana Legislature has enacted into law two bills that directly impact engineers and land surveyors. Both bills were supported by the Louisiana Engineering Society and the Louisiana Society of Professional Surveyors, as well as the State Board of Registration. The Louisiana Engineering Society and the Louisiana Society of Professional Surveyors both owe a great debt of gratitude to Representative Manny Fernandez who skillfully piloted one bill through the Legislature and miraculously resurrected the other bill after it had been tabled.

House Bill No. 892 by Fernandez is now law and standardizes the requirements for registration as a Land Surveyor. In short, after a phase-in period of eight years, all applicants for registration as Land Surveyors will be required, among other things, to have a Baccalaureate Degree, thirty semester hours of Land Surveying, Mapping and Real Property Courses; and four years experience in Land Surveying. This bill also corrected some technical problems with existing law.

Senate Bill No. 390 by Casey, was signed into law by the Governor and defines the appointment and terms of the members of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, provides for disciplinary action and related matters. This bill increases the flexibility and investigatory authority of the Board.

Copies of House Bill No. 892 (4 pages) and Senate Bill No. 390 (5 pages) can be obtained from Mrs. Carolyn East, Louisiana Society of Professional Surveyors, 6141 Parkforest Drive, Baton Rouge, Louisiana 70816, at a cost of \$1.00 per page.

Examination Results

Board members, registrants, and examinees (especially examinees who have failed an examination), have expressed concern over the results of the examinations.

The Board policy is to release only a pass or fail grade directly to the examinee. The Executive Secretary is not authorized to release any detailed results of an examination. Having said this, I

believe it may be helpful to past and future examinees if I give you my opinion and generalizing on the examination results.

Taking any examination without preparation or organization of the material is not a very good idea. Organization of the material is a necessity if one is to pass any examination administered by the Board. Reference material is a necessity for the open-book examinations.

Sitting eight hours for an examination is a demanding exercise. One should be prepared to experience a long, long day. One has less than one hour for lunch and no place to go which is convenient; therefore, having one's lunch and coffee will then permit an examinee to concentrate on passing the examination.

What has been the results of the past examinations administered by the Board? The passing rate has varied from 15% to 90%, depending upon the examination. The overall passing rate for all branches of engineering administered to applicants in the State of Louisiana on the April 11, 1987 examination was over 70%. In the past two or three examination cycles, the rate has been as low as

50%. The passing rate for Land Surveyor applicants has been, and continues to be, around 50%. The passing rate for Land Surveyors-In-Training and Engineers-In-Training has been, and continues to be, over 70%.

I would encourage applicants who have failed an examination to reapply whenever they become eligible. Taking and failing such an important examination is a most discouraging experience. If you know someone who was not successful in passing the required examination, give him or her a word of encouragement. This may be just what your associate or friend needs. If you know someone who will be taking an examination for the first time, urge him or her to spend time getting ready for the examination. The examinations are very tough if one is not properly prepared.

Continued on page 18

BOARD MEETING NOTICE

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

1987

Sept. 22
Nov. 17

1988

Jan. 26-27 July 26
Mar. 22 Sept. 27
June 7 Nov. 15

EXAMINATION SCHEDULE and APPLICATION DEADLINE DATES

EXAMINATION	SPRING		FALL	
	Application Deadline Date	Examination Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	Jan. 15, 1988	Apr. 16, 1988	Aug. 7, 1987	Oct. 31, 1987
Principles and Practice Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	Jan. 15, 1988	Apr. 16, 1988	Aug. 7, 1987	Oct. 31, 1987
Agricultural, Industrial, Metallurgical, Mining & Petroleum	NOT AVAILABLE		Aug. 7, 1987	Oct. 31, 1987
Fundamentals of Land Surveying Examination (8 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Principles and Practices of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 8, 1987	Oct. 31, 1987
Laws and Procedures of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	NOT AVAILABLE	

Apply at least six to eight months prior to an examination. Board approval must be given for anyone to be scheduled for an examination.

The applicant and the Board depend upon information provided by third parties in the processing of an application, therefore no assurance can be given that one will be scheduled for a specific examination.

Application Deadline date means that an application **must** be postmarked prior to or on the date specified so as to be given **consideration** for the examination. The Board may schedule an applicant for an examination later than that requested by the applicant. The Board cannot guarantee that the applicant will be scheduled for the examination initially requested.

What's In It For Me?

[Continued from the June 1987 *Notre Metier, Louisiana Engineer*]

How many of you went out of your way to meet one of the following after my brief introduction to them a couple of months ago?

Allen, Todd R., Metairie; Bartell, John B., Lafayette; Dao, Thi H., Gretna; Derby, Joel E., III, New Orleans; Drewes, Mark Richard, Metairie; Dubrock, Mark B., Lafayette; Erwin, Kay, New Orleans; Folse, Steve D., Baton Rouge; Gallodoro, Dale Victor, Kenner; Hingle, Jack Henry, New Orleans; Hugel, Michael Pual, Metairie; Irwin, Bill R., Denham Springs; Jordan, Bruce Max, New Orleans; Langlinais, John, Lafayette; Mogharehabed, Hossain, Metairie; Morecraft, Andrew J., New Orleans; Norris, John D., LaPlace; Prewitt, Charles E., New Orleans; Roseboom, Kenneth Wayne, Broussard; Savoy, Mark, Breau Bridge; Schroeder, Kenneth Ray, New Orleans; Speck, Gerald E., New Orleans; Sunderland, Jeffrey John, Youngsville; Tran, Canh N., New Orleans; Venable, Scott, Church Point; Wafer, Doug, Baton Rouge; Wheeler, Gerald E., Slidell; Willis, Jeffrey S., Lafayette.

These professionals did not ask the question, "What's in it for me?" when they were asked to **serve** you. How did they serve you? They all sat for a three-hour prototype examination on either Friday afternoon, April 24, 1987 or Saturday morning, April 25, 1987. We needed volunteers who had recently taken and passed one of the National Council of Engineering Examiners examinations so that future examinations administered to engineers could be improved. Volunteers were needed to validate an improved version of the Principles and Practice of Engineering Examination. Approximately four hundred people were contacted and the above individuals agreed to and were able to sit for the three hour examination.

What's in it for them? You ask them! The Board, the National Council of Engineering Examiners, or I had nothing to offer them. They will not even receive the results of the examination that they sat for.

Other states participated in the testing of this examination. One state, about the size of Louisiana, was able to muster but one volunteer. The probably reason is the **What's in it for me?** attitude. Please join me in thanking and saluting the above individuals who did not ask that question and came through to **serve** you.

EngiNEWS



Dr. Price Named Recipient of La. Tech Alumni Award

Dr. Bobby E. Price, Director of Undergraduate Studies and Professor of Civil Engineering, was named the recipient of the prestigious \$2,000 Louisiana Tech University Alumni Foundation Professorship Award. Dr. Price received his Bachelor of Science, Master of Science and Doctorate in Civil Engineering from the University of Texas at Arlington, Oklahoma State University, and the University of Texas at Austin, respectively. He is a Registered Professional Civil Engineer in both Louisiana and Texas and a Registered Land Surveyor in Louisiana. His main interests lie in the areas of open channel and culvert applications to water resources and fluid mechanics.

Dr. Price has received numerous awards and honors. He received the Louisiana Engineering Society 1986 Leo M. Odom Services to the Profession Award. In addition to receiving the 1987 Alumni Foundation Professorship Award, he also has received the 1987 Distinguished Service Award from the Louisiana Tech Engineering Foundation and was selected as a 1987 Favorite Professor by the Louisiana Tech Student Government Association.

Dr. Price is presently serving as President-Elect of the Louisiana Engineering Society and will assume the office of President in October 1987. He has also served as President of the ASCE Louisiana Section and the Southwest Section of the American Water Works Association.

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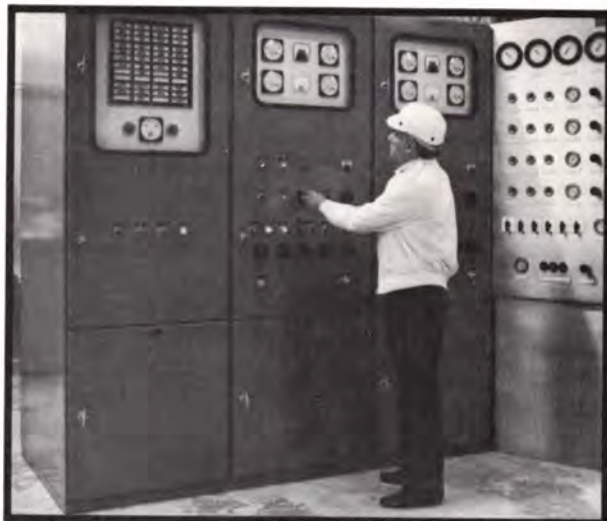


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POLITICAL CONTRIBUTIONS

Continued from page 7

Comment: This recommendation, if implemented, would significantly reduce the amount of negative publicity related to amounts given and work received.

3. NSPE formally requests that the National Council of Engineering Examiners incorporate political contribution limits into the model law, and further request that NCEE advocate the adoption of political contribution limits by all state boards of registration which will be applicable to all registrants of the respective boards.

Comment: An alternate possibility to recommendation #3 would be to require that if any individual or firm gave more than an established predetermined limit, that individual or firm could not receive any work from the governmental entity as long as the responsible elected official holds office.

4. NSPE adopt a position of support

for legislation to limit election campaign spending at the national, state and local levels and form or join in the support of existing coalitions established for the purpose of controlling election campaign spending.

As previously stated, these are some far-reaching recommendations. They are not, in and of themselves, the only answers. However, they do represent a bold starting point. It has been recognized by the NSPE-PEPP Committee and the NSPE-PEPP Board of Governors that other professions and businesses are under the same perfectly legal economic pressure to give in order to receive; but someone must take the lead. Because of our unique position in the public eye and our pledge to the highest standards of professional conduct, who better can lead the effort to bring about the much needed change, than professional engineers. To be successful we must shed ourselves of naivete, defensiveness, and the tendency to defend contract-related contributions with patriotic slogans.

BOARD MINUTES

Continued from page 5

13. The Liaison Committee has met with members of the State Board of Registration to discuss the registration of Land Surveyors. After a discussion concerning the "intent of the law" the committee recommended no further action by the Board of Direction. A proposed change to the registration law is before the Legislature this year to clarify the language in question.

14. President Blanche reported that the PEI division is accepting nominations to replace E. J. McNamara on the State Board of Registration. The replacement for McNamara must be from industry.

15. DeFraithe informed the board that the deadline for filing nominations with NSPE is May 29. LES should submit its support letters to the NSPE Nominating Committee in late August or early September. The committee will make its recommendations to the Board at a later date.

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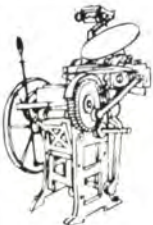


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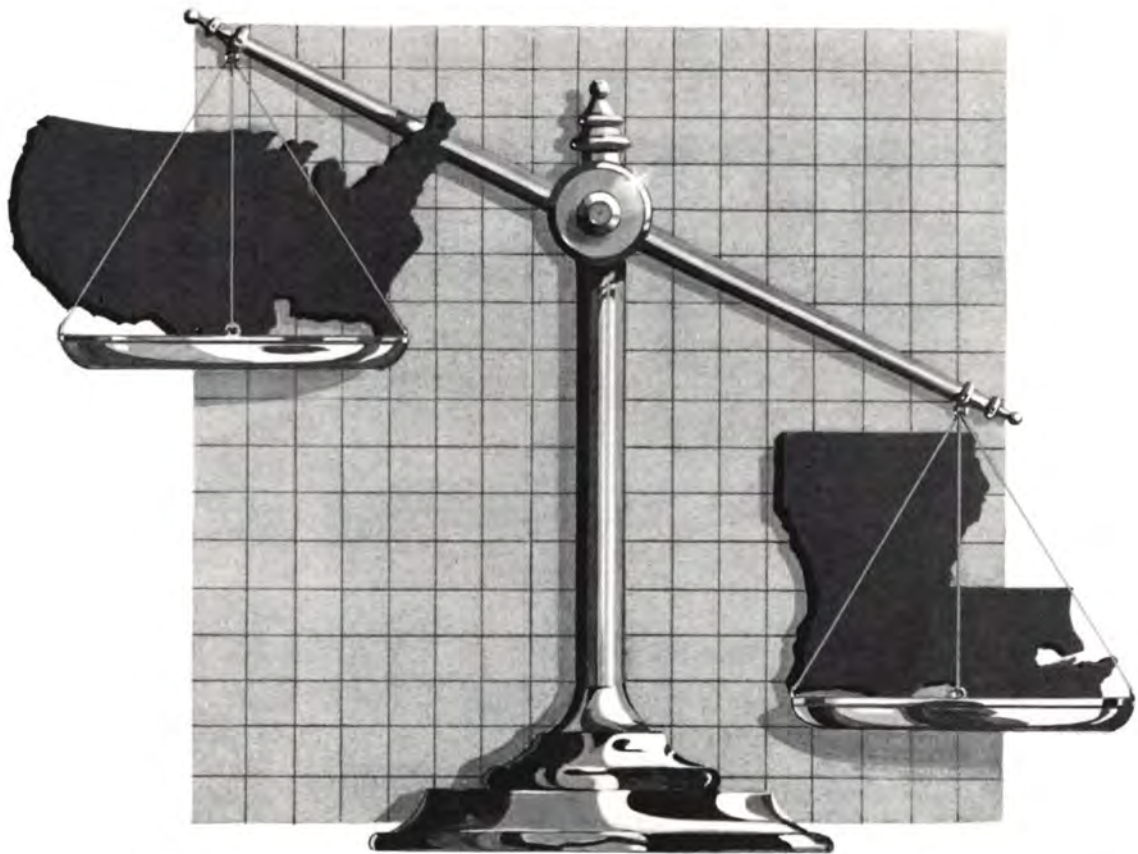
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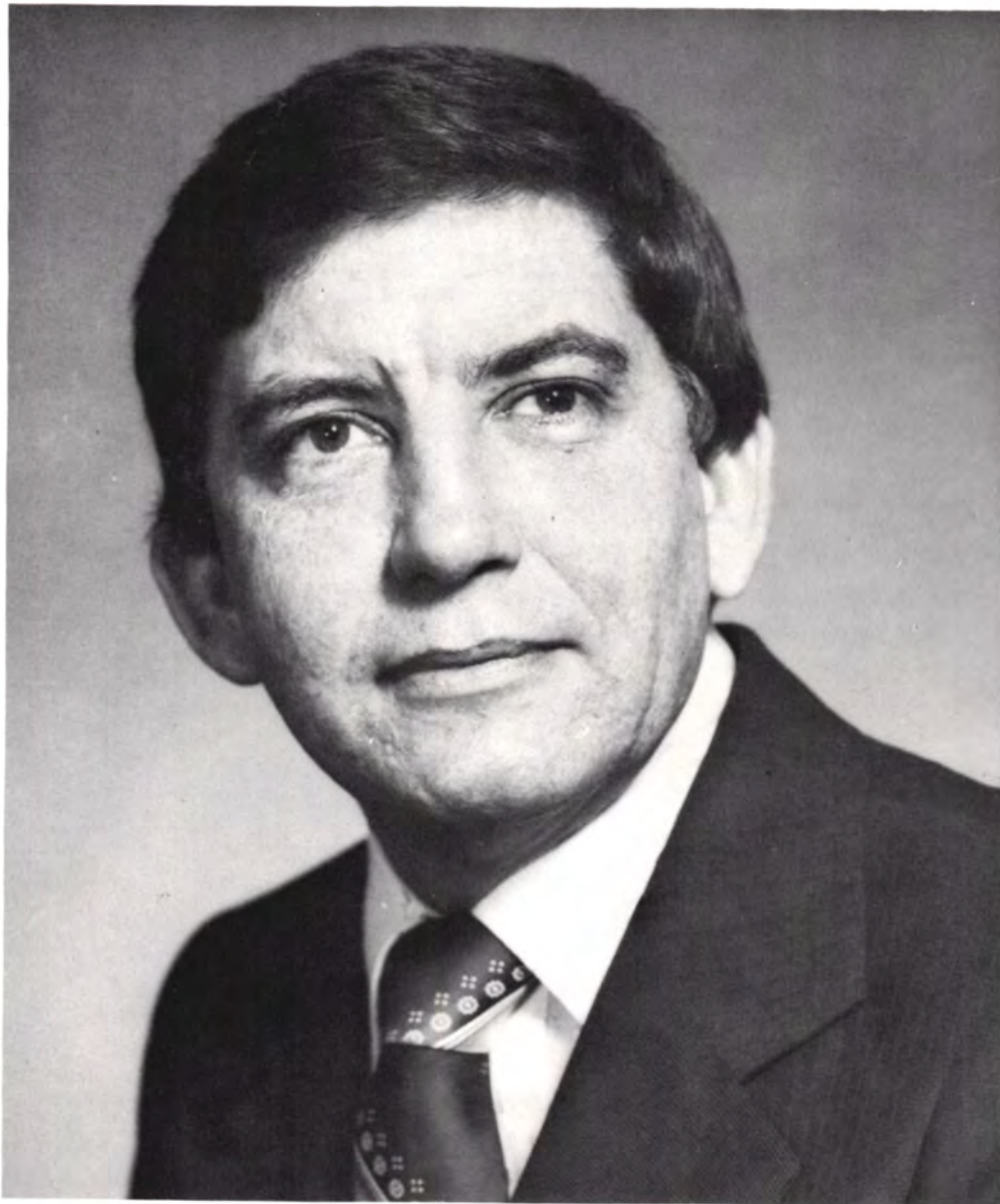
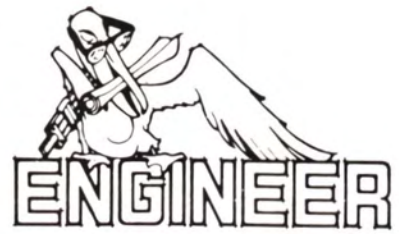
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Bobby E. Price, Ph.D., P.E., Director of Engineering Undergraduate Studies and Professor of Civil Engineering at Louisiana Tech University, is the new President of the Louisiana Engineering Society.



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A Quest for Progress

This will be the theme for the 1987-88 Administrative Year. The emphasis of the year will be to build on the activities of the past and the condition of the Louisiana Engineering Society at present. With proper planning, active involvement of our membership and a positive attitude about our opportunities, we can set our sights on moving the Society forward toward the 21st Century. I have set the following major goals for the 1987-88 Administrative Year:

Long Range Planning

The Society needs to develop a State Planning Guide to set the direction of the Society for the next several years. The planning guide would provide not only long range planning, but also medium and short range planning. The planning would establish LES's mission and goals, assess its organizational operation and effectiveness and note future involvement. We need to have more proper planning done so that we are not just moving from year to year. Our goals should be defined and be specific. The Long Range Planning Committee has been assigned the task of initiating the State Planning Guide.

Membership Development and Growth

We need to establish a definite plan on membership development and growth in which the three **R's** are emphasized: **R**ecruitment, **R**etention and **R**einvolvement. For the Society to remain a viable organization, we need the involvement of our young engineers and those engineers who have been in practice for several years. We need an effective retention program to retain those members who have joined the Society looking for the positive benefits that membership can provide. Reinvolvement is probably the most important one of the three **R's**. Regrettably, we have several members who pay their dues each year but are not involved in the activities either at the chapter or state levels. We are always going to have a group of individuals who are "joiners" but do not get involved.

Your Society took steps this year to develop incentives to help with the three **R's**. Seminars are now planned for the members at both the Annual Meeting and the Spring Awards Meeting. The Society moved its Annual Meeting in-state and from the summer to the fall



Bobby E. Price, Ph.D., P.E.
President
Louisiana Engineering Society

with the hope that this would make it more convenient for more of our membership to attend the seminars and other activities associated with the Annual Meeting. Your Society has taken on a new look with the expressed desire to emphasize that the organization is not stagnant and is responsive to the needs of its members.

Improved Society Visibility

The Society needs to be more visible to both the engineering profession and to the general public. News articles about major LES activities will be placed in all major newspapers. Approximately one week prior to each Board meeting, a news release with an accompanying photograph will be placed in the major newspaper of the chapter area where the Board is to meet. Any interested local engineers or lay persons will be invited to attend the Board meeting. The photograph may include the chapter president, perhaps another person from the chapter or the LES Executive Director or your State President. Also, to make the Society more visible, your State President plans to attend a general membership meeting in each chapter area during the year and to meet with other engineering organizations within the state. I would hope that other members of the Society will also take this approach of increasing the visibility of the Society.

Improved Communications/ Public Relations

Ways of improving our communications with other professional organizations and groups are being planned. We need to establish and/or maintain a dialogue with other groups to express our goals, activities and direction, as well as to find common grounds on which we may cooperate. We need to have closer communications with each of the Ladies Auxiliary groups within each chapter area. The auxiliaries certainly play a major role in LES activities. An adhoc committee of auxiliary members will be appointed to study and make recommendations on how the auxiliaries can better function and provide the necessary support to LES.

Positive Attitude/Image Promotion

We need to do some major work on our attitude about LES and the image that we portray to some of our membership. I hear too many comments that LES has no goals and direction, has lost contact with its membership, that membership in the organization is not worthwhile, that LES is dragging its feet, that programs are not well planned at both the chapter and state levels—causing members to either leave the organization or become uninvolved, etc., etc., etc. This administration will promote a positive attitude and will be enthusiastic throughout the year. The word "problems" will not be used. We do not have problems, only opportunities. I promise you that your President will work hard and seek out those individuals who likewise are dedicated to the Society and are willing to spend the time and effort necessary to approach the opportunities that we have. We will be promoting active involvement.

With the proper leadership, enthusiasm and dedication of your President, the chapter presidents and officers, the Board of Direction, our superb State Office Staff and our members, such as yourself, we can continue to make LES a viable organization which promotes the engineering profession and safeguards its ideals. We can begin our "Quest for Progress." I seek your support and involvement. A philosopher once said "The past is prologue." A modern day interpretation of that statement is "You ain't seen nothing yet!" **Let's get on with it!!**

Past President's Message

Robert P. Blanche, P.E.

As my 15-month term of office comes to a close, I look back on it with mixed emotions.

The disturbing fact is that it has been a tough time for the Society in terms of finances and membership. On the positive side, it has provided me the opportunity to work closely with many outstanding engineers for the benefit and future of engineering in our state.

Our membership has dropped approximately 12 percent over this period of time; however, it is my opinion that the trend of engineers leaving our state to seek employment elsewhere has run its course and that situation is now behind us. We must all seek to bring in new members to our organization in order that they might more actively participate in the future direction of our profession. With a reduction in membership we have also experienced a reduction in income, which was below that anticipated at the beginning of the year. This has required the staff and Budget Committee to spend many hours in paring down all expenses possible while still providing membership programs and services. This has had the positive effect of forcing the leadership of the Society to evaluate each and every activity as it relates to the overall aims of the Society. As a result of this process, we start the new Society year having very good control over this area of our operations.

My main goal for the year was to keep our membership informed of all our activities and to try and encourage you to participate in development of worthwhile programs. I trust that I have accomplished this through the Presidential Privilege column of the *Louisiana Engineer*.

The enthusiasm exhibited at the Planning Conference this September needs to be carried forward into action throughout the state this year. It was gratifying to see so many new faces and people who are eager to work with the Society for the betterment of our profession.

Nowhere has active participation been more evident or gratifying than in the MATHCOUNTS program. The magnitude of the program has grown to the point where each chapter has been required to involve a major portion of our

active Society members in administering the test. I encourage everyone who has not been involved in MATHCOUNTS to volunteer this year. The results and improvements shown in this year's contestant's, both statewide and at the national level, speak well of the dedication and interest that our Society's MATHCOUNTS leadership has provided. The major financial support provided by many organizations and led by the investor-owned electric utilities throughout our state enable us to continue to provide an outstanding program.

The Louisiana State Board of Regents' study on undergraduate engineering education provided a focus on the importance of engineering within our state. The outcome proved to be disappointing due to the fact that politics and the politicians won out over the more important goal of providing engineering excellence within our college programs.

Your Society's Long-Range Planning Committee continues to work towards the goal of guiding the Society to be more responsive to the needs of our membership. They continually seek ways of improving the Society's operation for the benefit of all.

Our Constitution and By-Laws Committee worked overtime this year in making the changes required to adjust our fiscal year from July to October. The idea was developed through the Long-Range Planning Committee, implemented through the direction of the Constitution and By-Laws Committee, and approved by the membership in balloting several months ago.

Lastly, as I review my term in office these past 15 months, I cannot express enough thanks to Leta and Debbie, our Executive Director and office staff for the outstanding effort they have put forth for the Society's benefit. While membership continues to be the heart of our Society, I feel the office staff remains the soul of our Society. Their unselfish time and effort required to make things work is appreciated by me, and I am sure all of our active membership.

The Society is in good hands with your new officers and Board of Direction and will move forward this coming year for the benefit of all engineers in our state.

Louisiana Engineering Society 1987-88 Board of Direction



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It's Your Move

James C. Porter, P.E.

So you joined the Louisiana Engineering Society. I suppose you have been procrastinating about when or if you will get involved in its affairs. Business conditions are tenuous at best and you are struggling to keep pace. Are the practical necessities of your engineering business consuming the time you planned to devote to participation in the LES?

Our state continues to trudge through a tough economic and political period in its history. Some believe that one is part and parcel to the other. The result has been devastating to business and employment in Louisiana. We have witnessed the more mobile components of our professional communities in terms of both businesses and individuals leave our state to deliver their services and contribute their vitality to other states and communities which are able to take advantage of their professional talents.

This has resulted in a net loss of membership in the Louisiana Engineering Society over the past three years. This experience has caused all of us in the LES to give long sobering thought to the state of the Society's affairs and to become more sensitive to the plight of our state and the engineering profession. There will most likely be a permanent offset in the future economy and progress in Louisiana. The sooner our economic problems are solved, the smaller this offset will be. Also the benefits our sister states are gaining from the migration of Louisiana's valuable human resources will cease.

There can be benefits to the survivors of difficult times. A forced process of toughening, tempering and renewal of a surviving organization can occur. For a surviving organization, and the LES intends to be one, this Darwinian process will leave us not as strong in numbers but stronger in resolve and more competent to achieve our goals and more responsive to our remaining membership.

During the immediately passed crescendo of economic growth in Louisiana, our membership program proceeded successfully almost self-propelled. It was a two phase program: recruit then retain



as many members as possible. Many employers completely subsidized their employees' dues in professional organizations. This brought many unmotivated members into the LES uncommitted to or unaware of its goals or its operations. Our motivating force, though subtle, for this kind of a membership recruiting and retention program was to generate income for the Society. Surely there were those of us who were thinking in terms of seeking and gaining viable members who would aid in the development of the engineering profession in Louisiana through the LES. But the nagging sentiment expressed in the rhetoric and behavior of many of our society's leaders was and to a degree still is that the membership is there to generate income for the Society's programs they develop and control.

It is time the notion that the membership of this Society is primarily a source of income is laid to rest. When we obligate ourselves to represent the engineering profession in Louisiana through positions of leadership in our society, let us have no illusions, this is not a means to pursue our own, individual purposes. At the end of our tenure, let us measure our success by the number of contacts we make with our fellow members and the number of problems and issues we are able to identify and/or resolve through our contacts. To this end our membership program must begin shifting toward a new two phase program: recruit then develop the professional interests of as many members as possible.

It is necessary that we as members of the LES visualize each other and other professional engineers in our state as vital, potential resources for the success of our engineering profession in Louisiana. When we renew our membership in the LES through our annual dues, let us renew our stewardship to the engineering profession in Louisiana through our introspective and retrospective thought of where we stand on the issues facing our profession. We must regularly keep ourselves informed and share our thoughts with other professional engineers to improve our understanding of the issues. It is important that we are prepared to respond to our leaders solicitations such that the **potential** resource in each of us can be converted into a **kinetic** resource which will benefit the engineering profession in Louisiana.

To this end you should be prepared to not only respond to the solicitations of our society's leaders but be willing to take the initiative to seek them out on the issues that vitally concern you. You should be able to take comfort in being a responsive member and knowing that your goals and needs will be effectively considered through the consensus process of our representative society. You do not have to take an active leadership role, only an active membership role, in order to pursue your interests in the LES.

If your only contact with current professional engineering issues is your chapter's newsletter and your dues statement, consider yourself not an active part of your professional community. You are only a source of income to the active part of your community. Ultimately, if this disfunctional relationship with LES and your profession is not corrected, you will conclude that your membership is of no value and you will either resign or fail to pay your dues. Then the membership retention program will get you.

It's your move.

Oh yes! . . . As a final note, pay your dues! This retention business is as uncomfortable for me to pursue as it is for its victims. It is an admission of failure for both of us.

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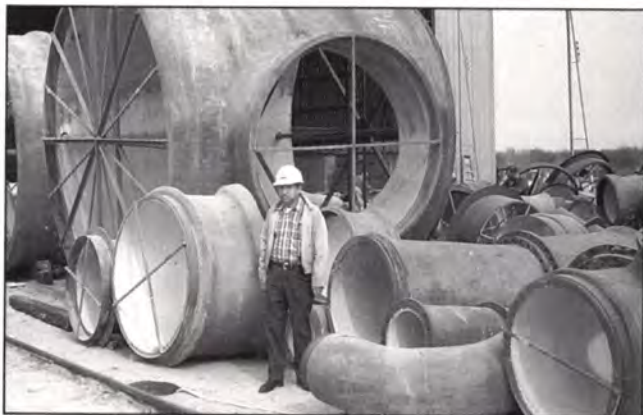


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Tooting The Board's Horn

I am honored to be serving the Board—to observe first hand what individual Board members do is a privilege. Please permit me to share with you some of my observations.

Who are the Board members? You will find the names of the current Board members on page three of this magazine. But who are they? They are your peers. You appointed them to the position they serve. You, as a member of the Society,

went through the selection process of nominating at least five Professional Engineers or Professional Land Surveyors whenever a vacancy occurred. The Governor had to appoint one of the five that you nominated.

Recently, Board members are appointed for a term of six years and cannot be reappointed. In this period a Board member will normally attend 36 regular scheduled meetings of the Board, six zone meetings of the National Council

of Engineering Examiners, six annual meetings of the National Council of Engineering Examiners, serve on a number of committees of the Board, serve on committees of the National Council of Engineering Examiners; and a Board member may be elected by his peers, to serve as an officer of the Board and/or an officer of the National Council of Engineering Examiners.

A Board member is given the opportunity to serve more, and to serve yet more. A Board member who is willing to give some of his time is asked to give even more of his time, and so on and so forth. All of the work that takes place on Board committees and the National Council of Engineering Examiner's committees are done by Board members who are willing to serve. The staffs of these two organizations support the committee activities, but the Board members do the work and make the decisions. The three photographs and brief activities of Board members which follows are the result of services rendered. Mr. Roy was recently elected by the members of the Southern zone of NCEE to serve as the Southern Zone Vice-President for the next two years. Messrs. Demopoulos and Meyers were two of eight recipients of the Distinguished Service Award, presented at the August 14, 1987, annual Awards Luncheon of NCEE, in Baltimore, Maryland. Louisiana was the only state with two recipients. Six of the eight recipients receiving the Distinguished Service Award, were from the southern zone. You may agree with me that Louisiana and the southern zone state boards, now under the leadership of Mr. Roy, are indeed being well served. I am proud to be tooting the Board's horn!

EXAMINATION SCHEDULE and APPLICATION DEADLINE DATES

EXAMINATION	SPRING		FALL	
	Application Deadline Date	Examination Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	Jan. 15, 1988	Apr. 16, 1988	Aug. 1, 1988	Oct. 29, 1988
Principles and Practice Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	Jan. 15, 1988	Apr. 16, 1988	Aug. 1, 1988	Oct. 29, 1988
Agricultural, Industrial, Metallurgical, Mining & Petroleum	NOT AVAILABLE		Aug. 1, 1988	Oct. 29, 1988
Fundamentals of Land Surveying Examination (8 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 1, 1988	Oct. 29, 1988
Principles and Practices of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 1, 1988	Oct. 29, 1988
Laws and Procedures of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	NOT AVAILABLE	

Apply at least six to eight months prior to an examination. Board approval must be given for anyone to be scheduled for an examination.

The applicant and the Board depend upon information provided by third parties in the processing of an application, therefore no assurance can be given that one will be scheduled for a specific examination.

Application Deadline date means that an application **must** be postmarked prior to or on the date specified so as to be given **consideration** for the examination. The Board may schedule an applicant for an examination later than that requested by the applicant. The Board cannot guarantee that the applicant will be scheduled for the examination initially requested.

BOARD MEETING NOTICE

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

1987	1988	
Nov. 17	Jan. 26-27	July 26
	Mar. 22	Sept. 27
	June 7	Nov. 15



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



Francis C. Roy, P.E.



Chris Demopulos, P.E., P.L.S.



James L. Meyer, P.E., P.L.S.

Francis C. Roy, P.E.

Francis C. Roy, of Lake Charles, was elected to the Board of Directors of the National Council of Engineering Examiners (NCEE) during the organization's annual meeting held recently in Baltimore, Maryland. Roy will serve as Vice-President of the Southern Zone along with his counterparts from the Central, Northeast, and Western Zones of the Council. He was nominated to the highest office of the Zone by the eleven southern states, Puerto Rico, and the Virgin Islands this past May at the Zone meeting held in Huntsville, Alabama, and will serve in this capacity for a period of two years.

Roy has served on a number of NCEE Committees, including Vice-Chairman of the Uniform Examinations and Qualifications (UEQ), and as NCEE representative to the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET). He also serves as an EAC/ABET visitor for the Institute of Electrical and Electronics Engineers (IEEE).

Roy was appointed to the Louisiana Board of Registration on August 26, 1980, and has served as Secretary, Vice-Chairman, and Chairman, as well as on

several Board committees. He is currently Chairman of the Electrical and Mechanical, member of the Engineer-In-Training, and Vice-Chairman of the Long Range Planning (Ad Hoc) Committees.

Francis, your peers, associates and fellow professionals are proud to say "hey, I know Francis . . . he's that German/Cajun from Iota!" We are indeed proud of Francis C. Roy, P.E., he SERVES his fellow man well. Thanks.

Chris Demopulos, P.E., P.L.S.

Chris Demopulos, P.E., P.L.S., a recipient of the NCEE Distinguished Service Award, was appointed to the Louisiana State Board for Professional Engineers and Land Surveyors for a nine-year term in August 1977. During his tenure, he served on numerous state board and zone committees and represented the Board on Accreditation Board for Engineering and Technology accreditation visits to four state universities. During the 1979 and 1980 administrative years, he served as vice chairman and as chairman, respectively, of his Board. He served on the Council's Committee on Uniform Examinations and Qualifications for Professional Engineers for five years, concentrating on the development

of the civil/sanitary/structural examinations, the development of workshops for question writers, and item specific scoring plans for each question on the examination. In addition, he served as a member of the Council's Committee on Nominations.

James L. Meyer, P.E., P.L.S.

James L. Meyer, P.E., P.L.S., also a recent recipient of the NCEE Distinguished Service Award, was appointed to the Louisiana State Board of Registration for Professional Engineers and Land Surveyors in August 1976. During his nine-year tenure, he served as secretary, vice chairman and chairman, respectively, of the Board. He represented the Board on Accreditation Board for Engineering and Technology accreditation visits to three universities and made "career day" presentations at high schools to promote the profession of engineering. He appeared before legislative committees to present the Board's view on proposed amendments to the engineering registration laws, and encouraged senior engineering students to seek registration. He served on the Council's Records Verification Committee for four years and on the Uniform Examinations and Qualifications for Professional Engineers Committee for three years.



Leta Bueto
Executive Director
Louisiana Engineering Society

Engineering Scholarships Available

High school seniors looking for ways to help finance their college engineering education can apply to the National Society of Professional Engineers' (NSPE) Education Foundation for one of 140 scholarships and grants. In addition, students transferring to, or already enrolled in, certain engineering colleges are eligible. Applications are available from now until November 15, 1987, and state society instructions should be followed for submission dates.

Applicants are judged from national standard test scores, essays, transcripts and extracurricular activities. Scholarships are available from specific colleges of engineering and in addition, NSPE offers separate scholarships in each of its six geographic regions, and memorial and minority grants. All national finalists will be nominated for *Who's Who Among American High School Students*.

In 1988 NSPE will award scholarships and grants ranging from \$1,000 for one year to more than \$20,000 for full-tuition, four-year scholarships. NSPE's scholarship program is the largest of its kind sponsored and administered by an engineering society; annual disbursements exceed \$1 million.

The NSPE Education Foundation raises funds from engineering schools, businesses, the NSPE Auxiliaries and individual donors.

For more information, contact local high school counselors, deans of engineering colleges, your local chapter of the National Society of Professional Engineers or the NSPE Education Foundation, 1420 King Street, Alexandria, Virginia 22314.

Conference to Examine Engineering Specialty Certification

Eighteen engineering societies will

host a major conference to consider establishing specialty certification for the engineering profession. The conference is scheduled for April 12-13, 1988, in Atlanta.

Certification is a means of establishing credentials in a specific area of engineering practice. Currently, after receiving a college degree in a major technical discipline, an engineer can pursue registration as a professional engineer—a broad designation of professional competence that in most states identifies minimum competence in an engineering discipline but not expertise in a specialty area. Some technical engineering societies have already developed their own certification programs for both registered and non-registered engineers.

"Specialty certification is of great interest to many segments of the engineering profession and one which merits full and open discussion," said National Society of Professional Engineers Past President Joseph H. Kuranz, P.E.-L.S., who was instrumental in initiating the conference. Kuranz stressed that the conference should have no predetermined or preferred outcome; instead the pros and cons of specialty certification should be fully aired and discussed.

The conference is expected to examine a number of crucial issues: Would specialty certification be granted before or after an engineer becomes registered? Would certification be granted by a centralized body, or would a number of organizations be authorized to certify engineers?

Other areas the conference is expected to focus on include determination of qualifications, maintenance of certification, legal issues such as increased liability and due process for denial of certification, and benefits and disadvantages of certification.

Engineers and engineering societies in all practice areas will be encouraged to participate in the conference along with interested members of the public. Engineering societies involved in the planning of the conference are: the National

Society of Professional Engineers, American Academy of Environmental Engineers, American Association of Engineering Societies, American Institute of Chemical Engineers, American Society of Civil Engineers, American Society for Engineering Education, American Society of Heating, Refrigerating and Air-Conditioning Engineers, American Society of Mechanical Engineers, American Society of Plumbing Engineers, American Society of Safety Engineers, Board of Certified Safety Professionals, Institute of Electrical and Electronics Engineers, National Academy of Engineering, National Academy of Forensic Engineers, National Council of Engineering Examiners, Society of American Military Engineers, Society of Manufacturing Engineers, and the System Safety Society.

For further information contact Arthur Schwartz, National Society of Professional Engineers (703) 684-2845.

Education Focus Of EAL/NSPE Program

Finally — a program where everyone wins!

In Educational Assistance Ltd., a scholarship program endorsed by NSPE/PEI, students, taxpayers and corporations come out big winners. The goal is the same for all — to provide educational assistance to needy college students.

The organization was originated in 1983 by V. R. "Swede" Roskam and some Chicago businessmen. Their idea was to have companies donate surplus inventory or equipment (laboratory materials, office furniture, machines) to EAL, usually receiving a tax deduction.

In turn, EAL would send the inventory to liberal arts and engineering colleges who would then credit the value of the gifts toward tuition for needy students. The scholarships would be awarded in the corporations name.

According to Mark Brumbach, P.E., NSPE National Coordinator for EAL, over \$2.3 million in scholarships have

Louisiana Engineering Foundation

been awarded nationwide to 450 students at 150 colleges.

"The success of the program has been wonderful," Brumbach said. "The biggest question we have run into when approaching corporations has been why we haven't asked sooner."

Corporation support continues to grow for the program. Brumbach anticipates the amount of scholarships awarded to be near \$6 million annually by 1990.

"EAL is an organization that benefits needy students and helps them to achieve their educational goals by providing scholarship money that makes their education a reality rather than merely a hope or dream . . . We consider it a privilege to be able to help support the EAL program," Richard M. Jaffee, President of Oil-Dri Corporation of America, said.

Students across the country are benefiting from the program which in 1985 received special citation from President Reagan's program for private sector initiatives.

Proponents of the program are quick to stress that EAL is beneficial for everyone. The program has demonstrated that very limited efforts can bring substantial new resources which enable disadvantaged students to attend small to medium-sized colleges.

According to Brumbach, students benefit because they would not otherwise be able to get this type of education; the participating colleges benefit because they receive materials needed on their campuses at virtually no cost and their enrollment increases; corporations benefit because the donations generate a tax deduction; and the corporations contribute to the community.

"The bottom line is that the taxpayer and society benefit because a potentially nonproductive person can become a productive taxpaying citizen," Brumbach said.

For more information on the program, contact Educational Assistance Ltd., P.O. Box 3021, Glen Ellyn, IL 60138, (312) 690-0010.

The Foundation provides a building that houses the Foundation office, the Louisiana Engineering Society, and the Consulting Engineers Council of Louisiana. Net rental income and contributions are used to fund scholarships and other engineering programs. The Foundation works closely with LES, NSPE and CEC/L in all matters and programs concerning the engineering profession.

Every engineer, graduate and professional, should support their profession with financial aid to the Foundation.

Contributions of \$500 or more make an organization or individual a member of the Honor Roll. Check the Honor Roll list. If your name appears, congratulations and thanks. If not, give LEF careful consideration. Louisiana is blessed with thousands of outstanding engineers. Help LEF make this fact known to the world.

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On a par with our Honor Roll we have individuals and organizations who have invested \$1,000 in the Foundation with a no-interest loan (Plan "A" program). Again, if you are on the list, congratulations and thanks. If not, consider lending LEF \$1,000 at no interest with a guaranteed payback within five years.

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Support your Foundation. Contact LEF, P.O. Box 2685, Baton Rouge 70821. (504) 344-4318.

A Look At Needs:

America's Highways, Bridges and Airports

America is at a crossroads in its battle to maintain its economic strength and quality of life. Both of these assets are jeopardized by the nation's apathy towards repairing and expanding our existing national infrastructure. Of particular importance are the maintenance and expansion of the nation's highway and bridge networks, as well as increasing the development of airports and related facilities. These issues will have to be addressed if the United States hopes to preserve both its economic competitiveness, and the quality of life to which it has become so accustomed.

For over 30 years, through a Federal-State partnership financed by user fees, this nation has developed an impressive highway transportation system. For nearly 25 years from 1959 to 1982, the program was financed primarily by a dedicated 4 cent per gallon gasoline and diesel fuel tax. In 1982, recognizing the critical link between a strong economy and an efficient highway system, the Congress enacted the 1982 Surface Transportation Assistance Act to raise the gasoline and diesel fuel taxes to 9 cents in order to finance needed improvements to the nation's deteriorating highway system.

Despite this funding increase, the recent biennial report to Congress entitled "The Status of the Nation's Highways: Conditions and Performance", indicates that there will be substantial future highway needs. For all levels of government the report indicates that a nearly \$920 billion investment will be required to meet the nation's highway needs over the next 15 years. In a companion report on the Federal Bridge Program, it is estimated that \$51.4 billion is needed to bring all deficient bridges up to current standards.

The nation's highway network consists of 3.86 million miles of roads on which 1.77 trillion vehicle - miles are traveled each year. Recent statistics show that travel has increased significantly in every region of the country since 1983. The range of travel increase was between 5 and 10 percent with the national average at 7.6 percent. With the recent em-

phasis on rehabilitation and reconstruction and the shift from new construction, this growth in travel has resulted in considerable congestion on most highway systems. Of particular note is the 8 percent increase in peak hour congestion on urban interstate highways.

While highway pavement deterioration has stabilized since 1982 with the increased emphasis on reconstruction and resurfacing, bridge conditions in the nation have generally deteriorated over the same period. The percentage of Interstate bridges that are classified as deficient has risen from 10.6 percent in 1982 to 14.3 percent in 1986, and 41 percent of all bridges in the nation are now classified as deficient.

Although the highway program at the Federal level is self-supported through user fees, it is part of the Unified Federal Budget and has been subjected to spending controls which attempt to restrain overall Federal spending. The result of these spending controls has been to delay needed transportation improvements and to allow the Trust Fund balance to burgeon to nearly \$10 billion.

The dilemma facing the nation's airport and airway system is similar, but in some respects different than that faced by the highway and bridge network. While maintenance is certainly an issue, it is expansion and development that are of the utmost importance to the nation's aviation infrastructure.

The Airport Improvement Program and the other programs financed by the Aviation Trust Fund will expire on September 30, 1987 unless reauthorized by Congress prior to that date. The Federal Government's authority to collect the 8 percent airline ticket tax and the other aviation user fees expires on December 31, 1987.

The situation facing our nation's airport and airway system is becoming critical. According to the FAA, more than 696 million passengers are expected to fly on commercial airlines each year by 1998. This represents a 70 percent increase from the 409 million passengers which the FAA estimates flew on commercial airlines in FY 1986. During the same time period, the country's civil air-

craft fleet is expected to grow to more than 250,000 as air carriers increase their fleets by about 1,000 airplanes to meet the projected demand for air travel and as another 30,000 general aviation aircraft come into operation.

Significantly, while the demand for commercial and non-commercial air travel has been rising sharply, capacity has been falling: There were 5,987 public use airports at the end of 1983; that number declined by 129 over the next two years. In fact, the last major airport constructed in this country was Dallas-Fort Worth in 1974. In FY 1987, the nation's commercial and non-commercial air travelers and those who transport property by air will pay roughly \$4 billion into the Aviation Trust Fund in the firm belief that their user fees will go to finance improvements to the airport and airway system. Their contributions will continue to pour into the trust fund at an unparalleled rate, so that by the end of the current fiscal year the trust fund's uncommitted balance will have swelled to \$5.7 billion. In return, these faithful contributions will be repaid with an increasingly congested airport and airway system, and long and frequent delays. According to the Airport Transport Association, passenger delays exceeded 2,000 hours per day last year. In dollar terms, delays cost consumers and air carriers over \$3 billion last year alone. Certain to add to the frustration of those air travelers whose flights have been delayed will be the knowledge that a substantial amount of their user fees are being used to disguise the size of the Federal budget deficit rather than for the dedicated purpose of improving the airport and airway system.

The availability of safe and efficient air transportation depends largely on the continued investment in airport capital development. This will require lengthening and strengthening runways and building new terminals, gate space, hangars and service facilities. The FAA estimates that at least \$24 billion in airport capital development will be required through 1995 to meet the increase in demand for air travel. The FAA's assessment of the airport capacity im-



Consulting Engineers Section
Warren J. Wilder
CEC/L Executive Director



provement needs is amply supported by a recent report prepared by the Airport Operators Council International (AOCI). According to AOCI, at least \$29 billion will be needed to fund the required capital improvements in the nation's airports in the next five years alone.

The Rebuild America coalition, a new group dedicated to revitalization of the nation's infrastructure, announced its formation September 9th at a Washington, D.C. press conference. The following two articles explain the problems with our infrastructure and the strategy to eliminate the problem.

Further decay of the nation's essential public facilities is not acceptable; America's quality of life and economic competitiveness depend on making the repair and rebuilding of those facilities a top national priority. That is the message of a new coalition in which public officials have joined private organizations of the construction, engineering and finance industries to "Rebuild America."

The "Rebuild America" coalition is tackling a task that has evaded an answer since the "infrastructure" crisis first gained widespread public attention in the early 1980's.

At a press conference in Washington, D.C., the coalition emphasized that "the task will require a strong partnership among the federal government, states, cities, counties and the private sector."

According to the Rebuild America Coalition, public and private groups must "seek new ways to make progress on many fronts, including capital planning, creative funding strategies, improved management, and technological innovation."

The coalition also set forth five goals for the 100th Congress in addressing the nation's infrastructure problems, and will seek commitments from the Presidential candidates to make infrastructure a priority issue.

The legislative goals:

- There should be no further funding reductions in existing federal programs that address infrastructure needs.
- The existing federal infrastructure trust funds must be continued, ade-

quately funded, and fully expended for their intended purpose.

- Federal restrictions on the use of tax-exempt financing for infrastructure purposes should be eliminated.
- A federal capital infrastructure program should be created to provide assistance to states and localities in meeting infrastructure needs.
- A federal long-term multi-year capital budget should be established.

A Deepening Crisis — According to the Rebuild America group's research, the nation has invested hundreds of billions of dollars in highways, bridges, water and wastewater facilities, waterways, dams, ports, public buildings, and other public facilities. However, investment in these has decreased from 3.5 percent of the GNP in 1967 to about 2.7 percent in the mid-1980's, and the percentage is still falling.

The result:

- Half of our nation's bridges are deficient.
- Over a million miles of highway will need to be resurfaced by the year 2000.
- The last major airport (Dallas-Fort Worth) constructed in this country opened 13 years ago.

Even where dedicated trust funds exist at the federal level for adequate investment — such as the dedicated Highway and Airport Trust Funds — those trust funds are not being fully used, the Coalition says. Billions of user fee dollars, already collected from the travelling public, sits unused in these funds. According to the coalition, these funds should be invested in much-needed improvement to the nation's transportation infrastructure.

Impact of Tax Law Changes — In addition, the 1986 Tax Reform Act severely restricted tax-exempt municipal finance for infrastructure facilities, to the point where, according to the Public Securities Association, a coalition member, 41 percent of all municipal bonds issued in 1984 could not be issued as tax-exempt securities by 1991. To make matters worse, the tax law also weakened incentives for public-private

partnerships in capital investment.

An Economic Imperative — Rebuild America's activities over the coming months will seek to heighten awareness of the fact that infrastructure problems are manifested not only in the common proliferation of potholes, the rupture of water mains, or the collapse of a bridge or school ceiling. In addition, there are the less visible but equally significant consequences for the health and competitiveness of America's economy.

Rebuild America's information states that, for example, about half of the 6,870 communities surveyed by the Department of Commerce are unable to accommodate industrial expansion because of overloaded wastewater facilities. Over 29 million Americans are not served by modern sewage treatment facilities. Deteriorating highway conditions increased the cost of using the nation's roads by nearly \$69 billion from 1981 to 1983 as measured by both travel time and the cost of getting needed goods to market.

John Horsley, immediate past president of the National Association of Counties and chairman of the Rebuild America Coalition states, "We need to mobilize public opinion behind the idea that investing more in infrastructure is something America cannot afford **not** to do. We need to make infrastructure a major issue of the 1988 Presidential campaign. Then we need to press Congress for action. And we need to press for similar action at the state and local levels. This type of mobilization is necessary to support any effort to reinvest in America and to ensure the growing, competitive economy needed to sustain the next generation."

Founding members of the Rebuild America Coalition are the American Consulting Engineers Council, American Institute of Architects, American Public Works Association, American Society of Civil Engineers, Associated General Contractors of America, National Association of Counties, National Association of Home Builders, National Conference of State Legislatures, National Governors Association, National League of Cities, Public Securities Association, U.S. Conference of Mayors.

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 Award for Services to the Profession

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 November 15, 1987. Nominations for the awards must be submitted on the appropriate form. These forms were delivered or mailed to each Chapter on September 18. 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 November 15, 1987.

Awards will be presented during the Society's spring meeting on April 29, 1988 in Houma.

Nominations for recipients of the awards may be made by:

- Any elected officer of the State Society or one of the Chapters.
- The Board of Direction of the Society.
- The Executive Committee or equivalent body of the Chapter.
- Three or more members of the Society.
- The individual Chapter Honors and Awards Committee.

Spring 1988 Engineering Management Courses

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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 fee per participant is \$300 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 Wed., Jan. 6, 1988 in Room 503, LSU Medical Center, New Orleans - 7:30 PM, on Thur., Jan. 8, 1988, 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.

AVAILABLE COURSES

- Course A — Modern Management
- Course B — Project Management with CPM/PERT
- Course C — Engineering Economy
- Course D — Financial Decision Making
- Course E — Automation and Computer Aided Manufacturing
- Course F — Basic Engineering Statistics
- Course G — Human Relations
- Course H — Cost Estimating
- Course I — Microcomputers for Decision Making
- Course J — Legal Aspects of Engineering

Please complete the following form and return it to the address below if you are interested in the program. (Classes will begin during the week of Jan. 18, 1988).

Name _____
Address _____ Phone _____
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MAIL FORM TO:

Dr. L. Mann
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Louisiana State University
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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).

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- ☐ Baton Rouge
- ☐ New Orleans
- ☐ Monroe
- ☐ Alexandria
- ☐ Shreveport
- I cannot attend on the following nights:
M _____ T _____ W _____ Th _____



Dr. Clarence Hall Receives Service Award

Dr. Clarence E. Hall, professor emeritus of LSU's Dept. of Industrial Engineering, has been named the recipient of the 1987 Distinguished Service Award of the Engineering Design Graphics Division of the American Society for Engineering Education. The award, which is the highest that can be given by the

division to one of its members, was presented at the Society's 95th annual conference in Reno for Hall's "outstanding contributions to the Division and to Engineering Education," according to Robert Foster, chairman of the Division of Continuing Education.

In his many years as a Division member, Hall has held a variety of offices, including those of vice-chairman and chairman of the Division. In addition, he has organized several regional and international conferences.

In recent years, Hall has also been awarded the Distinguished Service Awards of the National University Continuing Education Association, the Association for Gifted and Talented Students, and the Louisiana Academy of Sciences. He is the only person in the 59-year history of the Academy to have won that award twice.

Hall taught at LSU for 20 years and spent 26 years before that in industry and education in other states. He retired from teaching two years ago but remains active working part-time through LSU's Division of Continuing Education.

IN MEMORIAM

Charles Willard Decker, P.E.

Charles W. Decker, P.E., a member of the Louisiana Engineering Society since 1970 and a past president of the North Lake Chapter of LES, expired on May 13th following a lengthy illness. Mr. Decker was a native of New Orleans and lived in Mandeville for 48 years.

Mr. Decker has a long career in federal service, first with the Army Corps of Engineers in New Orleans in 1963 and retiring in 1983 as chief of the permits section. He was later to become Mandeville's first public works director.

Mr. Decker was a graduate of LSU in civil engineering and held a master's degree from Tulane University.

Mr. Decker was a member of the American Public Works Association and a president of the Board of Directors of the Greater Mandeville Federal Credit Union. He served in the U.S. Naval Reserve, where he attained the rank of commander.

The Board of Direction and members of the Louisiana Engineering Society express our deepest sympathy to his wife, Yvonne, sons, William and Steven, and daughters, Patricia and Laura.



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SCHOLARSHIP COMPETITION RESULTS

The North Lake Chapter of the Louisiana Engineering Society is pleased to announce that Sharon E. Medley of Madisonville, Louisiana, captured one of the NSPE-Leonard N. White Memorial Scholarships. Sharon is a recent honor graduate of Mandeville High School. She graduated with a 3.8 grade point average and intends to study mechanical engineering at the University of Arkansas.

Pictured is Sharon receiving word of the scholarship from Mr. Stan Diamond, Scholarship Chairman for the North Lake Chapter of LES. This is the first year in a number of years that the chapter has actively participated in the scholarship competition. Diamond stated that the chapter is pleased Sharon has chosen to pursue an engineering career and that they have been able to assist her in this endeavor.

The Leonard N. White Scholarship provides \$2,000 annually to two students judged strictly on the basis of scholarship and achievement. The recipients must attend the University of Arkansas. The scholarship was established in memory of Leonard N. White, a past president of the Arkansas Society of Professional Engineers, a past National Director of NSPE, and a past member of the Arkansas Board of Registration for Professional Engineers and Land Surveyors.

Gautreau, Gonzales Announce New Firm

Glynn P. Gautreau, P.E. and Raul S. Gonzalez, P.E., announce the formation of Gautreau and Gonzalez, Inc., a Consulting Geotechnical Engineering firm. The firm will offer the traditional practice of Soil and Foundation Engineering.

Gautreau, president of the firm, has practiced Geotechnical Engineering in the Baton Rouge area for 22 years prior to opening his firm. Their office is located at 2320 Drusilla Lane, Suite D, Baton Rouge, Louisiana 70809. Telephone number is (504) 926-3582."

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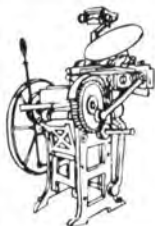
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The Louisiana Investor-Owned Electric Companies enthusiastically support the Special Olympics program. The courage shown by the competitors in overcoming personal adversities serves as a model for us all in today's difficult economic times. These plucky athletes convincingly demonstrate how to draw on other strengths when one facility is diminished.

The LIOEC applauds the contenders, the staff, and the volunteers of the Louisiana Special Olympics for setting an example of triumph against the odds.

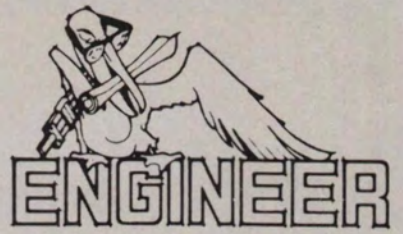
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Season's greetings from the Officers, Board and Staff of the Louisiana Engineering Society and the State Board of Registration for Professional Engineers and Land Surveyors.



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Working Together Works

This is the motto of the Director of Marketing for the Ruston-Lincoln Chamber of Commerce. It is just as apropos for the Louisiana Engineering Society in its activities as it is for any organization or business. The LES is a very diverse organization with many important functions.

Consider, if you will, the complexity of the Society's operation. The Society represents all disciplines of engineering as well as the employment fields of those engineers. The Society works with those in our universities and the universities' governing boards to enhance engineering education; works with the high school guidance counselors, principals and students on encouraging high school students to pursue a career in engineering; works with high school and college students on both the NSPE and LES scholarship programs; works with other technical and professional societies and with special interest groups on projects of mutual interest; works on membership recruitment and retention; works on promoting professionalism and ethics; proposes and monitors legislation that affects engineers and the conduct of engineering; cooperates with the State Board of Registration; cooperates with the Louisiana Engineering Foundation; works with the various Ladies Auxiliaries; etc., etc., etc.

In addition to all the above (and much more) LES works very closely with the National Society of Professional Engineers on coordination and cooperation of items pertaining to the national level. Just some of these items include working with NSPE on the highly successful MATHCOUNTS program, on national legislation affecting engineers and certainly on membership development. This close tie with NSPE is both beneficial and necessary. We need to maintain and strengthen our special relationship with NSPE.



Bobby E. Price, Ph.D., P.E.
President
Louisiana Engineering Society

Why am I listing all these activities of LES? To emphasize the fact that there are many important things going on simultaneously and that it takes everyone working together to make everything work in a professional and an efficient manner. There are many opportunities to serve your profession. A person need not be an LES state or chapter officer, committee chairman or practice division chairman to participate. **Working together works!**

Most people who are asked to serve in some position of responsibility in an organization look upon the position as an opportunity to serve rather than as a chore best ignored. As President of LES, I assumed the responsibility of appointing several committee chairmen. With only an unbelievable small number who declined, everyone contacted readily agreed to serve the Society in the capacity requested. Even those who declined had legitimate reasons (not excuses) for their decision. This willingness to serve, and to do it effectively, in a voluntary organ-

ization is commendable. Even with the large number of people in leadership positions, there are those who I am sure would be willing to help in some capacity. Volunteering your services at either the chapter or state levels or both would be commendable.

It is not an easy job (nor should it be) for the Society to continue providing high quality programs and activities year after year unless you have people whose response is: "I'll be glad to try," "I'll do my best," or "Sure, I'd be glad to serve." These are the people, wherever they may be in the organization, who really make it run. No organization can function successfully without them.

Of course, there are always some who are foot-draggers, or "can't" people. You've heard them: "I can't do that," "It's too difficult," or "Let someone else do it." Now, rest assured that this group does not include those who have legitimate reasons for declining a request to serve. As I have heard my mother say many times, "Can't never could do anything." We can all try.

Certainly there are many differences of opinion on what LES is presently doing and what it should be doing. Thank goodness there is enough diversity of thought to provide a unity of purpose! If we maintain a positive attitude and a cooperative spirit, we can approach our theme for the year "A Quest for Progress." Let's not fail because we did not try!

I am only one,
But still I am one.
I cannot do everything,
But still I can do something;
And because I cannot do everything
I will not refuse to do the something
that I can do.

Working Together Works!

I wish for each of you and your families a very Merry Christmas and a Happy New Year! May the God of Peace surround you with His Love!

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The Practice of Forensic Engineering

James C. Wernicke, P.E.,
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Five years ago, past NSPE Presidents Marvin Specter, P.E. and William Cox, P.E. together with (then) future NSPE President Paul Pritzker, P.E., NSPE Counsel Milton Lunch and over 100 other engineers, formed the National Academy of Forensic Engineering (NAFE). These gentlemen recognized that a new discipline was emerging as different from the traditional disciplines of civil, mechanical, electrical and chemical engineering as night is from day.

Forensic engineering is commonly associated with the legal side of the engineer's practice. Forensic is derived from the Latin term, *forensis* (public, forum) and means pertaining to the courts of law. While relatively unheard of previously, the term has blossomed over the past 15 years as engineers and manufacturers have been called to defend their designs more and more frequently.

The basic legal principal which has developed is that because an engineer must design for the good of the public, the design must be both useful and safe. When a design fails these criteria, the engineer or manufacturer must provide compensation to restore the other party to his status beforehand. When injuries occur, this generally takes the form of monetary compensation.

The complex nature of technical work makes it unsuitable for non-engineers to comment on the adequacy of a design. Engineers are therefore enlisted by attorneys to act as "expert witnesses" regarding the deficiencies of an engineer's or manufacturer's design.

As the litigation explosion proceeded during the late 1970's and 1980's, more and more engineers found themselves at the receiving end of summonses and many others found a lucrative career testifying against those engineers and manufacturers as "experts." Unfortunately, many of these experts were far from that and possessed only rudimentary knowledge of the legal considerations.

It is an unfortunate provision in our state's (and other's) registration laws that a professional engineer may practice in any area which he feels he is competent. As a result, many engineers extend themselves into areas they are minimally competent in. In the case of forensic engineering, this can lead to severe consequences, possibly destroying an indi-



vidual's life and that of his family. The decline of available design work in Louisiana has generated a flood of so called experts, many claiming expertise in a variety of areas such as chemical engineers offering automobile accident reconstruction services and civil engineers entering the products liability field. A good forensic engineer limits himself to two or three specializations, no more.

Should you be solicited by an attorney to become involved in a lawsuit, consider that the designer you are testifying against is likely to be an engineer, and more knowledgeable about the design. The defect, if any, is likely to be miniscule to have been overlooked in the design stage. This means you will be working in an area of unknowns with little existing literature to rely on.

Based upon your testimony, the insured or plaintiff may choose to go to trial. This results in a very large expense for both parties. If your facts are not sufficient, incorrect or just poorly presented, your client can suffer. In some cases this can result in little or no compensation to someone justly damaged, or a large settlement cost to an insured who was in the right. Considering the large sums involved, livelihoods swing in the balance. The rise in liability insurance rates alone has undoubtedly reduced the funds available for salaries and other forms of personal compensation.

It is imperative, that should you choose to become involved in a forensic case, you are both truly knowledgeable about the field of expertise and of the mechanics of the courtroom. Murray Hohns, P.E., a past NAFE president defined a forensic engineer as:

"An engineer who has rhetorical ability to present proofs for or against a situation happening in the forum or indeed in the courts of the world"

This definition points to the fact that the forensic engineer must understand how to present his argument within a court of law. It is insufficient to merely render an opinion, for your opinion is quickly refuted by another expert. You must therefore carefully plan and prove to the judge and jury that your opinion is correct.

Requirements of a Forensic Engineer

There are five requirements imposed upon the forensic engineer that differ from standard design work:

1. You must understand the law regarding evidence and discovery
2. You must understand the law regarding experts and testimony
3. You must understand how to present technical arguments to a lay jury and judge.
4. You must understand how to refute the testimony of other engineers without slandering the profession of engineering
5. You must be able to undergo vigorous examination of your past and your credentials in court by the opposition

There is one more requirement which you must place upon yourself—lack of bias. You must remain candid and inform a client (or potential client) where his and your weaknesses lie. This, of course, may result in a foreshortening of your work and possibly your removal from the case.

Discovery

In a legal case, the law allows for you to "discover" what information the other side possesses. This is accomplished through requests for production of documents, interrogatories and depositions. Interrogatories are written questions

posed to the other side regarding design data. Depositions are statements of persons who are involved with incident and are taken under oath.

The forensic engineer will usually assist the attorney in developing specific requests for production, interrogatories and counsel the attorney during depositions of a technical nature. As a result of the discovery, evidence is obtained which can later be used in court. Generally, new evidence cannot be suddenly uncovered and used in court without allowing the opposition time to examine it.

Evidence must also be pertinent and reasonable. A 1987 design standard cannot be applied to a 1967 design, a standard for a centrifugal fan cannot be applied to a centrifugal pump, etc. A material or process not yet invented cannot be used against an older material or process.

Testimony

There are two types of witnesses - witness of fact and expert witness. Witnesses of fact only discuss what they actually observed through their senses. Experts, however, may render an opinion in the field of expertise they have been tendered as an expert in.

It should be obvious, that the ability to render an opinion is significant. The opposition will vigorously oppose you. If they succeed in disqualifying you, your client will have a difficult time winning the case. If the item which rendered you unqualified was one which you should have informed your client about, he may be able to take legal action against you.

Presentation

When you present an argument in court you must remember that you are dealing with lay people and the formulas we so much love to use will only bewilder those who need to understand.

Demonstrations are not advisable. I know of several attorneys who will not allow demonstrations performed in courtrooms. It is their opinion, that no matter how repeatable the demonstration is, Murphy's Law will see to it that it fails this one time. The outcome of a failed demonstration is obvious. You must therefore be able to clearly explain and possibly diagram your conclusions to the judge and jury. A recent trend has

been to videotape demonstrations but this must conform to the rules of evidence.

During your presentation, you will be under careful visual observation by the courtroom and the opposition's expert. Should you hesitate or change the tenor of your voice inappropriately, the jury could suspect you are not sure of your answer and conclusions. If you fail to speak loudly or block the view of your diagrams then your point will go unmade.

The Argument

A trial proceeds first with the testimony for the plaintiff, followed by the defense's witnesses. Both sides then refute the others claims. It is the responsibility of the forensic engineer to assist the attorney in refuting the opposition's expert's opinion.

In refuting testimony, it is inappropriate to berate the other expert. As a professional, your approach must be to positively express the differences in the facts underlying both your opinion and the opposing expert.

Cross Examination

The forensic engineer will also be under cross examination. During the examination your integrity as well as your knowledge will be under inspection. Small items, such as a low grade in college, a job layoff or an ethics charge can jeopardize the forensic engineers credibility. In one trial, an engineer who testified only for defense firms was made to look prejudiced resulting in a higher settlement. The forensic engineer must never appear biased in court. For this reason, it is unwise to take any project on a contingency basis. Insist on being paid monthly if possible.

Need for Regulation

The multiple aspects of forensic engineering, particularly those beyond pure expertise, have shown that many engineers are unsuited for forensic work. Unfortunately, the higher demands on the engineer produce higher fees which attract unqualified individuals. The average attorney, with little knowledge of engineering, relies upon the engineer to regulate himself. He expects the engineer to refuse a case where he is not qualified, but greed often changes this equation.

To provide a better forum for discussing the legal aspects of engineering malpractice and products liability, and to offer some means to the legal profession to determine if his expert was indeed qualified in his field, **NAFE** was formed. **NAFE** is extremely selective in its membership requiring that potential members be thoroughly experienced in their field and have practiced as a forensic engineer a specific number of years and testified under oath a prescribed number of times based upon their member grade. The members are carefully researched by the admissions committee for high ethical standards, competency and understanding of the law. Unlike most engineering societies, legal references must be provided.

Recently, several engineering organizations have chosen to define selection procedures for attorneys to identify qualified forensic engineers. Acceptance into **NAFE** is one such method, but even **NAFE** has concluded that other methods must be employed. The American Society of Civil Engineers has formed a Technical Council on Forensic Engineering. Hopefully, one outcome of this council will be the formulation of guidelines to assist the attorney in obtaining a qualified forensic engineer.

Other approaches have included special ethics codes for those practicing as experts. Several years ago, NSPE published "Guidelines for the P.E. as a Forensic Engineer." The Association of Soils and Foundation Engineers recently proposed a "Recommended Principles of Practice for Design Professionals Serving as Expert Witnesses." This document is primarily a form of self regulation and does not actually provide the attorney with knowledge in his selection. While **NAFE** considers the **ASFE** document flawed, its executive board did agree to adopt large portions of the publication.

As the complexity of our society's infrastructure expands, there can be no doubt that the forensic engineer will be called upon with ever-increasing frequency. This rising demand will result in more engineers entering the field. What percent will actually be qualified is difficult to ascertain. Hopefully, increasing enlightenment of the engineer towards the duties and responsibilities of forensic engineering will keep that percentage high.

Laws Changes of 1987

Acts 385 and 694 of 1987 are two acts of the Legislature which will have significant impacts on current and future registrants and applicants of the Board. A copy of the registration law, Louisiana Revised Statute 37:681 through 37:703, may be obtained by either writing to or calling the Board Office. The address and telephone number of the Board Office may be found on Page 3 of the *Louisiana Engineer* magazine. The Board has directed that I inform all registrants of the Board of these changes in the law which recently took place; therefore, the purpose of this article.

New Educational Requirements for Land Surveyor Applicants

Act 385 of 1987 amended La. Rev. Stat. 37:693 (B) (3), (4), and (E). This law change is significant in changing the educational requirements needed for one to qualify for Land Surveyor-In-Training certification and Professional Land Surveyor registration consideration in the future.

Land Surveyors-In-Training applicants who apply on January 1, 1991 and thereafter, and **Professional Land Surveyor** applicants who apply for registration on January 1, 1995 and thereafter, "shall be a graduate holding a baccalaureate degree from a curriculum of four years or more who has completed at least thirty semester credit hours, or the equivalent approved by the Board, in land surveyor, mapping, and real property courses approved by the Board, who is of all good character and reputation, . . ." Experience will no longer be a factor in considering a Land Surveyor-In-

Training for admittance to take the examination. The only factors will be education, a baccalaureate degree, and thirty semester credit hours of courses as stated above and of a good character and reputation.

The Professional Land Surveyor applicant on January 1, 1995 and thereafter will also be required to have a baccalaureate degree and thirty semester hours of courses approved by the Board as stated above and additionally will need to present proof of "at least four years or more combined office and field experience in land surveying, including two years or more experience in responsible charge of land surveying projects under the supervision of a professional land surveyor registered or licensed by the appropriate authority . . ."

It behooves anyone who wishes to be given consideration for land surveying registration or land surveyor-in-training certification who does not meet these education requirements, to apply under the old law before January 1, 1991 for LSIT consideration and before January 1, 1995 for Professional Land Surveyor registration consideration.

Professional Engineers Who Apply for Professional Land Surveyor Registration

The new educational requirements which become effective January 1, 1991 for Land Surveyor-In-Training applicants and January 1, 1995 for Professional Land Surveyor applicants, will also apply to Professional Engineers' registrants of the Board. Up until January 1, 1995, a Professional Engineer registrant of the Louisiana Board who is registered

"on the bases of earning a bachelor of science degree from an engineering curriculum approved by the Board requiring no less than six semester credit hours of land surveying courses approved by the Board, who has a specific record of two years or more of experience in land surveying work of a character satisfactory to the Board, who has passed the oral and written examinations required by the Board, who is of good character and reputation, and who has satisfied the requirements of La. Rev. Stat. 37:694," may be registered as a Professional Land Surveyor.

The problem that Professional Engineers face in applying for Professional Land Surveyor registration is that many are not able to present "two years or more of experience in land surveying work of a character satisfactory to the Board." The verifiable land surveying experience that an applicant must present to the Board is land surveying experience as defined by the law. La. Rev. Stat. 37:682 (9) states "practice of land surveying shall include the measuring of areas, land surfaces, streams, bodies of water, and swamps, for correct determination and description, for the establishment, reestablishment, ascertainment, or description of land boundaries, corners, divisions, distances, and directions, the plotting and monumenting of lands and subdivisions thereof, and mapping and topographical work." If the land surveying experience presented by an applicant does not meet the criteria established by this law, the Board will not permit the applicant to take the examination in pursuit of Professional Land Surveyor registration. The surveying that many engineers do is surveying other than that defined by the law.



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



**Act 694 of 1987 Increases the
Board's Power**

This act amended the law in three general areas.

First, La. Rev. Stat. 37:683 (B), (C) & (D)

Comment:

A few years ago the Louisiana Land Surveyors Association changed the name of its organization to the Louisiana Society of Professional Surveyors. Act 694 of 1987 reflected this change in the law.

The Board has been financially self-sufficient — it is clearly stated in La. R.S. 37:683 D.

D. This board shall be financially self-sufficient. It shall receive no state funds through appropriation or otherwise and shall not expend any such state funds. No state funds shall be expended or committed to expenditure for the group benefits program or any other health insurance or employee benefit program, for any retirement system, for any salary, per diem payment, travel or expenses, office supplies and materials, rent, purchase of any product or service, or for any other purpose.

Second, La. Rev. Stat. 37:698 Disciplinary Action; Revocation; Suspension or Reprimand and LA. Rev. Stat. 37:699 Disciplinary Action; Procedure

Comment:

The changes in this section of the law are significant. It increases the powers of the Board. These changes need to be understood by all registrants. We all have heard the saying, "ignorance of the law is no excuse." La. Rev. Stat. 37:698 is therefore stated in its entirety. The words which are lined through are those which were deleted and the words which are underlined were added. Only paragraph C of La. Rev. Stat. 37:699 was changed.

Old 37:698. Disciplinary Action; Revocation; Suspension or Reprimand

A. The board shall have the power by majority vote of its entire membership authorized to participate in a proceeding to suspend, refuse to renew, revoke the certificate, reprimand, or fine in an amount not to exceed five thousand dollars, any registrant or certificate holder found by the board to be guilty of any of the following acts, provided a fine shall not be available in cases of physical injury or death resulting from negligence in the practice of engineering or land surveying or any felonious act.

(1) The practice of any fraud or deceit in obtaining a certificate of registration or certification.

(2) Any fraud, deceit, gross negligence, misrepresentation, violation of contract, gross incompetence, or misconduct in the practice of engineering or land surveying, or violation of any provision of this Chapter;

~~(3) Any felonious act;~~

(4) Violations of Rules of Professional Conduct for Professional Engineers and Land Surveyors adopted and promulgated by the board.

B. The board shall adopt and promulgate Rules of Professional Conduct for all registrants, and certificate holders as provided for in this Chapter, which shall be made known, in writing, to every applicant for registration, registrant, and certificate holder under this Chapter. The board may revise and amend these Rules of Professional Conduct for Professional Engineers and Land Surveyors from time to time and shall forthwith notify each registrant and certificate holder, in writing, of such revision or amendments.

C. The board shall have the power to 1) revoke a certificate of registration or certification issued to an individual, or 2) a certificate of registration of any foreign or domestic corporation if one or more of its officers, directors, employees, agents, or representatives have been guilty of a violation of any provision of this Chapter.

New 37:698. Disciplinary Action; Revocation; Suspension or Reprimand

A. The board shall have the power by majority vote of its entire membership authorized to participate in a proceeding to suspend, refuse to renew, revoke the certificate, reprimand, or fine in an amount not to exceed five thousand dollars, any registrant or certificate holder found by the board to be guilty of any of the following acts, provided a fine shall not be available in cases of physical injury or

death resulting from negligence in the practice of engineering or land surveying or in cases of conviction of a felony or entry of a plea of nolo contendere to a criminal charge, and provided, further, that a two-thirds vote of its entire membership authorized to participate in the proceedings its required to take disciplinary action in a case of entry of a plea of nolo contendere to a criminal charge:

(1) The practice of any fraud, deceit, material misstatement, or perjury in applying for a certificate of registration, or in taking any examination, or in applying for any renewal certificate provided for in this Chapter;

(2) Any fraud, deceit, gross negligence, misrepresentation, violation of contract, gross incompetence, or misconduct in the practice of engineering or land surveying, or violation of any provision of this Chapter;

(3) Conviction of a felony or entry of a plea of nolo contendere to a felony charge under the laws of the United States or any state;

(4) Conviction of any crime or entry of a plea of guilty or nolo contendere to any criminal charge an element of which is fraud or which arises out of such individual's practice of engineering or land surveying;

(5) Violations of rules of Professional Conduct for Professional Engineers and Land Surveyors, or any other rule or regulation adopted and promulgated by the board;

(6) The refusal of the licensing authority of another state, territory, or district of the United States to issue or renew a license, permit, or certificate to practice engineering or land surveying, or the revocation or suspension or other restriction imposed on a license, permit, or certificate issued by such licensing authority, on grounds other than non-payment of a registration fee; provided, that the reason for the action taken by the other licensing authority was recognized by the Louisiana board as a ground for disciplinary action at the time the action was taken;

(7) Providing false testimony before the board;

(8) Using a seal or stamp or engaging in any other act constituting the practice of engineering or land surveying at a time when his or her certificate of registration is suspended or revoked, or at a time

when his or her current renewal has not been obtained within sixty days after receipt of proper notification by certified mail;

(9) Failure to provide, within thirty calendar days of receipt of notice by certified mail, information requested by the executive secretary as a result of a formal complaint to the board alleging a violation of this Chapter;

(10) The use of any advertising or solicitation which is false or misleading.

B. The board shall adopt and promulgate Rules of Professional Conduct for all registrants, and certificate holders as provided for in this Chapter,

BOARD MEETING NOTICE

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will hold its regular meetings at 1055 St. Charles Avenue - Suite 415, New Orleans, La. 70130 on the following dates:

1988

Jan. 26-27	July 26
Mar. 22	Sept. 27
June 7	Nov. 15

which shall be made known, in writing, to every applicant for registration, registrant, and certificate holder under this Chapter. The board may revise and amend these Rules of Professional Conduct for Professional Engineers and Land Surveyors from time to time in accordance with the Administrative Procedure Act, and shall forthwith notify each registrant and certificate holder, in writing or by a notice in the official journal of the board, of such revision or amendments.

C. The board shall have the power to 1) revoke a certificate of registration or certification issued to an individual, or 2) a certificate of registration of any foreign or domestic corporation if one or more of its officers, directors, employees, agents, or representatives have been guilty of a violation of any provision of this Chapter.

D. In addition to any other action, the board may assess all reasonable costs in connection with a disciplinary proceeding, including investigators', stenographers', and attorneys' fees, as a condition of probation or reinstatement of any certificate or license suspended or revoked pursuant to this Section.

E. The disciplinary action assessed shall be published in the official journal of the board and may be released to other professional organizations relating to professional engineering and land surveying or to the news media.

37:699. Disciplinary Action; Procedure

C. In the event the board determines after investigation that the charges so filed are completely unfounded or trivial, the board shall so advise the person or corporation charged, in writing, of its determination. Otherwise, all charges shall be heard by the board within four months after date on which they shall have been preferred by either the board or by any other person.

C. In the event the board determines after investigation that the charges so filed are completely unfounded or trivial, the board shall so advise the person or corporation charged, in writing, of its determination. Otherwise, all charges shall be heard by the board within six months after date on which they shall have been preferred by either the board or by any other person.

Third, LA. Rev. Stat. 701 C

Comment:

This is not a change of the law but a clarification of the law which has been widely misunderstood by both registrants of the Board and industries operating in the state of Louisiana.

37:701. Public and Private Work; Application of Provisions

C. This Chapter shall not apply to, affect, interfere with, or in anywise regulate employees of a person, firm, or corporation engaged in industrial operations, including, but not limited to, producing processing, manufacturing, transmitting, distributing, or transporting, when performing services within the state of Louisiana in the course and scope of the business of said person, firm, or corporation, or affiliates thereof. In the event any of the activities set forth in this Subsection shall fall within the definition of practice of engineering as defined in Paragraph (8) of Section 682 of this Chapter, such activities shall be under the supervision and charge of a professional engineer, duly registered under the provisions of this Chapter. However, this Subsection shall not apply to persons practicing civil engineering or land surveying, who must at all times comply with the provisions of this Chapter.

C. This Chapter shall not apply to, affect, interfere with, or in anywise regulate employees of a person, firm, or corporation engaged in industrial operations, including, but not limited to, producing processing, manufacturing, transmitting, distributing, or transporting, when performing services in the course and scope of the business of said person, firm, or corporation, or affiliates thereof; however, this exemption shall not apply to the practice of civil engineering or land surveying, with the exception of resident industries producing manufactured products within the state of Louisiana, in the event any of the activities set forth in this Subsection shall fall within the definition of practice of engineering as defined in Paragraph (8) of Section 682 of this Chapter, such activities shall be under the supervision and charge of a professional engineer, duly registered under the provisions of this Chapter.

EXAMINATION SCHEDULE and APPLICATION DEADLINE DATES

EXAMINATION	SPRING		FALL	
	Application Deadline Date	Examination Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	Jan. 15, 1988	Apr. 16, 1988	Aug. 1, 1988	Oct. 29, 1988
Principles and Practice Engineering (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	Jan. 15, 1988	Apr. 16, 1988	Aug. 1, 1988	Oct. 29, 1988
Agricultural, Industrial, Metallurgical, Mining & Petroleum	NOT AVAILABLE		Aug. 1, 1988	Oct. 29, 1988
Fundamentals of Land Surveying Examination (8 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 1, 1988	Oct. 29, 1988
Principles and Practices of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	May 1, 1988	Oct. 29, 1988
Laws and Procedures of Land Surveying (4 hrs.)	Oct. 23, 1987	Apr. 16, 1988	NOT AVAILABLE	

Apply at least six to eight months prior to an examination. Board approval must be given for anyone to be scheduled for an examination.

The applicant and the Board depend upon information provided by third parties in the processing of an application, therefore no assurance can be given that one will be scheduled for a specific examination.

Application Deadline date means that an application must be postmarked prior to or on the date specified so as to be given consideration for the examination. The Board may schedule an applicant for an examination later than that requested by the applicant. The Board cannot guarantee that the applicant will be scheduled for the examination initially requested.

Young Engineers Committee Goals and Objectives-1987-88

Jedd Lewis, P.E.
Young Engineers Committee Chairman

The Young Engineers Committee for the Louisiana Engineering Society has been an active organization and a springboard for many of the leaders of the Louisiana Engineering Society. The focus of this year's committee members has been to establish the goals for the committee and to formulate plans for implementing them. The Young Engineers Committee (YEC) developed some preliminary plans at the Spring Awards Banquet in Monroe and due to the guidance of Andy Craig of Mohr, Sprawls & Associates in Shreveport, the committee began to make contacts for establishing a LES student chapter at Louisiana Tech. The topic was further discussed at the September Training Conference and steps were taken to begin the same process for the student chapters already established in Louisiana.

Our goal for the YEC in connection with the student chapters is to increase membership for LES and to provide interaction with practicing engineers, provide information from the professional society and provide technical seminars which have been popular at the Spring and Fall conferences. We have found that the college engineering students are very willing to participate in the activities but that the LES members and also Engineering School faculty must provide encouragement.

The National Society of Professional Engineers (NSPE) held a Regional Conference in New Orleans on September 23-25, at the Royal Sonesta Motor Hotel.

On Friday, the 25th, the afternoon portion of the conference was devoted to a Young Engineers Forum which involved eight young engineers, five students and three practicing, and eight to ten more experienced engineers who were to discuss current questions and situations involved in the engineering field. Henry Markel was the narrator for the forum and questions were fielded by the young engineers and the more experienced engineers for approximately three hours.

A video cassette was made of the forum and is being edited at this time for future use. We propose to have this edited tape available at the Houma LES Conference in the spring to provide information to all interested engineers. Some of the suggested questions for the forum were what does registration as an Engineer mean to you, what responsibilities do employers have towards engineers, what do your friends think of engineers/engineering, why have you chosen engineering as a career, etc.

The YEC feels that it is a year of new beginnings and that a movement has been started to re-evaluate the roles of all committees in LES. The Young Engineers Committee has committed itself to providing support in the form of time and effort toward establishing a groundwork for future young engineers who will be involved in LES. The student chapters at the Louisiana engineering universities, publicity for young engineers at the chapter level and more involvement of the young engineers at the chapter level, are among some of the 1987-88 goals. We

have also decided to pursue investigations into initiating short courses for continuing education in the chapter areas to provide a service to the engineers.

The Young Engineers Committee has a number of dedicated participants and are actively seeking to increase those numbers. Please contact me or the Co-Chairman for the Young Engineers Committee for LES, Mark Snow, or any of the chapter Young Engineers Committee chairmen. Become an active member of LES. A complete list of the names and their positions follows.

We feel that the Louisiana Engineering Society is making a concerted effort to provide a meaningful and worthwhile conference format and encourage all young engineers to be present at the Houma conference and to get involved in your chapter Young Engineers Committees.

Chairman: Jedd Lewis, P.E.-318-255-7236; Vice Chairman: Mark Snow, E.I.T.-318-425-7452; Board Sponsor: Andy Craig, P.E.-318-686-7190; Alexandria Chapter: Michael D'Angelo, E.I.T.-318-473-2100; Baton Rouge Chapter: David L. Miller, E.I.T.-318-293-3661; Bayou Chapter: Mac Mokhtarnejad-504-876-6380; Lafayette Chapter: Bill Neef-318-232-5182; Monroe Chapter: James L. Brewster, P.E.-318-323-9000; New Orleans Chapter: Tim E. Ponseti, E.I.T.-504-363-8943; North Lake Chapter: Charles T. Knight, P.E.-504-288-9961; Shreveport Chapter: Jeff Raley, P.E.-318-686-7190.

Liability Crisis Thriving in A/E Community, 1987 Survey Reveals

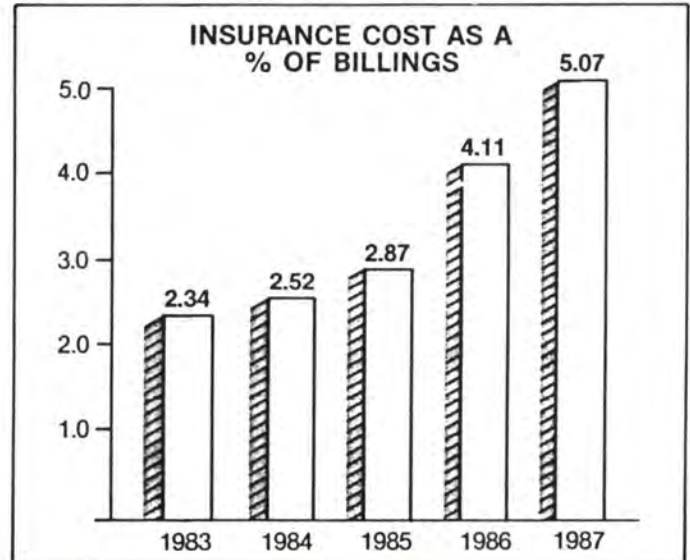
The amount that the average consulting engineering firm pays for professional liability insurance increased by 23 percent since last year. Over five percent of firms' annual billings are consumed by insurance premiums, the results of the American Consulting Engineers Council's Ninth Annual Professional Liability Survey, released October 16, reveal. The problem of increasing premiums is compounded by higher deductibles and less coverage. Structural engineers are by far the hardest hit. Structurals paid more than nine percent of their annual billings for insurance in 1987, triple the amount paid just four years earlier. Other disciplines, excluding structurals, pay slightly over four percent. Civil engineers follow structurals; architectural/engineers are third. Mechanical engineering firms are fourth, followed by geotechnical engineers.

The finding also show that the number of firms "going bare" has hit a new record. More than 23 percent of the responding firms are uninsured, up from 19 percent in 1986.

Another trend, higher deductibles coupled with decreasing limits of insurance, continues this year. "As the base narrows, firms are in effect getting less insurance for their premium dollar," said ACEC's Director of Liability Issues Bob Fogle.

The number of claims brought against consulting engineering firms increased by a dramatic 39 percent in 1987, but nearly 40 percent were settled without any payment to the claimant. The survey indicated that such preparation and defense cost can throttle a firm, costing thousands of dollars in money and personnel time expense.

Overall, ACEC estimates that its 5,000 member firms paid nearly \$250,000,000 for professional liability insurance in 1987.



(from *Liability Report*, October 1987, a monthly news bulletin of the American Consulting Engineers Council).

TABLE 1: INSURANCE TRENDS

ALL FIRMS: 1983-1987						
YEAR	INSURANCE COST AS A % OF BILLINGS	PERCENT OF FIRMS UNINSURED	PERCENT OF FIRMS INSURED BY:			
			DPIC	CNA	IMPERIAL CASUALTY	OTHER
1987	5.07%	23.5%	33%	28%	4%	11%
1986	4.11	19.1	34	27	5	15
1985	2.87	13.0	37	19	6	25
1984	2.52	11.7	34	16	7	31
1983	2.34	12.0	35	17	8	28

1987						
FIRM SIZE BY NUMBER OF EMPLOYEES	INSURANCE COST AS A % OF BILLINGS	PERCENT OF FIRMS UNINSURED	DPIC	CNA	IMPERIAL CASUALTY	OTHER
1-5	7.26%	41.1%	24%	24%	3%	8%
6-10	5.81	22.3	40	26	2	10
11-25	4.75	18.8	38	28	2	13
26-100	3.61	10.9	37	31	6	15
101-500	2.57	5.1	23	49	12	11
OVER 500	2.25	6.3	0	75	6	13

FIRM DISCIPLINE	INSURANCE COST AS A % OF BILLINGS	PERCENT OF FIRMS UNINSURED	DPIC	CNA	IMPERIAL CASUALTY	OTHER
STRUCTURAL	9.31%	20.2%	49%	19%	3%	9%
MECH/ELEC	4.26	14.0	36	35	3	12
CIVIL	4.37	26.0	31	29	4	10
ARCH/ENG	4.28	15.3	32	38	9	6
GEOTECH	3.92	36.4	0	7	2	55
OTHER	4.99	52.2	18	18	2	10



Consulting Engineers Section
Warren J. Wilder
CEC/L Executive Director



TABLE 2: DEDUCTIBLES

BY SIZE OF FIRM: 1987					
NUMBER OF EMPLOYEES	\$5,000 OR LESS	\$5,001-\$10,000	\$10,001-\$25,000	\$25,001-\$100,000	OVER \$100,000
1-5	72%	21%	6%	1%	0%
6-10	39	43	16	2	0
11-23	12	35	47	6	0
26-100	1	12	46	40	1
101-500	0	1	5	68	26
OVER 500	0	0	0	0	100

ALL FIRMS: 1983-1987					
YEAR					
1987	27%	25%	28%	17%	3%
1986	28	31	23	15	3
1985	30	36	21	11	2
1984	33	38	19	9	1
1983	33	38	19	9	1

TABLE 3: LIMITS OF COVERAGE

BY SIZE OF FIRM: 1987						
NUMBER OF EMPLOYEES	UNDER \$250,000	\$250,000-\$449,999	\$450,000-\$999,999	\$1,000,000-\$2,499,999	\$2,500,000-\$9,999,999	OVER \$10M
1-5	20%	41%	26%	13%	0%	0%
6-10	7	38	32	23	0	0
11-25	7	27	26	40	0	0
26-100	1	6	18	74	1	0
101-500	0	0	5	66	24	5
OVER 500	0	0	0	7	57	36

ALL FIRMS: 1983-1987						
YEAR						
1987	8%	25%	23%	40%	3%	1%
1986	7	23	24	41	4	1
1985	8	20	22	42	6	2
1984	9	17	23	43	6	2
1983	12	16	23	42	5	2

TABLE 4: CLAIMS

YEAR	CLAIMS MADE PER 100 FIRMS	CLAIMS PENDING PER 100 FIRMS	METHODS OF RESOLUTION: 1987	
			METHOD	PERCENT
1987	46	75	NEGOTIATION	42.4%
1986	33	71	ADR: MEDIATION	5.9
1985	39	64	ARBITRATION	2.0
1984	43	74	OTHER ADR	3.6
1983	35	60	LITIGATION:	
			-SETTLED PRIOR TO COURT AWARD	36.2
			-SETTLED BY COURT AWARD	9.9
				100.0%

TABLE 5: SOURCE AND NATURE OF CLAIMS

% OF CLAIMS BROUGHT BY:

OWNER:	
LOCAL GOVT.	9.1%
STATE GOVT.	3.3
FEDERAL GOVT.	1.8
COMM./INDUSTRIAL	15.3
OTHER TYPE OWNER	11.2

OTHER PARTY:	
CONTRACTOR	15.7%
SUBCONTRACTOR	4.3
EQUIP. SUPPLIER	0.8
A/E	3.5
OTHER THIRD PARTY	35.0
	100.0%

% OF CLAIMS INVOLVING:

PERSONAL INJURY	26.0%
DESIGN ERROR/OMISSION	41.5
DELAYS	4.3
CHANGED CONDITIONS	6.7
CONTRACT DOCUMENTS	3.9
OTHER	17.6
	100.0%

% OF CLAIMS ATTRIBUTED TO ERROR BY:

YOUR FIRM	18.4%
OWNER	12.9
OTHER DESIGN PRO	9.5
CONTRACTOR	28.0
SUBCONTRACTOR	9.0
EQUIPMENT SUPPLIER	3.2
OTHER	19.0
	100.0%

TABLE 6: COST OF CLAIMS SETTLED

DEFENSE (LEGAL) COSTS PAID PER CLAIM:

BY FIRM	\$ 8,152
BY INSURER	\$7,879

FIRMS' PERSONNEL HOURS EXPENDED PER CLAIM IN PREPARATION OF DEFENSE:

136 HOURS/CLAIM

CLAIMS SETTLED WITHOUT ANY PAYMENT TO CLAIMANT:

% OF ALL CLAIMS SETTLED W/O PAYMENT	38.7%
DEFENSE COSTS PER CLAIM: BY FIRM	\$6,784
BY INSURER	\$9,818
FIRMS' PERSONNEL HOURS EXPENDED PER CLAIM	166 HOURS

"86-PAD-145"
The A-E's Unintelligible Millstone

A growing problem among consulting engineers seeking or performing federal work is the insistence of many government auditors that a prorata share of liability insurance premiums is no longer an allocable element of overhead cost. For those who haven't faced this problem, the culprit is a Defense Contract Audit Agency guidance memo, "86-PAD-145," entitled "Audit Guidance on Errors and Omissions Insurance and Professional Liability Insurance."

Guidance memo 86-PAD-145 was issued September 6, 1986, with no opportunity for public comment and no formal discussion with representatives of the professions most affected. It appears to be in conflict with the allowability and allocability policies of virtually every federal construction agency or program. It contains statements and assumptions that are unsupported. It requests data that is generally unavailable and discusses (but does not mandate) modification of existing policy re: the allocability of A-E insurance costs.

Nevertheless, this memo is cited in numerous DCAA denials of architect-engineer professional liability premiums as part of firm overhead costs. Inexplicably, a careful reading of the contents reveals no specific directive to this effect. Instead, it contains some startling inaccuracies.

For example, the author correctly notes that E & O costs "have doubled or tripled in the past two years." But he goes on to state "This additional premium cost can be identified to litigation involving commercial activities associated with condominiums and other family housing projects."

Other statements include: "A & E contractors have rarely incurred insurance claims or losses on its Government contract activity," and "... third party exposure and risk of loss is minimal or non-existent on (A-E) Government contracting activity." (Parentheses added.)

Elsewhere the memo notes that the government "... requires A & E firms to

The Private Practice Division of the Louisiana Engineering Society (LES/PEPP)

James C. Wernicke, P.E.
Chairman, LES/PEPP

PEPP is the strongest and most viable group within the National Society of Professional Engineers and the Louisiana Engineering Society. PEPP represents almost 1,000 engineers in private practice on many important issues. Issues like liability, dealing with contractors, registration law, public relations, political contribution abuses and interaction with the lawmakers in Baton Rouge and Washington.

Over the past year, PEPP efforts have resulted in a mini-Brooks bill for highway construction, assistance in the form of amicus curiae briefs in defense of engineers in general, expansion of enforcement requiring practicing civil engineers in industry to be registered, a young engineer forum to discuss the young engineer within the design firm and industry, a series of monographs to assist the young engineer in understanding how a design firm does business, purchase and distribution of video tapes to assist firms in marketing and quality control, participation in the ACEC Peer Review program and ASCE Quality Assurance Manual, scholarships and recognition of the private practice engineer, support of the Highway Trust Fund, resignation of a member of the Ports and Waterways Institute who had a conflict of interest, cancellation of engineer fees imposed by the Department of Health and Human Resources for document review, assistance to the landscape architects in defining landscape architecture and to ourselves in defining engineering for future legislative acts.

It was a busy year and demonstrates that something is being done.

Over the next year, LES/PEPP will focus on issues such as seminars for PEPP members at our state conferences, a group medical program for members who are sole proprietors or consultants, distribution of new video tapes and the

engineering monographs, continuation of work on the highway trust fund, clarification of how the new highway bill will affect the way business is done in Louisiana, tort reform, support of the civil engineering registration law change, control of large political contributions by engineering firms to obtain work and other legislative issues.

At the October 23 annual meeting held in Shreveport, LES/PEPP committed itself to an active role in the support of the private practice engineer by increasing funding for communications, liability insurance for structural engineers, amicus curiae support for engineers being wrongly sued and officer participation within NSPE/PEPP. We agreed to strongly support the goals of LES '90, a program to revitalize the Louisiana Engineering Society, to support the Louisiana Highway Trust Fund and to determine that non-competitive bidding procedures are used by state agencies whenever engineer services are procured. In legislative priorities, we gave the following preferences to the LES Legislative Committee for 1987 - 88:

- 1) Tort Reform
- 2) Engineering Procurement
- 3) Highway Trust Fund Monitoring

LES/PEPP strongly supports the concept that a professional engineer shall be selected not on his cost, or hourly rate, but on his capabilities in the field of expertise. For this reason we discourage any political contributions which would attract attention to the firms or individuals involved. Due to the efforts of one of our members, Dudley Hixson, P.E., NSPE has gone on record as against major political contributions by engineering firms and has requested the National Council of Engineering Examiners to determine if the various state registration

boards can take action in some manner, either through existing or future laws.

Over the past few days, two additional issues have been brought to light. The first concerns the concept of contract privity. In a Louisiana Circuit Court of Appeal decision, it was concluded that although a contractor may not have a contract with the architect or engineer, the architect/engineer is still duty bound to prepare plans and specifications with reasonable care and skill. If, as a result of poor or incorrect plans and drawings the contractor suffers damages, the architect/engineer can be held liable. This changes the previous concept that the negligence incurred is imputed to the owner. This case is *Milton J. Womack v. State of Louisiana*.

The second issue is an outcome of the *Hydrolevel* case in which the ASME was found liable for damages due to the actions of their volunteers who were members of a committee. Recently, legislation has been proposed that would limit the liability incurred by an organization as a result of volunteers' actions. The House Bill (H.R. 911) has 200 sponsors and appears to be heading for passage, but the Senate Bill (S. 929) is far behind. All PEPP members are encouraged to write their senators and representatives in Washington in support of these bills.

We were very pleased to find that Mr. Hixson has been nominated by the NSPE nominating committee to serve as NSPE/PEPP Chairman-Elect. Barring any unforeseen mishap, Mr. Hixson will take the office of NSPE/PEPP Chairman in 1989. We congratulate Mr. Hixson.

Finally, everyone enjoys recognition. For this reason, NSPE/PEPP has several awards for outstanding individuals. If you know of someone who has dedicated himself selflessly to the advancement of engineering, please write to me at 6600 Schouest Street, Metairie, 70003.

Roster of Engineering And Surveying Societies

The Inter-Society Relations Committee of the Louisiana Engineering Society is responsible for compiling a roster of chief executive officers for other engineering societies in the state on an annual basis for publication in the *Louisiana Engineer*. The purpose of this effort is to improve communications among the entire engineering community in Louisiana and identify contacts for such inter-society activities as Engineers' Week programs, technical seminars, and coordination of legislative efforts. If your engineering organization is not listed and you wish to be included in next year's roster, please make that request through the LES headquarters at P. O. Box 2683, Baton Rouge, LA 70821.

James C. Wernicke, P.E., Chairman, Inter-Society Relations Committee

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

Baton Rouge Section

Geoffrey L. Price
LSU Department of Chemical Engineering
Baton Rouge, LA 70803
(504) 388-1426

New Orleans Section

Carl Herrick
3008 20th Street
Metairie, LA 70005
(504) 833-4424

Southwest Louisiana Section

Danny Edward Lakes
P.O. Box 286
Pt. Royal, SC 29935
(318) 439-0628

AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

New Orleans Section

Richard Smith
P.O. Box 29304 MS-3524
New Orleans, LA 70189
(504) 257-5120

AMERICAN INSTITUTE OF INDUSTRIAL ENGINEERS

Baton Rouge Section

Dr. Fred Aghazaden
3128 CEBA Bldg.
Louisiana State University
Baton Rouge, LA 70803

New Orleans Section

Pam Zolczer
P.O. Box 155
Grammercy, LA 70052
(504) 529-1102

AMERICAN INSTITUTE OF PLANT ENGINEERS

Chapter 67 (New Orleans)

James R. Danner
210 O'Keefe Avenue
New Orleans, LA 70112
(504) 561-1131

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS

Louisiana Section

Lalit R. Verma
149 E.B. Doran
LSU Agricultural Engr. Bldg.
Baton Rouge, LA 70803-4505
(504) 388-3153

AMERICAN SOCIETY OF CIVIL ENGINEERS

President, Louisiana Section
Frank M. Stuart, P.E.
1001 Howard Ave., Suite 2101
New Orleans, LA 70113
(504) 522-9359

Acadiana Branch

Dr. Kam Movassaghi, P.E.
P.O. Box 43988 USL
Lafayette, LA 70504
(318) 231-6485

Baton Rouge Branch

Anthony Palotta
1045 W. Tom Stokes Court
Baton Rouge, LA 70810
(504) 767-1307

New Orleans Branch

John W. Giardina
4176 Canal Street
New Orleans, LA 70119
(504) 486-5901

Shreveport Branch

Ron Norwood, P.E.
3825 Mansfield Road
Shreveport, LA 71103
(318) 226-6330

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS

Baton Rouge Chapter

Artheu J. Lopez
3112 Valley Creek Drive Suite A
Baton Rouge, LA 70808
(504) 928-9745

New Orleans Chapter

J. Alan Maddox
2200 David Drive
Metairie, LA 70003
(504) 885-2516

Shreveport Chapter

W. E. Hamm
P.O. Box 8689
Shreveport, LA 71148-8689
(318) 868-8884

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Acadiana Sub-Section

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Michael Boudreaux

Michael Boudreaux at Princeton

Michael B. Boudreaux of Opelousas has completed all requirements for his M.S. degree at the University of Southwest Louisiana and has been granted a \$23,000 per year fellowship, renewable for up to four years from Princeton University, where he is presently pursuing a PhD in engineering management.

Michael was the 1985 recipient of the Louisiana Engineering Foundation's Fellowship, which is presented annually to a graduate student of engineering who expresses a sincere desire to enter the teaching profession at the university level.

The Foundation is proud to be a part of Michael's success story and we wish him the best in his quest to join academia.



J. R. English

THE SPEC SHEET

Continued from page 13



maintain errors and omissions insurance . . . (to) provide the Government some assurance that a quality and professional job will be performed." This conclusion is seemingly ignored in a later paragraph which declares " . . . allocation of errors and omissions and professional liability insurance costs to all work does not appear to meet the . . . beneficial or casual relationships between the insurance costs and the benefitting or causing cost objective."

A-E contractors are directed by the DCAA memo to "require the insurance carrier to segregate the premium cost between commercial and Government risk

exposures so that the relationships can be demonstrated and evaluated." Said one underwriter, when confronted by such a request, "How the hell do we do that?"

ACEC and AIA, in a survey of federal agency policy on allowability/allocability of professional liability insurance premiums, has been assured that reasonable liability costs continue to be recognized and approved on A-E contracts awarded by NAVFAC, Corps of Engineers, NASA, Veterans Administration, U.S. Postal Service, and General Services Administration. Virtually every agency cited Federal Acquisition Regulation (FAR) 31.205-19 as its authority.

DCAA and ACEC officials met in August, and again in September (the latter with COFPAES and insurance industry representatives also attending). A third meeting is scheduled for late October. Discussions of the profession's and the government's respective positions have resulted in a better understanding of the issue by both sides. However, 86-PAD-145 is still the operative guidance and is still being cited by some DCAA auditors.

ACEC members, confronted by audits recommending against pro rata allocation of professional liability insurance costs, may find the following helpful in persuading federal negotiators that E & O insurance is a normal overhead expense.

(1) The overall government practice re-

garding this matter is clearly stated in FAR 31.205-19. There is no formal federal policy that makes professional liability costs unallowable or unallocable.

- (2) Government auditor recommendations are advisory to federal contracting officers. The latter can, if they choose, ignore such advice.
- (3) 86-PAD-145, in addition to factual shortcomings, fails to specifically direct DCAA auditors to implement the gist of its content.
- (4) Some DCAA auditors, apparently, have chosen to continue approving reasonable liability premiums. Thus, the Guidance is being inconsistently applied.
- (5) A letter from an A & E's underwriter, explaining problems of providing risk and rate data on public vs private projects, may be useful.
- (6) While Guidance Memos are not required to be disseminated for public comment, regulations are. If 86-PAD-145 is characterized as "mandatory," ask for documentation of its regulatory status.

ACEC member firms unable to resolve the allocability issue are encouraged to contact Mark Casso, in the Washington, D.C. office, for the latest work on developments re: eligibility of insurance premiums as an overhead cost.

J. R. English Named President of Ford, Bacon & Davis

J. R. English has been named president of Ford, Bacon & Davis, Incorporated by the board of directors of that company. In his new position, English will be responsible for the operation of Ford, Bacon & Davis' divisions located in Louisiana, Texas, Utah and its construction firms.

Prior to the appointment, English served as executive vice president of the Louisiana division. He has been with Ford, Bacon & Davis for over twenty years having also served as senior vice president and vice president of engineering for the Louisiana division.

English is a licensed professional engineer in the state of Louisiana and holds a master of science degree in mechanical engineering from Louisiana Tech University.

He is a member of the Louisiana Engineering Society, National Society of Professional Engineers, The Instrument Society of America, The Technical Association of the Pulp and Paper Industry, The American Society of Mechanical Engineers and serves on the executive board of Ouachita Valley Council of the Boy Scouts of America.

Ford, Bacon & Davis Incorporated is an international engineering and construction firm with major divisions located in Monroe, Louisiana; Dallas, Texas; and Salt Lake City, Utah.

Robert E. Benton, Jr., Receives LES Scholarship



Robert E. Benton, Jr., a freshman in Mechanical Engineering at Louisiana Tech University, was recently named to receive a \$1,000 Louisiana Engineering Society Scholarship for 1987-88. Robert is the son of Mr. and Mrs. Robert Benton, Sr. of Baton Rouge, Louisiana, and is a graduate of Scotlandville Magnet High School.

Robert is shown receiving his scholarship from Dr. Bobby E. Price, P.E., President of the Louisiana Engineering Society, and Chairman of the Awards and Scholarships Committee in the College of Engineering at Louisiana Tech.

Bovay Opens Phoenix Office

Bovay Engineers, Inc. has announced the opening of a new office in Phoenix, Arizona, effective October 1, 1987. Located at 4537 West Indian School Road, the Phoenix office is managed by Charles T. Sing. Bovay, a 40-year-old multidiscipline engineering firm based in Houston, also maintains branch offices in Austin, Albuquerque, and Baton Rouge.

According to Bovay's CEO Guy Furguele, "Opening an office in Phoenix is our first step in a plan to pursue viable markets outside Texas. The Phoenix office will give us the opportunity to go after industrial and commercial projects with high technology firms and will

satisfy the residency prerequisite necessary to perform work for the Arizona Department of Transportation. In the coming months, we also plan to open offices in Orlando, Florida and Charlotte-Raleigh, North Carolina."

The acquisition of the Phoenix office is the latest in a series of moves that began in March 1986 when a group of senior managers at Bovay bought the firm back from Armco. Bovay has since moved to new offices in the Concorde Tower at 1919 Smith in downtown Houston, reorganized its operating structure, and placed greater emphasis on its business development activities.

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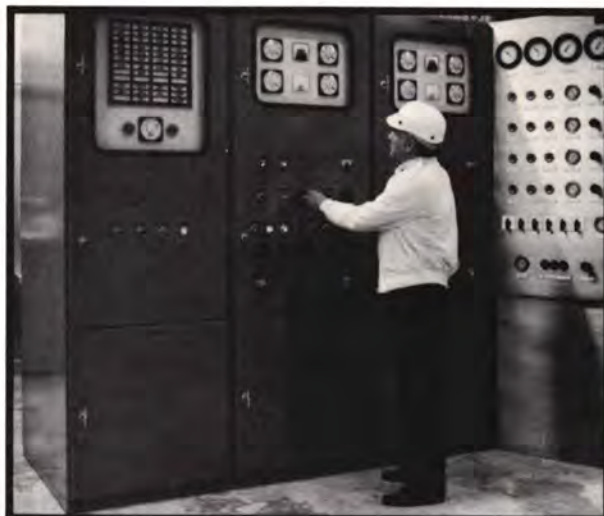
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1988 ACSE Daniel W. Mead Contest

The Daniel W. Mead Prize for Younger Members was established in 1939 to honor the memory and accomplishments of the 67th President of the American Society of Civil Engineers. The talents of many of the leaders of the profession were first recognized in previous contests for this significant professional honor. The current contest provides another opportunity for alert young civil engineers to further their professional development and gain national attention.

- Papers must be written on "Is Advanced Technology 'The Gateway to Irresponsibility'?"
- Advanced technology in design and

construction is making it easier for engineers to implement standard design, details and procedures rather than analyze or design each situation.

- How do you know if the answers advanced technology is giving are correct?
- What is the engineer's responsibility in understanding the theory behind the advanced technology being used?

RULES

- Authors must be Associate Members or Members of the Society 32 years of age or less on February 1, the year of the award.
- Only one person can write each paper.
- Each Section can submit only one paper.

- Paper must contain no more than 2,000 words.
- One will be selected from each of the Society's four zones.
- The national winner, selected from the zone winners, will receive a wall plaque and a certificate.
- Winners may be invited to present their papers at the ASCE Annual Convention, St. Louis, October, 1988.
- The paper by the national winner will be submitted for publication in *Civil Engineering* or *Journal of Professional Issues in Engineering*.

Local entrants should mail their papers on or before January 15, 1988, to John W. Moore, P.E., Secretary, Louisiana Section, ASCE, P.O. Drawer 1245, Ruston, LA 71273-1245.



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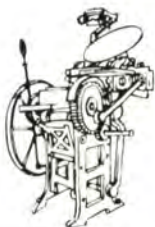
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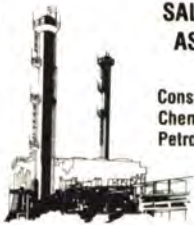
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