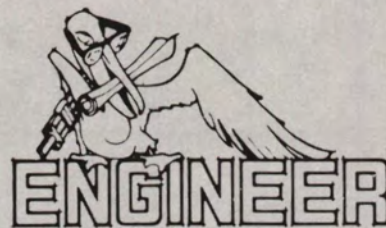




FEBRUARY, 1993
LOUISIANA



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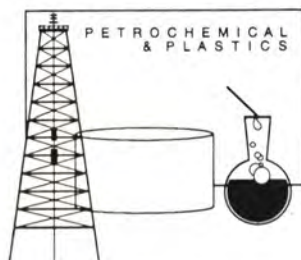
On the Inside:

Be sure to see important legislative issues beginning on page 14.

The KnightHawk Team

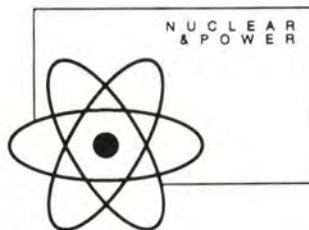


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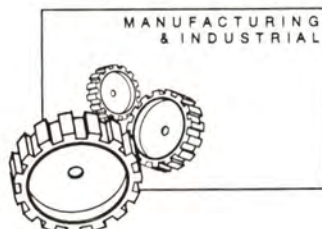
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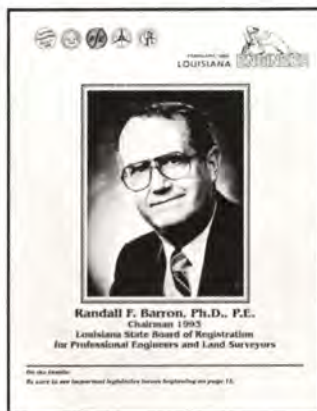
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ABOUT THE COVER

Randall F. Barron, Ph.D., P.E., Chairman of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, is pictured on this month's cover.

LOUISIANA ENGINEER

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(Please note: Receipt of Louisiana Engineer Magazine does not necessarily mean that you are registered with the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, or that you are a member of the Louisiana Engineering Society.)



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Presidential Privilege

Are the relationships and functions between the Louisiana Engineering Society (LES), Consulting Engineers Council of Louisiana, Inc. (CEC/L), Louisiana State Board of Registration for Professional Engineers and Land Surveyors (LSBRPE&LS), and Technical Societies, such as ASCE (civil), ASME (mechanical), IEEE (electrical), AIChE (chemical), and other disciplines consisting of Agricultural, Industrial, Metallurgical, Mining, Petroleum, and Nuclear clearly understood? Based on correspondence and questions received at the LES state office, there seems to be some misconceptions of the workings and objectives of these organizations. This article attempts to explain the purposes and relationships between these organizations.

LES is the single professional state organization affiliated with the National Society of Professional Engineers (NSPE), with prime focus to promote the **professional aspects** of the individual registered engineer, i.e., education, ethics, and legislation affecting registration. Individuals from all disciplines and areas of engineering, such as, education, construction, government, industry, and private practice, are encouraged to participate and become members of the Society.

CEC/L is the organization composed of principals of private practice firms with their main emphasis on the **business aspects** of the profession.

The LSBRPE&LS administers and enforces the engineering registration and licensing laws of the state. Since it is a state board, LES committees entitled "Liaison with the State Board" and "Legislative" coordinate items affecting the profession, such as legislation. LES assists the LSBRPE&LS by preparing needed legislation. Eight chapters in the state form LES, which is governed by a twenty-three member board. LES also furnishes the nominees to the Governor to replace members of LSBRPE&LS with expiring terms.

The technical societies address the educational development for these various disciplines. Most of these societies have national as well as state-wide affiliation.



Glynn P. Gautreau, P.E.
President
Louisiana Engineering Society

Coordination and liaison between the LES, CEC/L, LSBRPE&LS, and the technical societies on items of common interest continue on a regular basis. Joint state meetings are being planned to assist in cooperation on key issues. Even though these societies/organizations have different purposes or goals, considerable overlapping exists in legislative and general interest professional enhancement seminars.

Input from the general membership into these societies/organizations initiates at the committee level with recommendations given to their respective boards for action.

While this magazine, *Louisiana Engineer* (LE), is an LES publication, it is also the official journal of LSBRPE&LS. Recently, the Louisiana Society of Professional Engineers in Civil Service (LSPECS) has joined to use space in the LE magazine to describe items of interest. The LE magazine routinely offers space to CEC/L and LSBRPE&LS to present their officers and explain timely issues.

Some confusion exists between these societies and organizations, since articles in the LE magazine give the idea that LES

and LSBRPE&LS are one and the same. Some people think that because they receive the magazine, they are LES members. This is not so! They may be receiving the magazine because they are Professional Engineers registered by the LSBRPE&LS. Actually, the LE magazine is mailed to every registered or licensed Professional Engineer, Engineer-in-Training, and Professional Land Surveyor in the state. There is no chart or priority ranking of which society/organization is over the other. Each of these societies or organizations, as indicated above, fulfills different member, firm or registrant needs. For the ethical and professional aspects, LES serves the individual engineer. Principals of firms may associate with other principals in CEC/L to further their business interests. LES has Practice Divisions consisting of Professional Engineers in Construction (PEC), Education (PEE), Government (PEG), Industry (PEI), and Private Practice (PEPP). One of these LES practice divisions, PEPP, basically does a similar service for our private practice individual engineers as CEC/L does for their principals of member firms.

Often, the multiplicity of engineering organizations tends to be harmful and fragments our profession in efforts to join on a united front when legislative matters arise. This is particularly confusing at legislative committee hearings and to the architectural profession, when matters affecting these design professions are being debated.

It is extremely difficult to have legislation passed when the engineering profession is fragmented with many societies of both the professional and technical nature. We, the engineering profession, need to combine efforts when possible and to present a united front.

LES would like to be the **umbrella organization** for the state. This is similar to what NSPE is doing for the nation by promoting the ethical and competent practice of engineering in the public interest, and by promoting the social and economic well-being of its members. Please get involved and lend your support. **LE**

Guest Forum

A Modest Goal For Our Profession

The engineering profession exists with a slight anomaly in our state—the industrial exemption. How many of us would seek out the services of a medical doctor who was “exempt” from the requirements of medical licensing because he or she practices medicine through a medical corporation? How would the legal profession react to the idea that any attorney working for a legal corporation would not be required to pass the bar exam and become licensed? And yet because of the industrial exemption, a significant number of engineers in Louisiana legally practice engineering without becoming registered.

I would not propose immediate legislation to eliminate the industrial exemption from professional registration in Louisiana. Instead, I would propose a more modest goal for our profession. My proposal is for each of you—the practicing engineers of Louisiana—to seek to make the exemption unnecessary.

Already there is some effort presently being exerted in this direction. Many companies are seeing the benefit of having their engineers registered. For example, when an engineer working in industry is called upon to present legal testimony (and particularly when asked as an “expert witness”), the courts place much weight on whether the engineer who testifies in a legal case is a registered professional engineer or not. The registered engineer does not have to demonstrate his or her competence. This has been amply demonstrated through the registration process, which involves education in a specialized field, demonstration of an understanding of the fundamentals of engineering



Randall F. Barron, Ph.D., P.E.
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(through passing the FE exam), four or more years of experience under the tutelage of an experienced registered engineer, and demonstration of an understanding of the principles of the practice of engineering (through passing the P&P exam).

Another inducement for registration for engineers practicing in industry is that the person may not always practice in industry. Suppose you have worked for 25 years in an industry, and you want to break away on your own—to be your own boss for a while. Imagine your surprise (if you are not registered) when you find that you would violate the law of the State of Louisiana if you were to set up your own firm and offer your services as an

engineer—even though you had been doing exactly that same work for the past several years! Had you become registered 25 years ago and maintained registration, you would be able to offer your services legally through your own consulting firm after retirement from your industrial work.

The industrial exemption will become unnecessary when the majority of engineers going into industrial practice are highly motivated to begin the registration process upon graduation. This is where the experienced engineers in positions of industrial leadership can contribute to our profession. None of us knows the medical profession; we know a few physicians. Similarly, the young engineer does not really “know” the engineering profession; he knows a few engineers, and you are one of the ones that he or she knows.

If some of the engineers with whom you work are not registered, exert a little friendly persuasion and encourage them to continue the process of registration. Note that probably they have already begun the registration process by graduating from an ABET accredited engineering school. To reach the modest goal of making the industrial exemption unnecessary, voluntary effort is needed far beyond that required just to “get by.” We have a vigorous and growing profession now, but we need to continue our growth. We must be willing to promote changes in the profession for the common good of the public that we serve.

Ask not why engineers in industrial practice should be registered; instead, ask why not. Then, the industrial exemption will be as unnecessary as those three buttons on each sleeve of our suits.**LE**

Calendar of Events

We invite all technical and professional organizations to submit their meeting dates for publication in the *Louisiana Engineer* to: Editor, P. O. Box 2683, Baton Rouge, LA 70821.

February 14-20, 1993
Engineers' Week

March 18, 1993
NCEES Exam Reviews

March 22-23, 1993
State Board of Registration Meeting
New Orleans, LA

March 27, 1993*
State MATHCOUNTS Competition
Alexandria, LA

April 16-17, 1993
NCEES Exams

April 29-May 2, 1993
National MATHCOUNTS Competition
Washington, D.C.

May 2-6, 1993
ACEC Annual Convention
Los Angeles, CA

May 6-8, 1993
NCEES Southern Zone Meeting
Puerto Rico

June 23-26, 1993
LES Annual Meeting
Holidome, Lafayette
*New Date - Originally scheduled for
March 13, 1993

In Memoriam

Fielding H. Johnson, P.E.

12/15/34 - 1/11/93

Consulting Engineers Council of Louisiana, Inc. and the entire engineering community are greatly saddened at the passing of Fielding H. Johnson.

Fielding was President of Barber & Johnson, Inc., Baton Rouge. His exemplary service was well known throughout this organization. Barber & Johnson was inducted into CEC/L in early 1973. Fielding immediately jumped in and was appointed to serve on the Legislative Committee. In 1974 he was elected President of the Baton Rouge Chapter, and in 1975, he was appointed chairman of the CEC/L Legislative Committee. He continued to serve on the CEC/L Board of Governors, working his way up to finally serve as President of CEC/L in 1979-80, then as National Director the following year. At a time when many members' activity tapers off after their service on the board, Fielding remained extraordinarily active. He was the leading force behind the move of the CEC/L office from the Capital Lake Apartments to its present location in the Louisiana Engineering Foundation building on Nicholson Drive. He represented CEC/L at a series of meetings with the Louisiana DOTD to discuss engineering fees and contract formats. He served on the Budget Committee, Nominating Committee, and continued to participate on the Legislative Committee on many occasions serving as our spokesman.

Fielding served a term on the Louisiana Engineers Selection Board and was instrumental in promulgating meaningful revisions to the LE-1 Form. He was also elected to be the first representative of CEC/L to serve on the recently created East Baton Rouge Parish Engineers Selection Board. Whenever requested, he willingly served on a number of special ad hoc committees throughout the years including the CEC/L Long Range Planning Committee which developed the 1992-97 Strategic Plan. At the time of his death, Fielding was working with Carter Brown on the 1993 CEC/L Annual Meeting Planning Committee, making recommendations to the board on various proposed sites for the upcoming meeting. For his continued, unselfish service to CEC/L, Fielding was elevated to the status of ACEC Fellow in 1983 and was the 1984 recipient of the coveted A.E. Wilder, Jr. Award.

A well respected tenor and actor, Fielding Johnson was very active in the arts community in Baton Rouge. He was a member of the Baton Rouge Little Theater, the Gilbert and Sullivan Society, the Baton Rouge Symphony Chorus, the Baton Rouge Opera Chorus, the St. Thomas More Catholic Church Choir and the St. James Episcopal Church Choir. Many of us have fond memories of seeing Fielding in such Little Theater productions as "Show Boat", "Best Little Whorehouse in Texas", and many others too numerous to list.

Fielding Johnson touched so many lives with his terrific, singular personality. He was dearly loved by all who knew him and his family, and he will be greatly missed.

The CEC/L General Membership, Board of Governors and Staff offer heartfelt condolences to his wife, Mary; daughter, Kelley; and three Sons, Fielding, Jr., Stuart and Barton.

As Fielding Johnson has passed on, so passed a great man.

Warren J. Wilder
Executive Director, CEC/L

Metriation: Where It Stands In Dots

One of the most frequently asked questions relative to metric conversion is, "Are we really going through with it this time?" The answer is an unqualified yes. Both Congress and the Executive Branch by their actions have shown strong support for conversion to metric. Support by the private sector is also much stronger this time around.

Although the use of metric measurement standards in the United States has been authorized by law since 1866, the U.S. today is the only industrially devel-

oped nation in the world which has not adopted the metric system.

The Federal Highway Administration initiated a phased five-year plan to convert all its activities and business operations to the metric system of weights and measures. In an effort to assure the public was aware of the FHWA's intentions to convert in metric, a *Notice of Proposed Policy* was published in 1991 in the *Federal Register*. A total of 65 responses were received which included state highway agencies, local governments, trade associations, consulting firms, congressional, and the remainder from industry-related groups. The majority of respondents were state highway agencies.

Of those providing comments, 35% expressed some reservations about the proposed FHWA conversion policy and indicated specific areas of concern they thought needed special attention during any future conversion efforts. Eighteen percent of the responses were strongly supportive, and 47% were strongly opposed.

Exceptions to the rule

Nearly all of the respondents opposed to metric conversion took issue with FHWA's position against proposing exceptions to conversion for any of its programs. They felt the U.S. highway industry should be excluded in whole or at least in part



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



from having to convert because such conversion would be impractical or likely cause significant inefficiencies throughout the highway industry.

One state highway agency felt that there should be an exclusion for those types of measurements which affect the general public, such as acres, miles, and so on. Gailen O. Narum, Ward County (ND) Highway Engineer agrees. "It is our hope that miles and acres will not require change as it will be a financial burden to the states and counties and also cause a great deal of confusion relative to how the United States was originally divided up into townships and sections, each section being one mile square."

Another state highway agency suggested that the FHWA reconsider its exception policy with regard to highway signing, which will be a major cost factor in the change. Several state highway agencies and industry respondents questioned whether designing and constructing totally domestic U.S. highway projects in metric will increase the United States' international competitiveness.

Positive comments

One association noted that excluding programs from metric usage would weaken the conversion efforts and result in a heterogeneous system. A local government respondent expressed a position that the short-term impacts of conversion would be greatly outweighed by bringing the nation into line with the world market, providing economic benefit to the nation. One state highway agency engineer observed that the conversion would improve the United States' ability to compete in the world market place.

What's the cost?

The conversion for the transportation industry will be costly. A rough estimate of the nationwide cost of metrication to federal, state, and local highway agencies is placed at \$200 million. Estimates show about 30% of the total conversion costs would be signing changes with 25% for creating and converting existing computer programs, 10% for training, and 10% for reprinting manuals, specifications, standard plans, and similar material. Howard Yerusalem, P.E., Secretary of Transportation for the Commonwealth of Pennsylvania, says they estimate the cost of their

five-year implementation plan to be about \$31 million to complete the conversion to metric. Another state highway agency with slightly smaller-than-average highway program estimates costs at \$9 million for complete conversion. Duane Blanck, P.E., County Highway Engineer for Crow Wing County, Minnesota, says, "There will be costs, although unknown at this time, involved to make the necessary changes to metric which will only add to the already tight local road budget conditions; minimizing these costs will be important so the road user, and taxpayer, believes that public road funds are not being wasted."

A study scheduled to be completed this month should provide more information on cost that may be used to guide the FHWA's metric conversion program. Many respondents recommended special federal funding be established to reimburse states for costs associated with conversion. Several respondents noted that in 1978 the Congress prohibited the use of Federal-aid funds for highway signs solely using the metric system of measurement. Section 1053 of the Intermodal Surface Transportation Act of 1991 repealed section 144 of the Federal-aid Highway Act of 1978, covering this restriction. Therefore, the FHWA may now reimburse states for costs they incur in changing highway signs to reflect metric units under existing federal-aid categorical programs.

Dual usage

It is the FHWA's intent that all federal and federal-aid construction contracts advertised for bids after September 30, 1996, will contain only metric measurements. In response to concerns regarding the use of dual English/metric measurements during the transition period, the FHWA will not mandate such an approach, preferring instead to permit the state highway agencies to use dual measurements if they believe it appropriate. After fiscal year 1993, the FHWA plans as a general policy to discontinue its use of dual English/metric measurements.

Conversion aids

In the area of training material, the FHWA has purchased for general use a limited supply of metric/English conver-

sion slide rules and also has a larger quantity of specially developed technical conversion slide rules. A supply of these has been distributed to FHWA regional metric coordinators for distribution to division and state offices.

Additionally, FHWA regional offices 1 and 3 have developed computer conversion programs for general use. The region 1 program is a straight conversion program and the region 3 program uses macros within Word-Perfect. Both programs have been distributed agency-wide and are available on the electronic bulletin board.

In Crow Wing County, Minnesota, Duane Blanck says, "We hope to take advantage of computer software programs and other conversion aides that are or will be available to ease into metrication, relying on guidance from the FHWA and MnDOT. The acceptance of metrication by the public and local policy makers may very well influence the rate of conversion since there is and will be a need for education in explaining the *whys and howcomes* for metric on the local secondary road systems."

Equipment changes

More and more metrics will appear in equipment and machinery as they are redesigned - usually from the ground up. If an older model machine does get updated, much of the English measurement will remain because of interfacing. The Deere E-series loader line is heavily metric. Three of those units made in Davenport, Iowa, are sent to Japan with Hitachi logos and colors. Four Deere units come from Japan and are heavily metric. Metric and English will continue to be a mixed bag because of maintenance and repairs with interface of old and new parts, but the manufacturers are heading for all metric eventually.

The FHWA has a metric transition table that provides transition target dates for major program elements and activities. In developing the target date, the FHWA has attempted to be sensitive to all parties affected by the planned actions, recognizing that various industries and sectors of the economy may differ in the timing of their transition efforts toward the use of metric measure. [From: January, 1993 issue of *Better Roads*]

1992 Financial Statistics Survey Available

If you manage a small firm or medium size firm and wonder what everyone else is doing while we remain mired in this uncertain economic climate, the results of a recent survey of small and medium-sized firms may interest you.

According to Arthur Andersen, a national accounting and management consulting firm, over the last year:

- 30 percent of the firms surveyed have achieved quality improvements;
- 30 percent have improved productivity;
- 25 percent have ventured into new products and services in order to maintain or improve business activity;
- 18 percent have reduced the number of employees.

These are the kinds of steps that all firms are taking to survive the significant challenges they face in the current business climate. According to the survey, the recession ranks as the greatest threat to survival. However, a series of other considerations were also cited. They are ranked as:

- Cost of labor in terms of salaries and benefits;
- Regulatory burdens;
- Lack of available capital;
- Federal taxes;
- Lack of qualified workers;
- Health care benefits.

Firms frequently cited a credit and expense crunch. On the one hand, they face the inability to obtain credit and the worsening terms on outstanding loans. At the same time, they have had to address significant increases in expenses such as health care.

ACEC understands the challenges its firms must meet in order to survive and thrive. Among its recent initiatives is a quality management program to help firms apply quality principles to their operations, and new convention sessions and seminars to help firms with their business practice and marketing needs. One of ACEC's most important programs, Organizational Peer Review, is available to firms that wish to see how they are doing based on the assessment of other practitioners who understand the engineering business. For more information on these and other programs, please contact ACEC at 202-347-7474. For publication on this subject, please send prepayment of \$195 plus \$4 for shipping for ACEC # 253-92, 1992 Financial Statistics Survey.

—By Thomas F. Kern, Director of Business Practice Product and Services, American Consulting Engineers Council. LE

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Engineers in Government



Louisiana Society of Professional Engineers in Civil Service

Our increasing tendency to heap obligations on government at the federal, state and local levels through our politicians is leading to a deepening fiscal crisis in the United States. These obligations have accrued well beyond our apparent willingness as tax payers to pay for them. Hence, the national deficit, cuts in local and state programs exacerbated by cuts in federal aid and diminishing tax bases, and - significant to us as engineers - the deferred maintenance of a deteriorating infrastructure have become political issues in themselves. The cost of government services is becoming questionable as our confidence in government entities to meet their accruing obligations to us as citizens appears to be eroding.

The Intermodal Surface Transportation Efficiency Act of 1991 is referred to by its acronym - ISTEA. It is pronounced "ice tea." The Act is the foundation for the federal regulation of - and funding for - transportation in the United States. Of importance to us as providers of this government service, the Act is - in part - a direct confrontation of the aforementioned issue of the public's fading confidence in government. The Act mandates that participating, state, transportation agencies implement six management information systems (MIS) and a statewide intermodal planning process. What does this confront if anything?

For the Louisiana Department of Transportation and Development (DOTD) - and most state transportation agencies - it means that we must begin to respond to our obligations not by indiscriminately throwing more money at them but by better using the resources available. Particularly, we are called to better manage what we have. In this case, our management has two components: stewardship and leadership. The DOTD Secretary, General Patin, recently expressed his concerns in both of these areas and his hope that in implementing ISTEA, we can alleviate the related problems we are experiencing.

To be good stewards, we must wisely care for the public transportation systems with which we are entrusted. The MIS mandated by ISTEA can provide us with the opportunity to obtain a breadth of knowledge to make more informed decisions about the conservation of our transportation facilities in Louisiana.

To be good leaders, we must wisely focus on providing a transportation system that meets a definitive vision we develop and share with the public we serve. The statewide intermodal planning process - once it is operational - can provide the technical means to continually identify long range transportation alternatives to aid in developing and maintaining a realistic and definitive vision for Louisiana's transportation system. We - as engineers - need this vision to lead. We - as citizens of Louisiana - need this vision to renew our confidence in our government to effectively provide services.

The significance of an intermodal planning process is that past planning focused on reacting to narrow considerations - responding to current and future highway traffic needs and the condition of the highway facilities. An intermodal planning process focuses on how to improve our highway system to best integrate the service it provides into the other modes of transportation in Louisiana with which it must co-exist now and in the future. Transportation services are redefined. Instead of moving vehicles on a highway it is transporting goods and/or passengers by highway, railway, waterway, airway and pipeline. Transportation needs are then defined in terms of the local, national and international demands for transportation that now use and will be using the mix of transportation facilities that exist and will exist in Louisiana.

The significance of the MIS for highway pavements, highway bridges, highway safety, highway congestion, intermodal transportation linkages and public transportation inventory is that they are the tools to more effectively manage our

highways. MIS can improve our ability to prioritize and program short-range highway construction and maintenance needs. Then they can aid in choosing - from among the feasible alternatives that satisfy a programmed need - the most economical alternative by considering time dependent investment strategies. MIS also can provide the opportunity to improve our ability to monitor the progress and the actual impact of highway improvement programs. MIS opens a new, formal channel for communicating experience between highway design, construction, operations and maintenance. This improved quality and quantity of information offers the opportunity to improve our responsiveness to deficiencies in highway facilities.

In summary, the six MIS required by ISTEA offer us the opportunity to make more informed engineering management decisions and to select more economical and effective highway construction and maintenance programs. The intermodal planning process offers us an opportunity to develop and continually update a realistic vision of Louisiana's total transportation system and to reorder our highway priorities accordingly. Using the breadth of knowledge provided by the information systems and the focus provided through the planning process, the DOTD can be in a position to aggressively pursue programs from a strength of conviction and purpose engendered by good stewardship and leadership - good management.

In an unrelated issue, LSPECS is pleased to announce the recipient of its first annual \$500.00 scholarship. From over 100 applications, Ms. Becky L. Bryant of Lafayette, LA was awarded the scholarship by the LSPECS Board of Directors. Ms. Bryant is a Civil Engineering major at the University of Southwestern Louisiana. LE

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Letters to the Editor

The "LES Forum" invites comments on matters of interest to the profession. Comments should be brief, courteous and timely, and will be edited by the Publications Committee for balance and pertinent content.

Dear Reader,

At the LES State Meeting in Monroe this past January, I chaired the Engineering Education Committee Meeting, and counting my "shadow", there were two of us in attendance. Needless to say, not much business was conducted and no report was made at the General Membership Meeting.

There were several serious matters on my agenda which I felt should have been discussed and brought to the attention of the membership. Therefore I am resorting to a "letter to the Editor" in the hopes that some interested professional engineers will listen and voice an opinion on at least one particularly serious matter.

Only one Engineering college in the State of Louisiana was requiring their students to take the Engineer-in-Training Examination in order to graduate. The

idea, of course, was to promote professionalism and registration by (at the very least) forcing these future engineers to become aware of the registration procedure. In such an arrangement there are, naturally, some students that are not really interested in passing the exam, and they merely pay the fee and may even leave immediately after signing in at the test site. I say "was requiring" because this is no longer the case.

Recent action by the State Board of Registration resulted in the release of pass/fail statistics BY UNIVERSITY!! This information is released without any qualifying remarks with respect to such mandatory requirements. The various colleges in the state are now forced to "play the numbers game", thus, this school has dropped this requirement for graduation. If this is not reason enough to get involved, I have since heard that another school was actually discouraging their low GPA students from taking the test. The message that is being sent to the student is that registration is not really important, the title of "Professional Engineer" is a meaningless title, and that only the upper level student need even try to take the

initial steps. This is, of course, a very serious detriment to the promotion of the philosophies of the Louisiana Engineering Society, the goal of which is to get every Engineer registered and to become members. In my opinion many of these students will never even try to become registered and future membership in LES will suffer. After all, we are a branch of the National Society of **Professional Engineers!**

If you are interested in presenting thoughts on this to the Board of Direction of LES we can, as a committee, do so by telephone, fax, etc. Please contact me at (504) 286-6184, FAX (504) 286-7413, or write your comments and send them to me at:

Department of Mechanical
Engineering
University of New Orleans
New Orleans, Louisiana 70148

Please include your name, address, phone number and fax number so I can respond. Thank you for taking the time to consider this most serious matter.

Frederick J. Brown, P.E., Ph.D.
State Chairman
Engineering Education Committee



**INSTRUMENT
SOCIETY OF
AMERICA**

*New Orleans /
Baton Rouge Exhibit*

INSTRUMENT SOCIETY OF AMERICA Annual Trade Show and Exhibition April 27-28, 1993 Pontchartrain Center, Kenner, LA

The New Orleans/Baton Rouge ISA Exhibit is an annual trade show and exhibition that alternates between New Orleans and Baton Rouge. The 1993 exhibit will be held at the Pontchartrain Center in Kenner, LA on Tuesday, April 27, and Wednesday, April 28, from 12:00 noon to 7:00 p.m. each day. There will be over 130 booths/exhibitors showing the latest technologies and products from instrumentation and electrical manufacturers. In addition to the products, hardware, and software, there will be eighteen (18) technical and industry seminars held during the two days of the exhibit. These sessions will include topics as diverse as ISO 9000 certification, On-line calibration of instruments, etc.

Further information on the Instrument Society of America or the New Orleans/Baton Rouge 1993 ISA Exhibition can be obtained from the Exhibition Chairman, Mr. Bill Walvoord, at (504) 785-3216 or from the Publicity Chairman, Mr. Toby Miller, at (504) 835-8888.



**Paul L. Landry, P.E.,
Executive Secretary**

**Louisiana State Board of Registration for
Professional Engineers and Land Surveyors**



Changes in the Law are Needed

The Board administers the Engineering and Land Surveying Registration Law. From time to time it brings to the attention of the engineering and land surveying professions, which the Board regulates, the need for changes in the Registration Law.

In 1991 the Board met with members of the professions and expressed its views on the need for changes in the Law. It was suggested then that the Board delay its request one year. The Board studied its financial position at that time and agreed to delay it for one year.

On June 12, 1992 representatives of the Board again met with representatives of the professional engineering and land surveying societies and formally presented its request for a change in the Law.

One of the changes was an increase in the cap on initial registration fees and renewal fees. A position paper was prepared regarding Board fees. This position paper is presented in its entirety so that everyone understands why the changes in the Board fees are necessary.

June, 1992 Position Paper Board Fees

Louisiana has the second oldest engineering and land surveying licensing board in the nation. It was established in 1908 as a direct result of the dedication and persistency of the Louisiana Engineering Society.

Louisiana has been a leader in engineering and land surveying registration in the development of meaningful engineering and land surveying proficiency examinations. As a result, Louisiana is recognized nationwide for contributions to the current model laws and procedures. One of the major reasons has been the continuity of Board programs and policies. Louisiana has not, as many states have done, continually changed or revised the registration law at the whims of short term concepts. In the past ten years, the Louisiana Board has made significant strides in enforcing the Registration Statutes and Board Rules. The hearings held by the Board have not made the

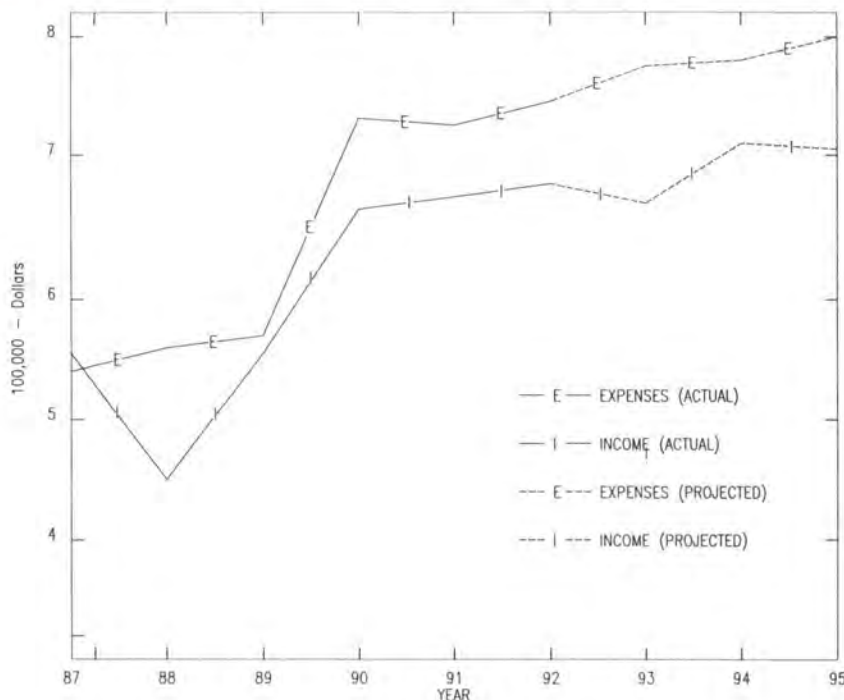
national headlines, but we feel they have had an impact on the public in that they have caused professional engineer and land surveyor registrants of the Board to examine their conduct and the services they provide to insure that they are better safeguarding the life, health, and property of the public they serve.

Act 149 of 1989 gave the Board the authority to deal directly with nonregistrants of the Board as it pertains to engineering and land surveying. We think this was a significant step in insuring that the public is protected. Other states are now changing their registration law and following our lead.

The Board's policy is to have one year's operating budget of funds in reserve for contingency purposes. As you know, the Board is completely independent of the State and cannot call upon state funds for its operation. It is and must remain independent. The greatest unknown that it has are funds which may be needed for legal fees. The Board has no way of predicting the legal fees needed in conducting its activities.

As you can see from Attachment I, since 1987 the Board's reserves and the budget have been diverging. Beginning with the fall of 1992, the divergency further accelerated because of the significant increase in examination costs. The Professional Engineering Examination costs increased by 20 percent, Fundamentals of Land Surveying Examination increased by 48 percent and the Land Surveying Examination increased by 67 percent. We also expect an increase in cost in the Fundamentals of Engineering Examination; however, we do not know how much it will be at this time. We expect it to be a 30 to 40 percent increase. These are national exams which we purchase from the National Council of Examiners for Engineering and Surveying (NCEES). The reason for the increase in the cost of the exams enables NCEES to make improvements in the quality of the examinations. The Louisiana Board supports these changes.

In the fall of 1993, we will no longer be able to administer the Fundamentals of Engineering and Land Surveying



ATTACHMENT #1

La. St. Board of Registration
For Professional Engineers & Land Surveyors
History & Projections of Income and Expenses

Examinations, and the Principles and Practice of Engineering and Land Surveying Examinations on the same day. These examinations will have to be administered on two separate days. The Principles and Practice of Engineering and Land Surveying Examinations will be administered on a Friday and the Fundamentals of Engineering and Land Surveying Examinations will be administered on Saturday. We are now in the process of relocating our examination sites to accommodate this change. This will increase our cost of administering the examinations by 20 to 40 percent.

The fees the Board charges its applicants and registrants is its only means of revenue. About 20 percent of the Board's income comes from the fees for the application for registration or certification which has a limit of \$100.00 (La R.S. 37:694.B.1). We are suggesting that the limit be raised at this time to \$200.00. Approximately, 80 percent of the Board's income comes from the renewals. That limit is now \$25.00 (La R.S. 37:697) per year and we suggest that the limit be changed to \$100.00 per year.

The Board has not had an increase in the statute limits it is allowed to charge for application and renewal fees since 1982. We very frankly believe that the Louisiana State Board of Registration for Professional Engineers and Land Surveyors operates very efficiently when you compare its cost of operation to other state boards in the United States. The Board does not believe that it would have to increase the application or renewal fees to the maximum suggested limits for a number of years, should it be given the authority by the legislature to do so. We, of course, would anticipate a modest increase in the current fees which would occur shortly after any legislation was approved. This increase would be only enough to cover increased costs and to reverse the trend of the divergence between the reserves and the budget.

Based upon past history, it is the Board's opinion that the new suggested maximum limit for application and renewal fees would probably not be reached for at least another ten to twelve years unless the rates of inflation drastically changed or the Board encountered a number of legal matters of disastrous financial cost to the Board.

A failure to increase the Board's revenues through increased limits on registration and renewal fees will essentially require the Board to significantly reduce its expenditures by limiting some of its activities. Such action may not be in the best interest of the public. However, the Board simply cannot indefinitely continue to operate within its current limits. Anticipated future budget deficits will

quickly consume the remaining operating reserve fund which is even now less than six months of the annual operating budget.

Other Recommended Changes in the Law

In addition to Board fees the Board has requested other changes in the Law which would greatly assist in administering the Law and thereby provide greater protection for the public. These requested changes are to be found on pages 14-17 of this issue of the *Louisiana Engineer* magazine.

The Board urges all registrants of the Board to review these requested changes and as you pass judgment as to the validity of these changes keep in mind that the Registration Law exists for the protection of the public rather than the protection of the professional registrant of the Board. The Board frankly believes that these requested changes do just that and no more.

Avoid Conflicts of Interest

The following is an example of a conflict of interest situation brought to our attention. The letter has been masked to avoid making references to specific individuals.

"I refer you to your letter of (date) wherein you posed a question regarding a possible conflict of interest involving referenced engineer.

Although the question you posed in your letter was answered on (date) during a meeting you had with the Board Investigator, I believe it proper to provide you a written confirmation. A registrant of the Board while under contract with one client, an owner, may engage with the contractor on the same project without placing himself in some type of conflict of interest if he follows the provisions of Louisiana Administrative Code Title 46:LXI §2107(C) which states; "Registrants shall not accept compensation, financial or otherwise, from more than one party for professional services on the same project, or for professional services pertaining to the same project, unless the circumstances are fully disclosed to, and agreed to, by all interested parties."

I personally would recommend that registrants avoid such situations if at all possible, because even if they follow the guidelines of referenced rule someone is going to question whether or not a conflict of interest exists.

The Board Investigator has looked into the matter you referenced and his findings appear to support that there is no conflict of interest in this particular instance."

Classification of Public Interest

The following letter was received from the State of Louisiana Licensing Board for Contractors, and it is published for your information and compliance. The "Board" referred to in the following letter is the Licensing Board for Contractors.

"We are attempting to advise all architects, engineers, and awarding authorities of the amendment made in the 1992 regular session of the Legislature to Louisiana R.S. 37:2163 as it pertains to the classification of public projects.

We would like for you to place in your newsletter Section 2163, Paragraph E, of the contractors' licensing law which reads as follows:

"It shall be the obligation of the architect, engineer, or awarding authority to classify public projects. Once the project is classified, any interested person may object by sending a certified letter to both the Board and to the architect, engineer, or awarding authority. Said objection shall be received by the Board and by the architect, engineer, or awarding authority at least ten working days prior to the date on which bids are to be opened. The objection shall state with particularity the reasons for the objection. The objection shall be submitted to a committee for determination. The chairman of the Board shall appoint the committee which shall consist of Board members. The committee shall have the power to approve the project classification or add an additional classification by vote of a majority of the members of the committee. The matter shall be resolved, and the Board shall notify the architect, engineer, and awarding authority no less than five days prior to the time when bids are to be opened, unless all parties agree that a delay will not cause harm to others."

It has been a policy of the Board in the past to accept the classification of an architect or engineer; however, we have encouraged them to show in the bid specifications the classification(s) a contractor must hold to be eligible to bid or perform the work.

If you have any questions, please do not hesitate to call me at 504-765-2301."

Client Communications

Jerry T. Carter, Executive Secretary of the North Carolina Board of Registration for Professional Engineers and Land Surveyors, has graciously agreed to let me reprint the following article which was

ublished in their December 19, 1992 newsletter. He expresses my thoughts about client communications —

"The Board's staff, in talking with complainants, has noted a significant increase in the mention of a common denominator which is often the root of disciplinary actions that might have been avoided; communication with the client.

It appears that a client's frustration usually converts to hostility in the absence of what the client perceives to be an honest effort at resolving problems by the registrant.

It's a fact of life that there will always be those who are chronic complainers or who are expecting something for nothing. Even so, it might be surprising if each client was accepted as a challenge in relation to your own emotions and reactions after paying for a product of service which was unsatisfactory. The registrant who conscientiously takes time to listen and investigate a client's concern is sometimes rewarded with the satisfaction of detecting his own error or that of his employee. In any event, human nature being what it is, the client will more likely retain the relationship with the registrant for future services. This viewpoint is supported by the logic of people preferring to return to the same doctor, lawyer, dentist, or service station. They may not be healed, acquitted, free of cavities, or travel any cheaper but their egos respond with "my doctor," "my lawyer," "my surveyor," "my engineer." Someone listened to them, established good communications, and the client felt justified with his expendi-

ture of funds, even though he wanted to hear something else.

By necessity we seem to become so involved within the shell of our own little

world that we sometimes fail to perform the preventive maintenance required to keep it intact. COMMUNICATION WITH YOUR CLIENT IS IMPORTANT!"



1993 - State of Louisiana Board of Registration for Professional Engineers and Land Surveyors

Front Row (left - right) - Paul L. Landry, P.E., Executive Secretary; Albert J. Dunn, PE/PLS, Vice Chairman; Randall F. Barron, P.E., Chairman; Coan J. Bueche, PE/PLS, Secretary; Benjamin S. Harrison, Board Investigator.

Back Row (left - right) - Morris P. Hebert, P.L.S.; Sam L. Sullivan, Jr., P.E.; William J. Thevenote, Jr., P.E.; Charles L. McDonald, P.L.S.; Larry A. McKee, PE/PLS; Malcolm L. Hurstell, P.E.; Vernon F. Meyer, PE/PLS; Ara Arman, PE/PLS.

**OCTOBER, 1993
EXAMINATION SCHEDULE AND DEADLINE DATES**

Examination	Pre-Application Deadline Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	July 15, 1993	August 1, 1993	October 30, 1993
Principles & Practice of Engineering Examination (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	July 15, 1993	August 1, 1993	October 29, 1993
Agricultural, Industrial, Metallurgical, Mining Nuclear, & Petroleum			
Fundamentals of Land Surveying Examination (8 hrs.)	May 1, 1993	May 15, 1993	October 30, 1993
Principles and Practice of Land Surveying (6 hrs.)	May 1, 1993	May 15, 1993	October 29, 1993
Louisiana Laws and Procedures of Land Surveying (2 hrs.)	October 1, 1993	October 15, 1993	April 15, 1994

Pre-Application is required of applicants for certification as an Engineer-in-Training or Land Surveyor-in-Training and for registration as a Professional Engineer or Professional Land Surveyor.

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.

1993

Mar. 22-23	Sept. 27-28
June 7-8	Nov. 8-9
July 26-27	

LES Legislative Update

The Society's involvement in the legislative arena still ranks as a high priority. Our participation in this process endeavors to protect and enhance the engineering profession, while at the same time, protecting the welfare of the general public by assisting the Registration Board and other organizations to formulate and successfully pass meaningful legislation.

To: All Louisiana Engineering and Land Surveying Professionals

From: Ad-Hoc Committee to Review Proposed Changes to Louisiana Registration Law

In 1992, the Louisiana State Board of Registration for Professional Engineers and Land Surveyors (the "Board of Registration") presented certain information to the engineering and land surveying professional societies concerning the budgetary and financial status of the Board of Registration. The Board of Registration also presented information concerning certain definitions, procedural and operational issues arising under the enabling statutes which charter and govern the Board of Registration (LA R.S. 37:681, et. seq. the "Registration Law"). The Louisiana Engineering Society, the Consulting Engineers Council of Louisiana, Inc., the American Society of Civil Engineers, and the Louisiana Society of Professional Surveyors (collectively, the "Professional Societies") appointed this ad-hoc committee to review the information presented by the Board of Registration.

The information presented by the Board of Registration is reproduced below in the form of seven proposed legislative changes and accompanying commentary. The commentary is also provided by the Board of Registration. This committee recommends approval of proposals 2, 3, 4, 5, 6, and 7 by the Professional Societies and further recommends that each Professional Society use their resources to cause these proposals to be introduced at, and enacted into law during, the 1993 Regular Session of the Legislature.

Proposals 2, 3, 4, 6, and 7 are viewed by this committee as housekeeping measures designed to update and clarify the Registration Law and to allow the Board of Registration to more efficiently administer the Registration Law.

Proposal 5 addresses the financial and budgetary status of the Board of Registration. As originally presented by the Board of Registration, the proposed change would have immediately increased the dues cap (not necessarily

the **dues**) from twenty-five dollars (\$25.00) to one hundred dollars (\$100.00). The proposal was silent, however, as to any limitations on the amount or timing of actual dues increases. While the committee supported the increase in the dues cap, the committee felt that some regulation on the timing and amount of increases should be established. After discussion of various alternatives, the committee reached a consensus that a staged incremental increase allowing no more than a fifteen dollar (\$15.00) increase in any three year period, with an overall cap of one hundred dollars (\$100.00), would be appropriate. Proposal 5, as presented herein, implements that concept. If enacted in 1993, this committee fully expects the Board of Registration to immediately increase dues by fifteen dollars (\$15.00).

The committee also considered whether the current budget and fiscal crisis facing the State of Louisiana should dissuade the Professional Societies from seeking action during the 1993 Regular Session of the Legislature. Many on the committee, including the undersigned, expressed concern that the introduction of this legislation might alert the Legislature to focus their taxing authority on the profession. While the committee certainly perceived a risk in moving forward with the legislation this legislative session, the committee also recognized that the risk exists independent of the introduction of such legislation. The committee felt that it was simply anybody's guess as to whether the introduction of this legislation would materially increase that risk. On balance, the committee unanimously decided to recommend introduction of the legislation at the 1993 Regular Session of the Legislature.

The committee takes no action on Proposal 1. The committee believes that more time, and more commentary from the profession, are required to adequately address the issue of modifying the definitions of engineering or land surveying. The committee strongly urges you to complete the questionnaire presented herein.

The comments and opinions expressed hereinabove represent a general consensus of the individual members of the committee and are not presented as, and are not intended as, the comments or opinions of the Professional Societies. However, each of the Professional Societies join with the committee in urging you to complete the questionnaire.

Signed: Raymond G. Areaux, P.E., Chairman, Ad-Hoc Committee

Suggested Revisions to the Registration Law, LA. R.S. 37:681-703

1993 Legislative Session

Additions To Existing Law are Underlined; Deletions are in Parenthesis; Commentaries are in Italics.

1. The Board proposes that the definitions of the practice of engineering [La. R.S. 37:682(8)] and of land surveying [La. R.S. 37:682(9)] be revised as follows:

Practice of Engineering - The term "Practice of Engineering," within the intent of this Act, shall mean any service or creative work, the adequate performance of which requires engineering education, training, and experience in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning and design of engineering works and systems, planning the use of land and water, teaching of advanced engineering subjects, engineering surveys and studies, and the review of construction for the purpose of assuring compliance with drawings and specifications; any of which embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects, and industrial or consumer products, or equipment of a mechanical, electrical, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health, or property, and including such other professional services as may be necessary to the planning, progress, and completion of any engineering services.

Engineering surveys include all survey activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, but exclude the surveying of real property for the establishment of land boundaries, rights-of-way, easements, and the dependent or independent surveys or resurveys of the public land survey system.

A person shall be construed to practice or offer to practice engineering, within the meaning and intent of this Act, who practices any branch of the profession of engineering, or who, by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself to be a pro-

essional engineer, or through the use of some other title implies that he is a professional engineer or is registered under this Act; or who holds himself out as able to perform, or who does perform any engineering service or work or any other service designated by the practitioner or otherwise recognized as engineering.

Practice of Land Surveying - The term "Practice of Land Surveying," within the intent of this Act, shall mean any service or work, the adequate performance of which requires the application of special knowledge of the principles of mathematics, the related physical and applied sciences, and the relevant requirements of law for adequate evidence to the act of measuring and locating lines, angles, elevations, natural, and man-made features in the air, on the surface of the earth, within underground workings, and on the beds of bodies of water for the purpose of determining areas and volumes, for the monumenting of property boundaries, and for the platting and layout of lands and subdivisions thereof, including the topography, alignment, and grades of streets and for the preparation and perpetuation of maps, record plats, field note records, and property descriptions that represent these surveys and such other duties as sound surveying practices would direct.

Any person shall be construed to practice or offer to practice land surveying, within the meaning and intent of this Act, who engages in land surveying or who by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself to be a professional land surveyor or, through the use of some other title implies that he is able to perform or who does perform any land surveying service or work or any other service designated by the practitioner or otherwise recognized as land surveying.

These proposed definitions are those set forth in the NCEES model law. The Board recognizes that the definitions currently in the statute are out of date; the NCEES model law definitions more fully encompass the current status of the two professions. Additionally, registrants and non-registrants alike over the past years have challenged the current definition of the "practice of engineering" in La. R.S. 37:682(8) by contending that the definition pertains only to engineering activities related to construction. Thus, a more comprehensive definition of the varied aspects of the practice of engineering and land surveying is advisable.

2. La. R.S. 37:693(B). The minimum requirements for registration or certification by the board shall be as follows:

(1) A certified engineer-in-training:

(c) Effective January 1, 1999, shall be a graduate of an unapproved engineer-

ing curriculum (or related science curriculum) of four years or more who has a specific record of four years or more of progressive experience on engineering projects of a grade and character satisfactory to the board, who is of good character and reputation, who has passed a written examination in the fundamentals of engineering, and who has satisfied the requirements of R.S. 37:694.

(2) A professional engineer:

(b) Effective January 1, 1999, shall be a graduate of an unapproved engineering curriculum (or a related science or related technology curriculum) who has a record of eight years or more of progressive experience in engineering work of such quality that the applicant is competent to practice engineering, who is of good character and reputation, who has passed a written examination in the fundamentals of engineering, who has passed a written examination in the principles and practice of engineering approved by the board, and who has satisfied the requirements of R.S. 37:694, or

These suggested revisions to La. R.S. 37:693(B)(1)(c) and La. R.S. 37:693(B)(2)(b) reflect the opinion of the Board members and of many members of NCEES that the engineering profession has evolved to the point that a college background in a related science or related technology inadequately prepares the applicant to be a professional engineer. A four-year education in an engineering curriculum is the desirable background for professional engineers.

Due to the fact that this change to the law would affect those already pursuing related science and related technology degrees, the law would not become effective until 1999. This is ample notice to those enrolling in such curricula and is a sufficient amount of time so that those currently pursuing related science and related technology degrees would not be penalized.

3. The Board suggests the following revisions to La. R.S. 37:693(B):

La. R.S. 37:693(B)(3)(b): A professional land surveyor-in-training -

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 courses involving land surveying, mapping, and real property (courses) approved by the board, who is of good character and reputation, who has passed the oral and written examinations required by the board, and who has satisfied the requirements of R.S. 37:694.

La. R.S. 37:693(B)(4)(f): A professional land surveyor -

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 courses involving land surveying, mapping, and real property (courses) approved by the board, who has had 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, who has passed the oral and written examinations required by the board, who is of good character and reputation, who has satisfied the requirements of R.S. 37:694, or

These changes are necessitated by the fact that currently very few institutions teach courses in land surveying, mapping and real property. Rather, they offer courses covering these topics, as distinguished from courses solely restricted to these topics. The suggested change to the law will more closely parallel the course offerings available to undergraduates.

4. The Board proposes the following clarification to La. R.S. 37:693(B)(4)(g):

A professional land surveyor:

(g) Shall be a person who holds a valid certificate of registration to engage in the practice of land surveying issued to him by the proper authority of a state, territory, or possession of the United States, or the District of Columbia, based on requirements that do not conflict with the provisions of this Chapter, who has passed a written examination (of a duration of four hours or more) in the laws, procedures, and practices pertaining to land surveying in Louisiana, who is of good character and reputation, and who has satisfied the requirements of R.S. 37:694, and if the state, territory, or possession, or the District of Columbia in which he is registered will accept the certificates of registration issued by the board on a reciprocal basis.

The purpose of the deletion of the reference to a four hour exam is to bring the statute in line with current practice. Recently the Louisiana Laws and Procedures examination has been either a one or two-hour exam. The revised law would contain no requirement as to a specified length of the examination.

5. The Board suggests the following revisions to the fee schedules for initial registration or certification and renewals:

La. R.S. 37:694(B)(1). Application and Registration or Certification Fees.

The registration or certification fee for professional engineers, professional land

surveyors, engineers-in-training, land surveyors-in-training, and foreign and domestic corporations shall be established at the discretion of the board, but shall not exceed (one) two hundred dollars, and said fee shall accompany the application. Commencing in 1993, the board may not increase said registration or certification fee by more than thirty dollars in any three (3) year period.

La. R.S. 37:697. Expiration and Renewals.

Certificates of registration and certification shall expire at a time specified by the board and shall become invalid after that date unless renewed. 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 the expiration of the certificate and the amount of the 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. Renewal of registration as a professional engineer, professional land surveyor, or corporation, or certification as an engineer-in-training or land surveyor-in-training may be effected at any time during the two months prior to expiration by the payment of a fee not to exceed (twenty-five) one hundred dollars per year, at the discretion of the board. The failure on the part of any person or entity to renew his certificate, as required above, shall not deprive such person or entity of the right of renewal. The maximum fee for delayed renewal shall be established by the board, provided that said renewal fee shall not exceed three times the normal renewal fee. Commencing in 1993, the board may not increase said registration or certification fee by more than fifteen dollars in any three (3) year period.

The Board operates totally without state funds. Fees charged to applicants and registrants is the Board's only means of revenue. Approximately 20% of the Board's income is derived from fees for initial registration or certification. Approximately 80% of the Board's income derives from renewals. The Board has not had an increase in the statutory limits on application and renewal fees since 1982.

Since 1987 the Board's reserves and its budget have diverged. Significantly increased NCEES examination costs, in effect since the fall of 1992, have been a further drain on the Board's budget. These national exams, which the Board purchases from NCEES, increased in cost in 1992 as follows:

*Professional Engineering Examination: 20%
Fundamentals of Engineering Examination: 30-40% (anticipated)*

Professional Land Surveying Examination: 67%

Fundamentals of Land Surveying Examination: 47%

Commencing in the fall of 1993, additional expenses of 20 to 40% will be incurred because of a nationwide agreement that the fundamentals of engineering and land surveying examination must be administered on a different day than the principles and practice of engineering and land surveying examination. The Board is in the process of relocating examination sites to accommodate this change.

Based upon precedent, the maximum limit for application and renewal fees would probably not be reached for ten to twelve years. The Board would prefer no limit to the amount of permissible annual increase, but could accept the three-year-per-increment phase-in set forth above. A failure to increase the Board's revenues as suggested will result in the Board's having to reduce its expenditures by cutbacks in the area of enforcement. Such action is clearly not in the best interest of the public or the profession. The Board simply cannot continue to operate within the current statutory limits on fees chargeable for registration/certification and renewals. The proposed fee increases are fair and crucial to the Board's continued efficient operation.

6. The Board proposes the following revisions to La. R.S. 37:698, "Disciplinary Action; Revocation; Suspension or Reprimand."

La. R.S. 37:698(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, place on probation, (or) and 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 proceeding is required to take disciplinary action in a case of entry of a plea of nolo contendere to a criminal charge:

La. R.S. 37:698(A)(9)

Using a seal or stamp or engaging in any other act constituting the practice of engineering or land surveying, or violating any order or terms of probation imposed by the board, 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;) certificate of registration has been expired for more than ninety days.

La. R.S. 37:698(D)

In addition to any other action, the board may assess all reasonable costs incurred 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), in conjunction with any other disciplinary action taken.

La. R.S. 37:698(F) [all new]

Consent orders may be considered disciplinary action.

The Board has in the past placed certain licenses on probation because nothing in the registration law prohibited it from doing so. It is preferable to have an affirmative statement in the law that such a practice is authorized. Obviously, probation is a valuable disciplinary tool and it enables the Board to better monitor the future activities of those receiving disciplinary action.

Substitution of the word "and" for "or" in the listing of disciplinary powers of the Board would enable the Board to have more effective disciplinary powers. The imposition of probation and a fine, or probation and a suspension, is obviously more effective than one or the other.

The proposed change to La. R.S. 37:698(A)(9) will enable the Board to efficiently deal with those who fail or refuse to renew their licenses and yet continue to practice engineering or land surveying. Three notices are routinely sent out to registrants whose licenses have expired. The requirement that the Board show receipt of notice was hampering enforcement, in that such registrants routinely fail to accept certified mail from the Board. The Board believes that it is the registrant's duty to renew his/her license and that the Board should not be required to give more than the three standard notices of renewal prior to being able to take disciplinary action against those practicing on expired licenses.

The suggested revision to La. R.S. 37:698(D) will enable the Board to impose all or part of the costs of a hearing in conjunction with any disciplinary action taken. The current law allows the imposition of such costs only in conjunction with probation or reinstatement of license.

The proposed new section, R.S. 37:698(F), concerns consent orders. The Board resolves a high percentage of its complaint files via consent orders, in which the registrant agrees to abide by the law and often consents to a fine or some other disciplinary action, in lieu of a hearing. Some of these consent

orders should be considered disciplinary action as opposed to informal settlement, because of the nature of the penalty consented to. This proposed provision of the law would allow such an approach.

7. The Board suggests that it be allowed the following additional disciplinary authority over non registrants:

La. R.S. 37:700(C)(1)(a)

The Board is charged with the duty of ensuring that the provisions of this Chapter are enforced. The Board shall investigate any complaint relating to a violation of any provision of this Chapter and, dependent upon the result of such

investigation, the Board may, after notice and hearing and by majority vote of its entire membership authorized to participate in the proceeding, issue an order prohibiting any such person, corporation, or business entity from violating this Chapter, and/or fine any such person, corporation, or business entity for any violations of this Chapter; provided that said fine does not exceed fifteen hundred dollars per violation in the case of an individual, or five thousand dollars per violation in the case of a corporation, company, partnership, firm or business entity.

The reason for this suggested change to the registration law is that the Board should be able to fine non registrants, after the due process accorded in a hearing, without having to go through the currently required step of issuing an order, waiting for the non registrant to violate the order, and then assessing a fine. The requested change to the law strengthens the enforcement authority of the Board over non registrants and enables the Board to proceed more expeditiously against the more flagrant violations of the law by non registrants. As with all other fines assessed by the Board, these fines would be paid to the state General Fund.

QUESTIONNAIRE

It is the desire of the Professional Societies to not only act in the best interest of its members, but in the profession as well. Please complete the questionnaire below and promptly return to Raymond G. Areaux at Milling, Benson, Woodward, Hillyer, Pierson & Miller, Suite 2300, 909 Poydras Street, New Orleans, LA 70112-1017 or fax to 504-569-7001.

1. Proposal to amend R.S. 37:682(8), Practice of Engineering

SUPPORT: ☐ OPPOSE: ☐ Comment: _____

Proposal to amend R.S. 37:682(9), Practice of Land Surveying

SUPPORT: ☐ OPPOSE: ☐ Comment: _____
2. Proposal to amend R.S.37:693(B) (1) (c) and 37:693(B) (2) (b)

SUPPORT: ☐ OPPOSE: ☐ Comment: _____
3. Proposal to amend 37:693(B) (3) (b) and 37:693(B) (4) (f)

SUPPORT: ☐ OPPOSE: ☐ Comment: _____
4. Proposal to amend R.S.37:693(B) (4) (g)

SUPPORT: ☐ OPPOSE: ☐ Comment: _____
5. Proposal to amend R.S. 37:694(B) (1)

SUPPORT: ☐ OPPOSE: ☐ Comment: _____

Proposal to amend R.S.36:697

SUPPORT: ☐ OPPOSE: ☐ Comment: _____
6. Proposal to amend R.S. 37:698, "Disciplinary Action; Revocation; Suspension or Reprimand"

SUPPORT: ☐ OPPOSE: ☐ Comment: _____
7. Proposal to amend R.S. 37:700(c) (1) (a)

SUPPORT: ☐ OPPOSE: ☐ Comment: _____

Other Legislative Activities

The Louisiana Engineering Society, the Louisiana Architects Association, the Louisiana Society of Professional Surveyors, and the Landscape Architects Association are endorsing a "Qualification Based Selection" bill to be filed by the Consulting Engineers Council of Louisiana, Inc. The organizations are soliciting input and commentary on this proposed legislation from the Louisiana Municipal Association and the Police Jurors Association.

Public Contracts: Provides for the procurement of professional engineering, architectural, landscape architectural, and land surveying services.

To enact Part IX of Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 38:2320.1 through 2320.5 relative to the Louisiana Professional Services Procurement Act; to provide for the selection of professional engineers, architects, landscape architects, and land surveyors based on demonstrated competence and qualifications; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. Part IX of Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 2320.1 through 2320.5 is hereby enacted to read as follows:

PART IX. LOUISIANA PROFESSIONAL SERVICES PROCUREMENT ACT

Section 2320.1 Title - This section shall be referred to and may be cited as the "Louisiana Professional Services Procurement Act".

Section 2320.2 Definitions - The following words and phrases, as used in this Part unless a different meaning is plainly required by the context, shall have the following meaning:

(1) "Professional Services" means those services within the scope of the practice of professional engineering, architecture, landscape architecture, or land surveying as performed by any licensed professional engineer, architect, landscape architect, or land surveyor in connection with his professional employment or practice.

(2) "Agency" means any state agency, political subdivision, parish, municipality, district, authority, board commission, or publicly operated utility.

(3) "Firm" means any individual, partnership, corporation, joint venture, or other legal entity permitted by law to practice professional engineering, architecture, landscape architecture, or land surveying in the State of Louisiana.

(4) "Competitive Bidding" means requesting, accepting, or considering any bids or proposals that include compensation to be paid, estimated manhours, hourly rates, overhead rates or other forms of remuneration for services before selecting a firm to provide professional engineering, architectural, landscape architectural, or land surveying services.

Section 2320.3 Policy - It is the policy of the State of Louisiana and all agencies that all agencies shall negotiate contracts for professional engineering, architectural, landscape architectural, and land surveying services on the basis of demonstrated competence and qualifications for the type of services required and at fair and reasonable prices and to prohibit the use of competitive bidding for the procurement of professional services.

Section 2320.4 Public Announcement, Qualification and Selection Procedure.

A. For the procurement of all services for which the basic construction cost of an individual project exceeds two hundred thousand dollars (\$200,000) or the compensation to the selected firm for an individual project for professional services exceeds twenty-five thousand dollars (\$25,000), the agency shall publicly announce in a uniform and consistent manner in a publicly recognized news publication or journal each occasion when professional services are to be required. The public notice shall include the general description and scope of the project, the criteria to be used for selecting a firm, and the relative weight assigned to each criterion during the selection process. The public notice shall indicate how interested firms may apply for consideration.

B. The public notice must appear a minimum of twenty-five (25) calendar days prior to the deadline for interested firms to apply for consideration.

C. In the case of a valid public emergency so certified by the agency head, Subsections A and B may be waived.

D. The selection of firms for those projects that do not meet the thresholds stipulated in Subsection A do not have to

comply with the requirements of this Section; however, they must otherwise comply with the requirements of the Louisiana Professional Services Procurement Act.

E. In evaluating the qualifications of each firm, the agency shall consider:

(1) The specialized experience and technical competence of the firm with respect to the type of professional services required;

(2) The capacity and capability of the firm to perform the work in question, including specialized services, within the time limitations fixed for the completion of the project;

(3) The past record of performance of the firm with respect to such factors as controls of cost, quality of work and ability to meet schedules and deadlines;

(4) The firm's proximity to and familiarity with the area in which the project is located; and

(5) Other qualifications criteria that the agency may deem necessary.

F. The agency shall not use competitive bidding.

G. (1) The agency shall select, from the applications received, the firm considered the best qualified and capable of performing the desired work and then negotiate a contract with the firm selected.

(2) For the basis of negotiations, the agency and the selected firm will jointly prepare a detailed, written description of the scope of the proposed services.

(3) If the agency is unable to negotiate a satisfactory contract with the firm selected, negotiations with the firm shall be terminated. The agency shall then undertake negotiations with the second most qualified firm. If there is a failing of accord with the second firm, negotiations with such firm shall be terminated. The agency shall then undertake negotiations with the third most qualified firm.

(4) If the agency is unable to negotiate a contract with any of the selected firms, the agency shall re-evaluate

the necessary professional engineering, architectural, landscape architectural, or land surveying services, including the scope and reasonable fee requirements, again publicly announce the project, compile a list of qualified firms, and proceed in accordance with the provisions of this Act.

Nothing in this Part shall affect the validity or effect any contracts in existence on the effective date of this Part.

Section 2320.5 Applicability to Existing Selection Procedures - Not Based on Competitive Bidding - Nothing in this Part shall affect the application of R.S. 38:2310 et. seq. or any other selection procedure of an agency which is based on qualifications and not competitive bidding, and which is in existence by rule, ordinance or statute as of January 1, 1993.

The Louisiana Engineering Society, the Louisiana Society of Professional Surveyors, the Consulting Engineers Council of Louisiana, Inc., and the Landscape Architects Association are endorsing a "certificate of merit" bill to be filed by the Louisiana Architects Association.

Malpractice: Requires filing of affidavit to accompany the filing of a complaint of malpractice by an architect, engineer, land surveyor, or landscape architect.

To enact Code of Civil Procedure Art. 894, relative to professional liability of architects, engineers, land surveyors, and landscape architects; to require the filing of an affidavit alleging negligence; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. Code of Civil Procedure Art. 894 is hereby enacted to read as follows:

Section 894. Professional liability; architects, engineers, land surveyors and landscape architects; affidavit

C.C.P. Art. 894 is all new law.

A. In any action for damages alleging professional malpractice by an architect, engineer, land surveyor or landscape architect, the plaintiff shall be required to file with the complaint an affidavit of an expert competent to testify. The affidavit shall set forth specifically at least one negligent act or omission claimed to exist and the factual basis for each such claim.

B. The contemporaneous filing requirement of Paragraph (A) shall not apply to any case in which the period of filing will expire within ten days of the date of filing and, because of such time constraints, the plaintiff has alleged that an affidavit of an expert could not be prepared. In such cases, the plaintiff shall have forty-five days after the filing of the complaint to supplement the pleadings with the affidavit. The trial court may, on motion, after hearing and for good cause extend such time as it shall determine justice requires.

C. If an affidavit is filed after the filing of a complaint, as allowed under Paragraph (B), the defendant shall not be required to file an answer to the complaint and affidavit until thirty days after the filing of the affidavit.

D. This Article shall not be construed to extend any applicable limitation of time for action.

The Louisiana Engineering Society, the Landscape Architects Association and the Society of Professional Land Surveyors are endorsing a "prohibitions against the assumption of liability" bill to be filed by the Louisiana Architects Association.

Public Contracts: Prohibitions against the assumption of liability

To amend and reenact La. R.S. 38:2195 to provide that public entities may enter into certain contracts for professional services in connection with asbestos and other pollutants in buildings, structures or other property owned by the public entity.

Be it enacted by the Legislature of Louisiana:

R.S. 38:2195. Prohibited provisions

It is hereby declared that any provision contained in a public contract, other than a provision naming another as a co-insured or additional beneficiary in a contract of insurance, which requires a public body to assume liability for damages arising out of injuries or property damage to the contracting parties or to third parties caused by the negligence of anyone other than the public body, its employees, or agents, are contrary to the public policy of the state of Louisiana. Any and all such provisions in any and all public contracts issued on or after October 1, 1998, are null and void. The provisions of this Section shall be inapplicable with respect to

intrastate intergovernmental contracts (Provided further that the provisions of this section) and to contracts between any public entity and another party whereby the other party is to render professional services in connection with buildings, structures or facilities owned by a public body involving testing, sampling, detecting, monitoring, management planning, design or specifications relative to any asbestos, or other pollutants in buildings, structures or other property owned by the public body. Provided further that the provisions of this Section shall not apply to contracts between any public body and the owner of immovable property when the purpose of such contract is to grant the public body a servitude, right-of-way, or other authority to go upon, construct works, perform activities, or otherwise exercise control over or use the owner's property.

The Louisiana Engineering Society is endorsing a "Good Samaritan" bill to be filed by the Louisiana Architects Association.

To enact R.S. 9:2777 relative to voluntary services of architects or engineers during or in anticipation of a natural disaster or emergency; to provide for the non-liability of architects and engineers performing services at the request of a public entity or the American Red Cross during or in anticipation of a natural disaster or emergency.

Be it enacted by the Legislature of Louisiana:

La R.S. 9:2777 is hereby enacted to read as follows:

§ 2777 Non-Liability of Architects and Engineers during Natural Disasters - Any engineer or architect, whether licensed in this state or any other state, who renders voluntary services within the scope of his or her license during or in anticipation of any disaster or emergency at the express or implied request of any public entity or the American Red Cross, shall have no liability for injuries sustained by any person or damage sustained to any property by reason of such voluntary services, regardless of how or under what circumstances or by what cause such injuries or damages are sustained, including a failure to warn; provided, however, that the immunity granted herein shall not apply in the event of a willful act or willful omission. LE

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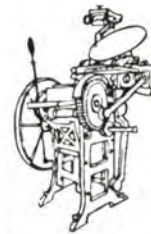
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A message from the President of the United States

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February 14-20, 1993**

Engineers have always been major contributors to our nation's prosperity and quality of life. Now, as our country embarks in a new direction, engineers will be key players in finding solutions to many of our challenges ahead. From environmental cleanup to international competitiveness, from rebuilding our infrastructure to assuring a reliable energy supply, it is engineers who'll be called upon for the creativity to move our country ahead.

It is fitting that you mark your annual observance with visits to our nation's classrooms to inspire the leaders and workers of tomorrow with the wonders and opportunities of technology. A technically literate workforce is essential to our future success.

I am pleased to join all Americans in saluting our nation's engineers during National Engineers Week. I look forward to the opportunity of working with you to ensure a bright future for our nation.

Rui Clinton

Professionalism

Technology

Quality

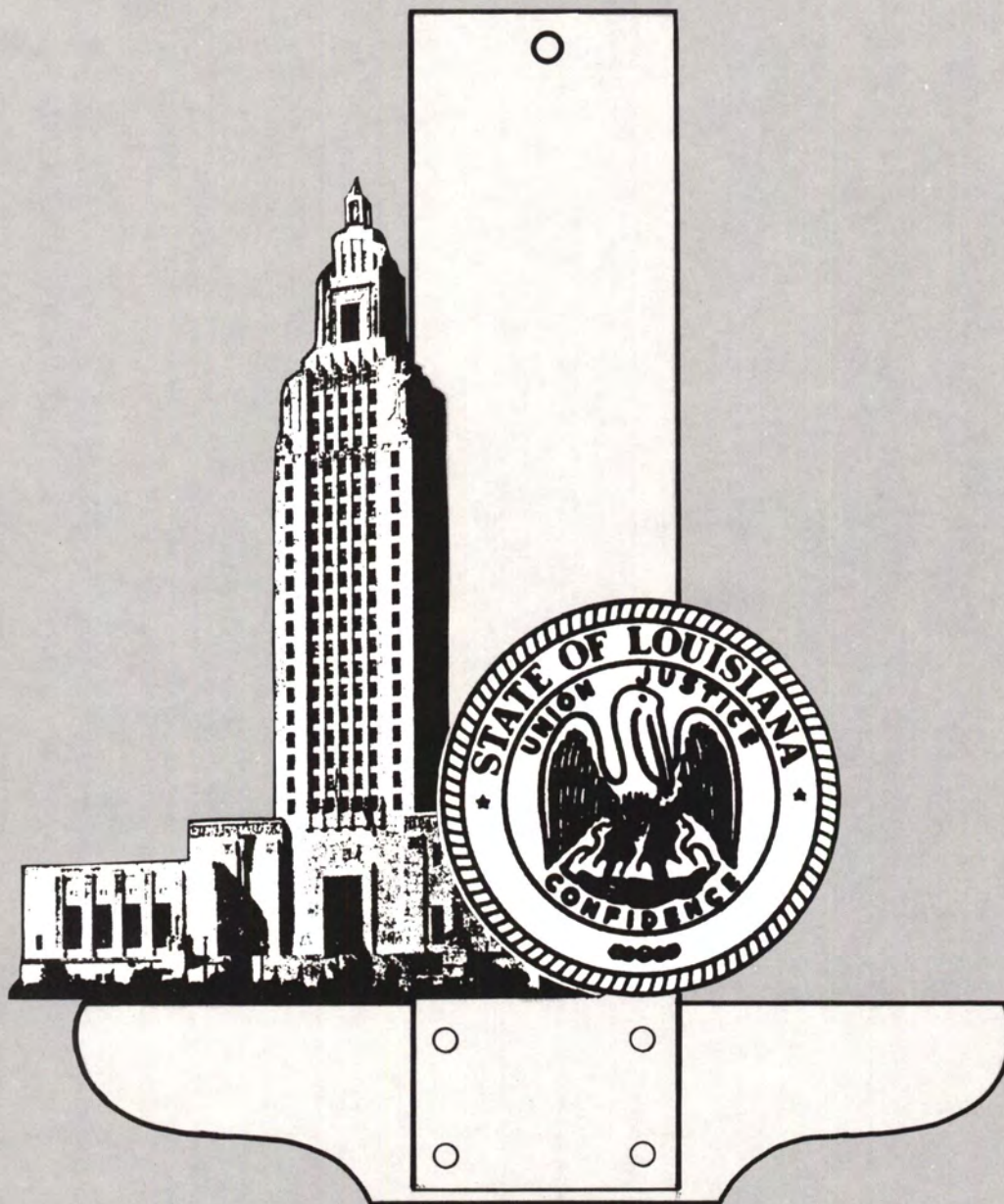
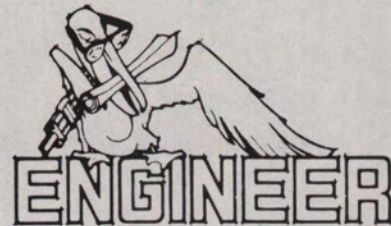


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1993 Louisiana Legislative Session March 29 - June 21

On the Inside:

Be sure to see pages 8, 9, and 10 for registration forms, general program, and meeting agendas. LES Annual Meeting June 23-26, 1993.



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Membership rates and requirements are subject to change.

APRIL, 1993



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1993 Louisiana Legislative Session -
March 29 - June 21.



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Presidential Privilege

Since the last issue of the *Louisiana Engineer* (LE) magazine, wherein the areas covered by LES and the other professional and technical organizations were outlined, some items have surfaced which need input from you, the membership.

The most recent issue of the LE magazine had an article about the proposed legislative changes to the Engineering Registration Law. A questionnaire on these legislative issues were included for you to respond to the Ad-Hoc Committee. Hopefully, you have done so. By the time you receive this magazine, the LES Board of Direction will have acted on the results of the response.

The LSBRELS has announced that two additional disciplines of engineering will be added to the existing ten branches currently registered. These new branches are Environmental and Control Systems. Examinations prepared by the National Council of Examiners for Engineering and Surveying (NCEES) have become available for use.

Another item which appeared in the February 1993 issue of the LE magazine under the heading *LES Forum - Letters to the Editor* - deserves consideration and possibly a response. We would appreciate you reading this article. The Engineering Education Committee of LES is concerned about the LSBRELS publishing pass/fail statistics of the E.I.T. exams by university. In the past, universities were not named. This new reporting policy will greatly affect the students' initial steps toward professionalism because some universities will not be requiring them to take the E.I.T. exam. LES believes this new publishing policy will affect the future of membership of our Society. Please write to the LSBRELS and inform them of your feelings about this matter. An equitable means of reporting data must be established that will encourage students to attempt the E.I.T. exam without fear of embarrassment to their university. The LSBRELS believes publishing the results will make the university accountable for their preparation of students or lack thereof.

LES continues to receive feedback from engineers relative to their failure of the P.E. Licensing Exam. Special review times



Glynn P. Gautreau, P.E.
President
Louisiana Engineering Society

of past exams are available at the LSBRELS. We encourage you to write your concerns directly to the LSBRELS at the address found in this magazine. This magazine serves as the official journal of the LSBRELS. As mentioned in a previous issue of the magazine, LES has a Liaison Committee to work with the State Board of Registration and give them our input and feedback, as directed by our members.

The regional competitions for MATH-COUNTS have recently been held. By the time you receive this magazine, results of the statewide competition held in Alexandria between Mathletes will be known. The winners and coach will receive a complimentary trip to Washington, D.C. for the national competition.

This is one of the many worthwhile programs that LES has, and we appreciate your support. Additional funding for this program is always necessary and appre-

ciated. Anyone desiring to make a tax deductible contribution to the MATH-COUNTS program should send their donations to the Louisiana Engineering Foundation in care of the LES State Office.

A Liaison Committee has been formed between Engineers representing LES, CEC/L, and ASCE, and the Architects to discuss key or common issues. Officers have been elected, and the following topics have been placed on the agenda for discussion: design-build; prime professional, definitions of engineering and architecture; and incidental practice. This committee was initially formed to discuss the exemption relative to civil engineers practicing architecture. There is no current effort to change the Registration Law. Input and comments relative to the above items can be made through LES, ASCE, CEC/L, or AIA. We look forward to continuing this Liaison Committee on a congenial basis.

In addition, as a spinoff of this committee, a seminar relative to the use of both the Building and Life Safety Codes will be held to assist Engineers and Architects in preparing data for Fire Marshal approval. More information will be forthcoming relative to this item.

I would like to thank ALL of the LES members, committee members, Practice Division Chairpersons, the LES staff, and the LES Executive Committee for their assistance and help in my year as President of this Society. A new administration will be accepting leadership in June. This does not mean a change in direction, but that existing committees will continue to accomplish established goals and objectives. Please lend your support to keep LES an outstanding professional society.

Our annual LES meeting and installation banquet will be held in June in Lafayette. An outline of the program and registration requirements are included in this magazine. Please take the time to sign up now! We look forward to seeing you in Lafayette. **LE**

LOUISIANA ENGINEER/APRIL 1993

ENGINEERS' LEADERSHIP AND COMMUNICATION SKILLS SEMINAR
FRIDAY, JUNE 25, 1993 - 1:00 P.M. - 5:00 P.M.
HOLIDAY INN OF LAFAYETTE - CENTRAL

Many of us, after being in the workplace for a number of years, have advanced in our careers and find ourselves in a management/leadership role with a lack of formal management training.

Current college engineering curriculums are primarily technical and allow for few "elective" courses. The ability to communicate and lead people is vital in our society. This seminar will supplement your technical education with needed human relation skills.

Moderator for the seminar will be Jim Dalton, Deputy Director, of the National Society of Professional Engineers.

The seminar will be held on Friday, June 25, 1993, 1:00 p.m. - 5:00 p.m. at the Holiday Inn of Lafayette - Central, Lafayette, Louisiana, in conjunction with the Louisiana Engineering Society's Annual Convention. The seminar is sponsored by the Professional Engineers in Industry Division of the Louisiana Engineering Society and is open to members and non-members. The only requirement for participation is payment of the Society's daily registration fee. Registration for this meeting and seminar is included elsewhere in this magazine.

LEADERSHIP AND COMMUNICATION SKILLS FOR ENGINEERS

The leader is someone who:

- Has a vision of how their environment will change in ways that require adaptation;
- Has a proactive attitude that overcomes adversity;
- Combines reason and emotion in motivating others with appeals that touch their values.

This seminar is aimed specifically at engineers whose formal education contained little information about the psychology of leadership and effective communication skills. Participants will:

- See how systems thinking and leadership come together in developing a "vision" for their company, work unit, families, and themselves;
- Build a model of how the mind combines freedom of choice, values, and everyday events in the fabrication of attitudes that are either reactive or proactive;
- Understand how logic, emotion, and character work together as the primary means of persuasion when influencing others.

Based on the works of classical thinkers from Aristotle to Augustine, the seminar provides engineers with a practical guide to liberal arts thinking that they never got in school, but desperately need in order to be leaders.

Calendar of Events

We invite all technical and professional organizations to submit their meeting dates for publication in the *Louisiana Engineer* to: Editor, P. O. Box 2683, Baton Rouge, LA 70821.

April 16-17, 1993

NCEES Exams

April 29-May 2, 1993

National MATHCOUNTS Competition
Washington, D.C.

May 2-6, 1993

ACEC Annual Convention
Los Angeles, CA

May 6-8, 1993

NCEES Southern Zone Meeting
Puerto Rico

May 12, 1993

NCEES Exam Reviews

May 28, 1993

Professional Land Surveyor
Oral Exams

June 3, 1993

NCEES Exam Reviews

June 7-8, 1993

State Board of Registration Meeting
New Orleans, LA

June 23-26, 1993

LES Annual Meeting
Holidome, Lafayette

July 16, 1993

Professional Land Surveyor
Oral Exams

July 18-24, 1993

NSPE Annual Meeting
Vista International Hotel
Pittsburgh, PA

ACEC Takes Pro-Active Role in Presidential Transition

The American Consulting Engineers Council's recent efforts encouraging member organizations to work for a record turnout at Consulting Congress Day 1993 has been closely paralleled by the efforts and actions at the national level to keep ACEC members abreast of the political and governmental changes in Washington, D.C., according to ACEC Executive Vice President Howard M. Messner.

"We view this year, with a new Congress and Administration, as one of unprecedented opportunities for the voices of consulting engineers to be heard in both branches of government and throughout Washington," Messner said. "We have stressed to member organizations and members this year that Consulting Congress Day promises to be a great success because of the more than 100 new Members of Congress. In addition, the staff here has taken a very proactive role with the help of ACEC members to stay abreast of the presidential transition, and to keep our issues out in front of the more than 4,000 new executive branch officials serving under President Clinton," he added.

ACEC President John H. Foster, (Malcolm Pirnie, Inc., White Plains, NY), has written to each Member Organization and visited with many officers directly to encourage calls and visits to the new Members of Congress during their early days in office.

"If we, as a profession, are to be successful in making our voices heard during this time of significant change in our government, it depends upon the cooperative and concerted efforts of officers and staff at the national level, and decidedly, through the member organizations and ultimately the members themselves," Foster said.

"It is up to you to explain these key issues to the new members of Congress — Qualifications-based selection, the need for, and the proper direction of the fund-

ing for infrastructure renewal and *Rebuilding America*, and the role and mission that ACEC has always fulfilled and will continue to fulfill throughout this time of transition and change," Foster added.

ACEC efforts during the transition period have included: a briefing of the Environmental Protection Agency (EPA) transition team on procurement issues with Messner, Bert Conklin of the Professional Services Council, and Mark A. Casso, Deputy Executive Vice President and General Counsel of ACEC; a lead role by Howard Messner, per the Administration, in the transition team's review of the Federal Emergency Management Agency (FEMA); ACEC's international committee meeting with the Agency for International Development (AID) transition team, and a meeting between John Foster and *Rebuild America* Chairman Maynard Jackson in Atlanta to discuss the infrastructure renewal agenda of the Clinton transition team.

Very recently, ACEC President-elect Paul F. Sprehe, (PSA Consultants, Oklahoma City, OK), testified in Washington before Congress's subcommittee on Water Resources and the Environment of the House Public Works and Transportation Committee. Sprehe focused on the environmental infrastructure needs of rural communities throughout the United States — issues relevant to all of ACEC's Member Organizations.

As has always been the case, ACEC has continued throughout this period to work with allied organizations such as the National Society of Professional Engineers (NSPE) and the American Society of Civil Engineers (ASCE), to support candidates for key positions in the executive branch.

"You, the members of ACEC and the Member Organizations, have told us which issues are important to you and the profession. We have continued to communicate those issues to policy makers in Washington and will continue that effort during this transition and beyond," Messner said.

It is also essential, Messner added, that the Member Organizations continue their excellent efforts to reach out to the new Members of Congress as soon as possible. "The earlier we are able to reach Members of Congress with information about ACEC and our legislative priorities, the better the chances for success in the coming year."

"All of our efforts at the national level, while vitally important, depend for their success on the direct contact of ACEC members with Members of Congress and direct action to voice the concerns of the profession. That is why attendance at Consulting Congress Day, especially this year, is so important," Messner said.

EPA Applies Stringent Asbestos Rule

Architects and engineers should be aware of a recent pronouncement from the Environmental Protection Agency that henceforth it will apply its regulations to prevent asbestos emissions in a more stringent manner, particularly as related to the demolition and/or renovations of buildings.

Although the regulation has existed since 1973, the EPA states that while it always implicitly required that a facility be inspected for asbestos prior to demolition or renovation, it now explicitly states such a requirement.

The pertinent regulation, as amended, requires that "owners or operators ... thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos" The EPA statement adds, "Therefore, as a general rule, you should ensure that an asbestos survey has been conducted prior to every demolition or renovation you engage in."

The asbestos regulation, as part of the Clean Air Act, is a strict liability statute: that is, not knowing the requirements of the regulation is not an excuse for violating it. Although architects and engineers are not likely to be directly responsible for demolition or renovation itself,



Consulting Engineers Section

Warren J. Wilder

CEC/L Executive Director



the EPA broadly defines the owner or operator of such activity to include any person who controls or supervises the demolition or renovation operation.

The regulation also requires those subject to it to notify EPA prior to renovation operations in which more than 260 linear feet or 160 square feet of regulated asbestos-containing material is stripped or removed from facility components. Further, EPA must be notified prior to all demolitions regardless of the amount of asbestos in the facility, "including zero."

(From "Liability Update", February, 1993 issue. Published by the Office for Professional Liability Research, Inc. of Schinnerer Management Services, Inc.)

EPA Issues Final Indemnification Guidance

In a message to the ACEC membership, ACEC President, John Foster comments on EPA's *Final Contractor Indemnification Guidance* for the Superfund Program were issued in February, 1993.

Two weeks ago, the Environmental Protection Agency issued their *Final Contractor Indemnification Guidance* for the Superfund Program, rejecting requests by more than 50 engineering, science and contracting firms and six trade associations, to republish the proposed indemnification guidance for public comment.

As in so many other cases, the actions at the federal level will no doubt set a precedent that states, localities and private clients will follow. And that means an immediate impact on the bottom line—for all of our firms—not simply those that do business with the federal government.

The new guidelines place a greater amount of risk upon engineering firms and other contractors than ever before, and regrettably, endanger the continued success of the entire Superfund Program. EPA, as a government entity, is supposed to serve the public as effectively as possible. But when consulting engineers across the country are confronted at every level with the effects of this highly questionable precedent, what public good will be served? On the contrary, the implications for the public and consulting engineers, large and small, will be negative and far-reaching.

Clearly, a lack of indemnification for future contracts, and insufficient indemnification for existing contracts, means that many firms will find it impractical to risk any innovative methods which, although they may result in the best quality effort, could potentially leave the firm open to huge claims. EPA's approach to renegotiate current contracts that have indemnification clauses is both flawed and cumbersome. So whatever the project—whether the owner is federal, state, local or private—many contractors in a position to undertake the kind of activities that are often needed on creative and innovative projects, could choose not to become involved at all.

In our current example, if EPA were to ask for public comment on one simple question, "Do you want the most qualified firms in the Superfund Cleanup process?", it seems clear that the answer would be an emphatic "yes," both from the public at large, and especially those who have lived in the area of a Superfund site. The

same principle holds true for state, local and private projects.

But under this new scheme, legal liabilities, instead of the implementation of quality processes and innovations, are driving participation. What results can we expect? In the case of Superfund, the program could be delayed while cleanups are desperately needed. Do consulting engineers, or the public, want the same motivations at work in the coming effort to undertake massive renewal of the nation's infrastructure?

It seems EPA has developed a plan that will achieve the exact opposite of the legislative intent of Superfund indemnification: "to protect the public from uninsured losses; to promote innovation in hazardous waste cleanup activities; to encourage development of the hazardous waste insurance and bond markets, and to ensure the participation of the most qualified firms in the Superfund process."

Consulting engineers are called on to perform a public service by not only cleaning up the problems created by others, but to generally provide services and facilities which improve the quality of life for the nation as a whole. The new Indemnification Guidance will likely result in the delayed completion of approximately 1,000 sites on the National Priorities List (NPL). A result that impedes the ultimate goal of the program by leaving the public health and wealth unprotected is, to say the least, highly questionable. Perhaps a rethinking of which "national priorities" are vital, and which ones are not, is required here—urgently. LE

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**LES ANNUAL MEETING
REGISTRATION
HOLIDAY INN of LAFAYETTE - CENTRAL, LAFAYETTE, LA
JUNE 23-26, 1993**

Name _____ P.E. YES _____ NO _____

Spouse's Name _____

Chapter _____

**CLIP OR
REPRODUCE &
MAIL TO:**

**LES
P. O. Box 2683
Baton Rouge,
LA 70821**

		No. Tickets	Amount
PREPAID Discount Registration Fee ¹	\$42.00	_____	_____
Registration Without Prepayment	\$56.00	_____	_____
Daily Registration Fee ²	\$14.00	_____	_____
Wednesday Golf ³ (Average Score _____)	\$25.00	_____	_____
Thursday Dinner ⁴	\$17.50	_____	_____
Friday Luncheon ⁵	\$ 9.00	_____	_____
Friday Seminar ⁶	\$FREE ⁶	_____	_____
Friday Installation Banquet	\$18.00	_____	_____
Spouses			
Thursday - Tour of Acadian Village, Lunch at Corner Pantry ⁷	\$18.00	_____	_____
Friday - Washington, LA, Lunch at Enola Prudomme's Cajun Cafe ⁸	\$28.00	_____	_____

TOTAL _____

1/Prepaid discount applies only if registration and payment are received one week prior to the convention.

2/Daily registration fee is applicable for one day attendees only.

3/City Park (Muni) Golf Course - Includes green fee and cart. Tee off - 1:00 p.m. Please include your average score in the space provided above.

4/McGee's Landing - Atchafalaya Basin Tour and Dinner - Tour departs at 6:30 p.m. - Menu - Fried Catfish, French Fries, Salad, Dessert, Jambalaya, Hush Puppies, Tea

5/Combined Luncheon and General Membership Meeting

6/Seminar: Leadership and Communication Skills for Engineers - Speaker: Jim

Dalton, Deputy Director, National Society of Professional Engineers. FREE with payment of daily registration fee.

7/The Chapter has arranged for a tour of an Acadian Village, Lunch, and Shopping at Acadiana Mall.

8/Participants will leave the hotel at 9:00 a.m. for historic Washington, LA. A visit to Washington Museum, Tour Magnolia Ridge Antebellum Home and Grounds, Antique Shops, and Lunch at Prudhomme's Cajun Cafe. After lunch, the group will depart to Grand Coteau where a Tour of the Academy of the Sacred Heart School, Grounds, and the Shrine of St. John Berchmans, site of the Miracle of Grand Coteau has been arranged.

☐ Payment Enclosed

☐ Registration Without Prepayment
Non-discount rate applies

MAKE CHECKS PAYABLE TO LES

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

**Hotel Reservation Card
Louisiana Engineering Society
June 23-26, 1993**

Holiday Inn of Lafayette - Central, Lafayette, LA

Please register early. Reservations must be received by the hotel no later than June 9, 1993. On that date rooms will be placed on a first come, first serve basis.

Date of Arrival _____ Date of Departure _____

Type of Room _____ # In Party _____
2 BEDS 1 KING

Name (print) _____

Address _____

City _____ State _____ Zip _____

Check-in Time: 2:00 p.m. Check-out Time: 12:00 Noon

Convention Rates: \$50.00 + tax ☐ SINGLE ☐ DOUBLE

Major credit card or one (1) night's deposit required.

Credit Card and # _____ Expiration _____

Advance Deposit \$ _____ (One Night)

**CLIP OR
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MAIL TO:**

**HOLIDAY INN
P.O. Box 91807
Lafayette,
LA 70509**

(318) 233-6815

LES Annual Meeting, June 23-26, 1993, Lafayette, Louisiana

General Program

Wednesday, June 23, 1993

1:00 p.m. Golf Tournament
City Park (Muni) Golf Course
"On Your Own"

DINNER

Thursday, June 24, 1993

9:00 a.m. - 5:00 p.m. Registration
10:00 a.m. - 12:00 Noon COMMITTEE MEETINGS
Public Relations
Inter-Society Relations
Constitution and Bylaws
12:00 Noon - 2:00 p.m. LUNCH - "On Your Own"
2:00 p.m. - 3:30 p.m. LOUISIANA ENGINEERING FOUNDATION
2:00 p.m. - 3:30 p.m. COMMITTEE MEETINGS
Long Range Planning
Engineering Education
Membership Committee
3:30 p.m. - 5:00 p.m. COMMITTEE MEETINGS
Executive Committee/Liaison
State Board of Registration
6:00 p.m. TOUR/DINNER
McGee's Landing

Friday, June 25, 1993

8:00 a.m. - 12:00 Noon Registration
9:00 a.m. - 11:00 a.m. COMMITTEE MEETING
Young Engineers
9:00 a.m. - 11:00 a.m. PRACTICE DIVISION MEETINGS
Education
Government
Industry
Private Practice
11:00 a.m. - 12:30 p.m. LUNCH/GENERAL MEMBERSHIP MEETING

Meeting Information

Agenda/Issues for all Committees and Practice Divisions scheduled to meet are published below for your information.

Seminar: "Leadership and Communication Skills for Engineers" - Moderator: Jim Dalton, Deputy Director, National Society of Professional Engineers (See more information on this seminar on page 5 of this magazine).

Spouses' Program: The Lafayette Chapter has an outstanding program planned for the spouses. Thursday's schedule will be filled with a Tour of an Acadian Village, Lunch and Shopping; and Friday's schedule consist of an exciting tour of historical Washington, LA. with a visit to the Washington Museum and a tour of Magnolia Ridge antebellum home and grounds. After lunch at Enola Prudhomme's Cajun Cafe, the group will travel to Grand Coteau for a tour of the Academy of Sacred Heart School, grounds, and the Shrine of St. John Berchmans, site of the Miracle of Grand Coteau.

COMMITTEE MEETINGS

Membership Committee

- I) Membership Recruitment - State Contest
 - a) Membership Drive Month
 - b) Incentives/Benefits
 - c) Membership Recruitment Formula
 1. Modification
 2. Tie to delinquents and drops
- II) Support of Young Engineers Committees Efforts
 - a) Retaining Students Members to Membership Grade Upon Graduation
 - b) Improve Communication with Student Members During Transition
- III) Membership Dues - Payroll Deduction

Engineering Education

1. Review definition and mission of Engineering Education Committee
2. LES Student Paper Presentations
3. LES Meeting Locations
4. State Board of Registration practice of releasing EIT statistics
5. State population -vs- Engineering Colleges
6. The Budget Crisis, Should LES take a constructive stand?
7. Old Business
8. New Business

Constitution and Bylaws Committee

- Old Business:
1. Suggestions submitted by members regarding proposed Constitution
 2. Draft #9 of Bylaws
 3. Review Bylaws

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1:00 p.m. - 5:00 p.m.

SEMINAR

"Leadership and Communication Skills for Engineers"
Moderator: Jim Dalton, Deputy Director, NSPE
COCKTAILS
INSTALLATION BANQUET

6:30 p.m.

7:30 p.m.

Saturday, June 26, 1993

8:00 a.m. LES Board of Direction Meeting

Spouses' Program

Wednesday, June 23, 1993

1:00 p.m. Golf Tournament
City Park (Muni) Golf Course
"On Your Own"

DINNER

Thursday, June 24, 1993

8:00 a.m. Hospitality Suite Open
9:30 a.m. Leave Hotel
10:00 a.m. Tour of Acadian Village
12:00 Noon Lunch @ Corner Pantry
1:30 p.m. Shopping at Acadiana Mall
4:15 p.m. Arrive Back at Hotel
6:00 p.m. Tour/Dinner

Friday, June 25, 1993

8:00 a.m. Hospitality Suite Open
9:00 a.m. Leave Hotel
10:00 a.m. Arrive in Washington, LA
12:45 p.m. Lunch at Enola Prudhomme's Cajun Cafe
2:00 p.m. - 2:30 p.m. Arrive at Grand Coteau
5:00 p.m. Arrive back at Hotel
6:30 p.m. Cocktails
7:30 p.m. Installation Banquet

Saturday, June 26, 1993

8:00 a.m. Hospitality Suite Open

New Business

1. Articles of Incorporation

Public Relations Committee

Old Business

1. Reviewing and approving Public Relations Master Plan

New Business

1. None

Inter-Society Relations Committee

Old and New Business

1. Proposed revisions to State Public Bid Law

Young Engineers

1. Promotion of Student Chapters
 - a. Revitalization of Defunct Student Chapters
 - b. Maintaining Contact with Existing Student Chapters
 - c. Development of a Student Column in the LE Magazine
2. Retention of Recent Graduate
 - a. Prohibitionary Period for Unemployed Graduates
 - b. Possibility of Payroll Deduction for Dues
 - c. Membership Sponsorship at Monthly Meetings
3. Promotion of PE Registration
4. Changes in Registration Law

Long Range Planning Committee

1. State Meetings
 - a. Joint meeting with ASCE
 - b. Joint meeting with Mississippi Engineering Society
 - c. Joint meeting with other engineering groups
2. Communication
 - a. Teleconference meeting
 - b. Louisiana Engineer

Liaison/State Board of Registration

1. Report on nominees for PEI pending vacancy on Board of Registration
2. Review 1994 schedule for upcoming vacancies, Board of Registration
3. Review progress of legislation being considered by the 1993 Legislative Session which would affect Board of Registration
4. Review and discuss any preliminary or final reports dealing with the proposed amendment of architectural registration law to exclude civil engineers as this subject may impact the Louisiana Engineer Registration Act
5. Review status of unfinished business dealing with:
 - a. Qualification Based Selection
 - b. Licensing of engineering educators
 - c. Status of Environmental and Control Systems Disciplines
6. Other business which may be added to the agenda

PRACTICE DIVISION MEETINGS

Education

1. Introductions
2. Reading of Minutes of January 14, 1993 Meeting in Monroe
3. Financial Report
4. Old Business
 - a. Continued discussions on future directions of the Louisiana Engineering Society and PEE
 - b. Meaningful activities of the PEE Practice Division
 - c. More involvement of Deans and Faculty Members in LES and PEE.
 - d. Report on Legislative Matters
 - e. Others
5. New Business
6. Adjourn

Government

1. Minutes from the January 14, 1993 Meeting
2. Discuss possible changes to the PEG Award nomination forms
3. Update on guidelines for contracting out design work at DOTD (LSPECS Proposal)
4. Other Business

Industry

1. Call Meeting to Order

2. Review minutes of January 14, 1993 Meeting in Monroe, LA
3. Secretary-Treasurer's Report
4. Old Business
 - a. Continuing MATHCOUNTS Incentive for Chapter Participation
 - b. PEI Newsletter Highlights
 - c. Report on Industry Visitations/Industry Relations Program
 - d. Report on Kona, Hawaii NSPE/PEI Meeting
 - e. PEI Nominations to State Board of Registration
5. New Business
 - a. 1994 Winter Meeting in Tucson, AZ
 - b. PEI Action Plan
6. Adjournment

Private Practice

1. Call to Order
 - a. Attendance List
 - b. Agenda Acceptance/Modifications
2. Minutes of Last Meeting
3. Treasurer's Report
 - a. Year End Report
 - b. 1993-94 Budget
4. Old Business
 - a. Nominating Committee Report/Election of Officers
 - b. Environmental Site Assessment
 - c. Environmental Engineering Registration
 - d. Definition of Engineering
 - e. Public Bid Laws
 - f. QBS Legislation
 - g. Continuing Professional Development
 - h. Rock/Reed Wastewater Plants
 - i. Inter-society Relations
 - j. Ad hoc Committee, State Board of Registration
 - k. Legislative Issues
 - l. Other Committee Reports
5. New Business
 - a. NSPE/PEPP - Kona, Hawaii Meeting
 - b. Extended Board of Governor Term
 - c. Southwestern Regional NSPE Vice President
 - d. Other New Business
6. Adjourn

PLAN TO ATTEND... NEW ORLEANS / BATON ROUGE 1993 ISA EXHIBIT



**Knowledge:
Key To
Competitiveness**

**Tuesday, April 27
Wednesday, April 28
12:00-7:00 PM
Pontchartrain Center
Kenner, LA**



**PONTCHARTRAIN
CENTER**

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SOCIETY OF
AMERICA**

FREE PARKING / 18 FREE SEMINARS



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



Board Examination Site Locations

Commencing in October 1993, all National Council of Examiners for Engineering and Surveying (NCEES) Examinations throughout the United States **must** be administered as follows:

1. Fundamentals of Engineering and Land Surveying Examinations on Saturdays.
2. Principles and Practice of Engineering and Land Surveying Examinations on Fridays.

Because of this mandatory requirement, changes had to be made on examination site locations. The future locations are:

1. The Fundamentals of Engineering Examinations will continue to be administered at the four universities which are Tulane, LSU, USL, and Louisiana Tech.
2. The Fundamentals of Land Surveying and the Principles and Practice of Land Surveying will all be administered at Pleasant Hall, LSU, Baton Rouge.
3. The Principles and Practice of Engineering Examination will be administered at only two site locations, New Orleans and Alexandria.

The Board recognizes that these changes may impose a hardship for some examinees; however, with the constraints imposed (time and money), this was the best examination site locations for most of the examinees but certainly not all.

Environmental Engineers and Control Systems Engineers

The Board is announcing its "Notice of Intent" to register engineers in these two new branches of engineering. The "Notice of Intent" was officially published in the March 20, 1993 issue of the *Louisiana Register*.

Board Rule, Section 909 Registration Branch states in part, "Within one year after the board establishes a new branch, the board may waive the principles and practice examination in that branch for all registrants who present evidence that they are qualified by experience and education to practice in that branch." It is strongly suggested that current registered professional engineers of the Louisiana

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Board who may be qualified to practice in these two new branches contact the Board Office for the appropriate application forms.

NOTICE OF INTENT

Department of Transportation and Development Board of Registration for Professional Engineers and Land Surveyors

In accordance with the Louisiana Revised Statutes 49:950, 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:LXI as follows:

Title 46 PROFESSIONAL AND OCCUPATIONAL STANDARDS Part LXI. Professional Engineers and Land Surveyors Subpart 1. Rules

Chapter 9. Branches of Engineering §902. Branches Added

- B. Environmental - 1993
C. Control Systems - 1993

AUTHORITY NOTE: Promulgated in accordance with R.S. 37:693.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Board of Registration for Professional Engineers and Land Surveyors, LR 17:273 (March 1991), LR 19:.

§1103. Other Curricula

- D. Related technology curricula shall be those four-year technology curricula which correspond to the approved branches of engineering listed in §901 and §902 which are approved by the board. Such curricula shall be accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET) or equivalent to such curricula.

AUTHORITY NOTE: Promulgated in accordance with R.S. 37:693.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Board of Registration for Professional Engineers and Land Surveyors, LR 5:113 (May 1979), amended 7:647 (December 1981), LR 10:805 (October 1984), LR 19:.

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 June 3, 1993. The Board proposes to consider and take action on the adoption of this rule at a meeting in its office at 11:00 a.m. on June 7, 1993.

January 21, 1993 File #14-3

The Honorable Edwin W. Edwards
Governor of the State of Louisiana
PO Box 94004
Baton Rouge Louisiana 70804-9004

Dear Governor Edwards:

Pursuant to the provisions of Louisiana Revised Statute 37:691 B, I submit the report of the transactions of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors for the fiscal year 1992. A duly certified audit and financial statement showing the receipts and disbursements for the fiscal year ending June 30, 1993 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:

Ara Arman	January 24, 1993
Malcolm L. Hurstell	July 31, 1993
Albert J. Dunn	February 18, 1994
Randall F. Barron	August 24, 1994
Coan J. Bueche	August 24, 1994
Larry A. McKee	August 31, 1995
William J. Thevenote, Jr.	August 31, 1995
Morris P. Hebert	August 31, 1996

Charles L. McDonald August 31, 1997
 Sam L. Sullivan August 31, 1997
 Vernon F. Meyer August 31, 1998

At the regular meeting of the Board held on July 28, 1992, the following officers were elected effective September 22, 1992:

Randall F. Barron Chairman
 Albert J. Dunn Vice Chairman
 Coan J. Bueche Secretary
 William J. Thevenote, Jr. Secretary-Elect

Very truly yours,

Randall F. Barron
 Chairman of the Board
 Attachment: Annual Report for 1992

ANNUAL REPORT

Louisiana State Board of Registration for Professional Engineers and Land Surveyors

For 1992

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 520
 Applications disapproved 213

Land Surveyors:

Applications approved 29
 Applications disapproved 32

Engineers-In-Training:

Applications approved for certification 472
 Applications disapproved 213

Land Surveyors-In-Training

Applications approved for certification 23
 Applications disapproved 22

Annual Report - 1992

The following is a tabulation of the total number of active 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, 1992:

Professional Engineers 14,907
 Professional Land Surveyors 2,112
 Engineers-In-Training 4,251
 Land Surveyors-In-Training 183
 Public Employees 1
 Engineering Firms 1,010
 Land Surveying Firms 219

Below is a tabulation of the number of Professional Engineers registered in the various branches as of December 31, 1992.

Agricultural 138
 Chemical 1,196
 Civil 6,320

Electrical 2,225
 Industrial 136
 Mechanical 3,791
 Metallurgical 37
 Mining 33
 Nuclear 3
 Petroleum 1,311

A total of 1428 written examinations were administered in 1992. Of these, there were 763 examinations in the fundamentals of engineering, 47 in the fundamentals of land surveying, 432 in the principles and practice of engineering, 97 in the principles and practice of land surveying, 71 in the laws and procedures of land surveying and 18 examinations administered for other states 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.

Members of the Board

Louisiana Revised Statute 37:683 A 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:

Larry A. McKee and Vernon F. Meyer

Engineers in Government Employment:

Albert J. Dunn and Coan J. Bueche

Engineers Employed in Industry:

Malcolm L. Hurstell and William J. Thevenote, Jr.

Engineers Employed in Education:

Ara Arman, Randall F. Barron and Sam L. Sullivan

Professional Land Surveyor:

Morris P. Hebert and Charles L. McDonald

This is the end of the annual report. LE

Louisiana - 1992 Exam Results

Exam		Total	Pass	% Pass
Professional Engineering				
Agricultural	Apr	Not Offered		
	Oct	2	1	50
Chemical	Apr	18	10	56
	Oct	30	13	43
Civil	Apr	68	37	54
	Oct	80	42	53
Electrical	Apr	31	13	42
	Oct	32	10	31
Industrial	Apr	Not Offered		
	Oct	10	4	40
Mechanical	Apr	52	28	54
	Oct	70	47	67
Metallurgical	Apr	Not Offered		
	Oct	1	0	0
Mining	Apr	Not Offered		
	Oct	0	0	0
Nuclear	Apr	Not Offered		
	Oct	4	0	0
Petroleum	Apr	Not Offered		
	Oct	39	18	46
Total PE		437	223	51
Professional Land Surveying				
Principles & Practice of LS-4 hr	Apr	24	18	75
	Oct	26	20	77
Public Domain PLS II-A Exam -3 hr	Apr	47	27	57
	Oct	Not Offered		
LA Laws of Land Surveying-1 hr	Apr	71	18	25
	Oct	Not Offered		
Total P.L.S.			Registered - 22	
Fundamentals of Engineering/Senior	Apr	345/206	202/139	59/67
	Oct	417/263	248/173	59/66
Fundamentals of Land Surveying	Apr	29	15	52
	Oct	18	8	44
TOTAL EXAMS ADMINISTERED - 1,414				

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

As a registrant of the Louisiana Board of Registration for Professional Engineers and Land Surveyors, you are responsible for abiding by the law and rules of the Board. Answer these questions to test your knowledge:

Answers to the Law and Rules of the Board Quiz to be found on Page 19.

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

- A registered professional engineer designated as a supervising professional of a firm is responsible for:
 - The administration of the firm
 - Sealing of plans, designs, specifications, reports, or maps
 - Supervision of all professional services
 - Both B and C
- Firms offering both professional engineering and land surveying services must:
 - Qualify as either a land surveying or engineering firm

- Quality separately as an engineering firm and land surveying firm
 - Have at least two (2) engineers and two (2) land surveyors
 - Advertise as a joint venture
- Which of the following are functions common to both land surveying and engineering?
 - Topographic surveys
 - Site grading plans
 - Surveys for record drawings
 - Horizontal and vertical control surveys
 - All of the above
 - Applicants found to have engaged in conduct which subverts or attempts to subvert the examination process may:
 - Have his or her scores on the examination withheld or declared invalid and have disciplinary action taken against them
 - Suffer imprisonment
 - Be fined \$10,000
 - Be restricted from retaking the examination for 10 years
 - Which of the following are Rules of Professional Conduct binding on every registrant?
 - Registrant shall perform services only in the area of their competence
 - Registrants shall promote and strive to better the engineering and land surveying professions public image
 - Registrants shall hold paramount the safety, health, and welfare of the public
 - All of the above
 - Both A and C

- Charges against any registrant or certificate holder of the Board may be preferred by:
 - Only district attorneys
 - The Board
 - Any person of the Board
 - Only District Court Officers
- At any Board hearing, the accused individual, registrant, or certificate holder shall have the right to:
 - Appear by or with counsel
 - Appear in person
 - Produce evidence and witnesses in his or its behalf and/or cross examine witnesses in his or its defense
 - All of the above
- Registrants may accept responsibility for, and review, revise, sign, and seal drawings of plans begun by persons who are not their employees and not properly registered.
 - True
 - False
- Which of the following corporations do not have to register with the Board?
 - Corporations offering engineering services only
 - Corporations offering drafting services only
 - Corporations offering land surveying services only
 - Corporations offering engineering services and land surveying services
- The Board of Registration may consider a registrant "grossly negligent" when:
 - He/She fails to renew his/her professional license
 - He/She fails to exercise reasonable diligence and care in providing professional services, which could end in financial loss or damage or injury
 - He/She fails to adequately charge for professional services
 - None of the above

OCTOBER, 1993 EXAMINATION SCHEDULE AND DEADLINE DATES			
Examination	Pre-Application Deadline Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	July 15, 1993	August 1, 1993	October 30, 1993
Principles & Practice of Engineering Examination (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	July 15, 1993	August 1, 1993	October 29, 1993
Agricultural, Industrial, Metallurgical, Mining Nuclear, & Petroleum			
Fundamentals of Land Surveying Examination (8 hrs.)	May 1, 1993	May 15, 1993	October 30, 1993
Principles and Practice of Land Surveying (6 hrs.)	May 1, 1993	May 15, 1993	October 29, 1993
Louisiana Laws and Procedures of Land Surveying (2 hrs.)	October 1, 1993	October 15, 1993	April 15, 1994
Pre-Application is required of applicants for certification as an Engineer-in-Training or Land Surveyor-in-Training and for registration as a Professional Engineer or Professional Land Surveyor. 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.

1993

June 7-8

July 26-27

Sept. 27-28

Nov. 8-9

Engineers in Government



Louisiana Society of Professional Engineers in Civil Service

Among the presentations at the July 1992 meeting of the AASHTO Region 2 Subcommittee on Design in New Orleans was one made on behalf of the Louisiana Society of Professional Engineers in Civil Service (LSPECS). The presentation was titled "Balancing Design Program Distribution", and dealt with the issue of determining just how much of the preconstruction engineering load at the Department of Transportation and Development (DOTD) should be done under consultant contract and how much should be done by resident staff. It was no surprise to the LSPECS that the presentation proved to be quite controversial among the members of the consulting engineer community represented at the meeting, or that news of the presentation had spread like wildfire throughout most of the balance of that community, even before the proceedings in New Orleans were concluded. Although we anticipated the concern that raising this topic would generate among those in private practice, it was not our intention to inflame or to polarize opinions. Quite the opposite, our purpose was to call attention to and generate a dialogue on a circumstance which we believe is detrimental to the long-term public interest of the state. We knew that we could never hope to facilitate a change in the status quo of this issue without the knowledge and support of our colleagues in the consultant community. So, we chose the AASHTO meeting as a forum for bringing the issue into the open.

It has long been a concern of many of the career engineers in DOTD that the abdication of a disproportionate share of design work to consultant contract could, over a long enough period of time, result in a gradual and progressive erosion of the technical skills of the career staff. We now believe that we are on the downslope of that "long enough period of time", and that if remedial measures are not taken soon to reverse the process, DOTD could suffer the irreversible loss (at least in terms of many years) of its technical credibility and leadership.

At an LSPECS meeting two years ago, a motion was made and passed that a committee would be formed to investigate

the phenomenon of the ever-increasing privatization of DOTD's preconstruction engineering program, and to determine the causes and impacts of the phenomenon. One of the first things the committee did was to prepare a questionnaire for distribution to all other state DOTs to learn what their practices were in terms of contracting-out and what percentage of their overall workload is done under contract. Probably the most startling knowledge to be gained from that questionnaire came from within our own department. In our effort to learn the answers to the questionnaire for DOTD's response, it became apparent that no one really knew for certain just what percentage of design work was being done by contract and what percentage was being done by staff. Most administrators and managers believed the distribution to be between 70-30 and 80-20 (with the lower figure representing the percentage done in-house), but there were no specific figures available, since there was no apparent effort being made to monitor or to manage the distribution. By our own calculations, we were able to confirm that the 80-20 figure was relatively accurate. While we were not especially surprised at the lopsided distribution, we were more concerned that it was apparently more the result of just allowing things to seek their course than of a conscious administrative plan. Exactly how DOTD got to where it is in terms of this issue may be subject to a considerable variance of opinion, depending upon who one talks to. Our own assessment of the circumstances leading up to the current condition was part of our presentation in New Orleans.

Also in our presentation, we asserted that we believed that regardless of what the proper distribution of DOTD's design load between its consultant resources and its resident staff turns out to be, the distribution should be the product of a systematic plan which considers all economic and other factors influencing and influenced by such distribution. We further asserted that such a plan could serve as a primary tool in such other administrative efforts such as employee evaluation and Project Programming. The way in

which projects are placed into and advanced through the program is an issue which is closely related to and intertwined with the issue of Design Program Distribution. The objective of the Project Programming effort should be to produce quality plans for enough projects in a fiscal period to utilize all available construction funds from all available sources, plus enough "shelf" plans to ensure that any unanticipated funds can also be used, and to ensure that the projects are processed through the program according to a credible system of priorities. While the DOTD has a credible system for qualifying projects for inclusion into the program and for placing them in order of priority (the Highway Needs Analysis Program), the value of that system has long been compromised by a political community whose members want pet projects included in the program, if only to show good faith to their respective constituencies. The result is a Design Program which far exceeds any realistic hope of being funded (even when accounting for a reasonable amount of completed "shelf" projects). When there are more projects in the Design Program than the system can handle, the Design Sections are forced to commit more and more projects to consultant contract. But, committing the project to contract does not totally relieve the Design Section of its responsibility for the project — personnel must be assigned to coordinate the contract and review the plans. When a design unit is burdened with more consultant projects than it can effectively administer, it is unable to retain any significant projects for in-house design; and, as our basic premise suggests, we believe that the result is a progressive erosion in the quality of experience upon which the careers of young DOTD engineers is built. Another consequence of this overloading of the program is that completed project plans often remain on the shelf long enough that, by the time they can be scheduled for letting, they require extensive or, in some cases, complete redesign. In addition to the waste of time and effort, this added cost of design actually results in fewer dollars to apply to construction.

On the surface, it may seem that all of the above works to the advantage of the average consultant firm competing for work at DOTD, since it results in more work for which to compete. We think that, upon consideration of all information, most firms will agree with us that we are all better served by a strong and efficient DOTD with a technically advanced staff and an effective Program Management System. Such a Program Management System would balance the priorities of the state's transportation needs against the most efficient use of available funds and manpower resources. The list of projects in the design program at any given time would be a realistic representation not only of the priority of needs of the state's transportation system, but also of the amount of work which can be effectively produced by available resources while insuring obligation of all available construction funds. The implementation of such a system is no longer just a good idea to think about — it is now a requirement for the continued receipt of federal transportation dollars. Among the requirements of the Intermodal Surface Transportation Efficiency Act of 1991, ISTEA, are: a statewide planning process;

a statewide transportation plan; and a statewide transportation program. Projects in the annual program must be part of the overall Transportation Improvement Program (TIP), which in turn must balance program size against available funds and against design resources.

As stated above, the LSPECS committee was formed to research the causes and impacts of the phenomenon of growing privatization of the DOTD engineering program. As the scope of the problem was revealed by the committee's work, the committee and the Board of Directors of the LSPECS concluded that the continuation of the current workload distribution was damaging the technical viability of the DOTD staff, and that an effort must be made to influence the situation in favor of allowing the DOTD design teams to retain more challenging design assignments. The mission of the committee was expanded to include seeking ways to facilitate such a change in the system. Recognizing that any efforts to effect such change could be viewed, at least initially, as a threat by the consultant engineer community, we believe that our best hope for success lies in open communication with

the leaders of the consultant community about our concerns and our goals.

We are now starting the second year of a new administration at DOTD. As the new administration continues to make the organizational and planning adjustments which it feels are necessary to implement its vision of how the DOTD will meet the transportation challenges of the future, we hope to seize the opportunity to present and recommend to the administration a policy for balancing the preconstruction engineering workload distribution in such a way that the amount of work to be contracted-out is systematically determined at the beginning of the fiscal period by a process which makes the most effective use of in-house engineering resources. It is our hope and our belief that by involvement of the consultant community through our common professional societies (primarily LES), we can recommend a policy which can be supported by the entire professional community, including those who provide consultant engineering services to the DOTD. **LE**

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1993 NSPE Winter Meeting Highlights

The 1993 NSPE Winter Meeting was held in Kona, Hawaii, January 23-30. Highlights of the week's events follow.

Actions of the Board

Future Direction of NSPE

- The NSPE Board of Directors charted a new course for the Society by voting to focus the organization's efforts on the interests of licensed professional engineers and aspiring PEs rather than acting as an umbrella organization for all engineers. The Board discussion emphasized that the policy, which is consistent with many current programs, will allow the Society to be more specific in taking on new programs. Moreover, it will assist in the evaluation of present efforts.

Continuing Professional Competence (CPC)

- A number of recommendations were made to the Board by the Registration and Qualifications for Practice Committee. Under a newly adopted policy, the Board maintained its recommendation that CPC should be voluntary rather than mandatory, but moved a step further. The Society's CPC policy now states: "NSPE can find no compelling justification for any jurisdiction to adopt a continuing professional competency requirement as a prerequisite to renewal of a registered professional engineer's or land surveyor's license." The Board also recommended that there be uniformity or reciprocal recognition of CPC requirements between states.
- In the same area, NSPE called for revisions to the National Council of Examiners for Engineering and Surveying (NCEES) Model Rules on continuing professional competency, including changes in definitions, requirements, units, and the determination of credits and record-keeping. The Board asked NCEES to clarify portions of the model rules, such as which type of publishing might qualify for CPC credits, who will determine which educational programs are acceptable, and what may be the criteria for that decision. Furthermore, the Board suggested that active membership in a profes-

sional society, such as NSPE, should be considered for CPC credits.

Use of Licensing Fees

- Because licensing fees have been targeted in many states as a source of revenue for overstretched state government budgets, the Board adopted a position statement to urge states to separate their regulatory and revenue-raising measures and to use licensing fees exclusively for professional regulation purposes. One avenue for engineers to keep licensing targeted on registration and enforcement issues is through a self regulation system. With that in mind, the Board requested that NCEES develop alternative language on self-regulation for the model registration law and that NSPE inform state societies on how to implement such a system. Under self-regulation, an association of PEs would assume the powers, duties, and responsibilities of professional regulation and establish its own fee structure to cover enforcement and other activities. Delaware currently has such a system.

Changes in the Registration System

- The Board also voted to give registration exemption issues a high priority and to work toward removing barriers that keep competent engineers from pursuing the registration process. It decided that NSPE should play an assertive role in redesigning the registration and qualifications for practice system, which might include new approaches such as using an ABET-accredited degree as a prerequisite for registration rather than a Fundamentals of Engineering exam or waiving the FE exam requirement for engineering Ph.D.s.

Hazardous Waste

- Noting that the engineering profession plays a key role in managing the nation's hazardous waste, the Board adopted a position statement and policy on hazardous waste management. The statement gives guiding principles for establishing a national hazardous waste management policy that address the public health and ecological and commercial needs of the country. The policy

advocates a systems approach: "Goals and policies should be harmonized with other public health, environmental protection, natural resources, and commercial policies and goals." The statement also calls for performance-based standards rather than technology-based requirements and asks that adequate funding be appropriated for scientific research on the effects of hazardous substances on humans. The statement lists options for hazardous waste management, emergency response, and remediation.

Gasoline Tax

- Anticipating a possible Clinton administration gas tax, the Board voted to authorize the Legislative and Government Affairs Committee to enter into discussions with other entities on whether such taxes should be imposed and how those taxes should be used. The Board gave the committee the general guidance that, if enacted, at least 51% should be allocated toward infrastructure-related investment.

Advertising for Candidates for NSPE Office

- The Board approved a policy allowing NSPE members running for office within NSPE to advertise in the Society's publications, including Engineering Times, but under the following guidelines: "The advertisement should be based on the office seeker's qualifications and related experience. Ads must be positive and constructive; may not be self-laudatory; and may not be demeaning to other candidates, officers, or NSPE."

Awards

- Changes in several NSPE programs were approved by the Board to allow alternate presentations if the recipients are unable to attend the NSPE meetings. In addition, the Board rescinded a previous resolution that would have required the Professional Development Award Selection Committee to respond to all Industrial Professional Development Award nominees indicating why they were not selected for the award.

Winter Meeting

- The Board rejected a motion to eliminate the Winter Meeting after 1995. A report for the Society's Long-Range Financial Planning Committee had noted that few action items must necessarily be addressed at the Winter Meetings and that the expense to the Society and to the attending members may not be justified. However, the Board did approve a motion that the Executive Committee look for ways to reduce the cost of the Winter Meetings.

1998 Meeting Sites

- The Meeting Site Selection Committee's choices for 1998 were approved by the Board. Reno, Nevada, was chosen as the site for the 1998 Winter Meeting, and Tulsa, Oklahoma, will be the location of the 1998 Annual Meeting.

Resolutions

- Citing a lack of success in recruiting younger engineers, the Illinois Society offered a resolution calling for NSPE to establish discounted dues for members under the age of 30 and offer two years of membership for the price of one to such prospective members. The Board rejected the resolution in view of current studies of the overall dues structure.
- Treasurer Pat Natale presented a new financial reporting system to the Board. Three states—Alaska, California, and Washington—had introduced resolutions calling for an overhaul of the budget and financial reporting formats. Following the treasurer's presentation, the Board passed the Alaska resolution, and the Washington and California resolutions were withdrawn. The Board indicated the format changes presented met the intent of the resolutions.
- The Delaware Engineering Society asked the Board to rescind the \$25 service fee for all who were life members on the date the Board approved the fee. The Board rejected the measure.
- A second resolution from Delaware called on NSPE to develop a program specifically aimed at meeting the needs of engineer interns in order to boost the Society's membership. The resolution was referred to the Membership Committee.

State of the Society Dinner

In his State of the Society address to the Board of Directors, NSPE President Joe Paul Jones recalled the words of NSPE founder David Steinman, who envisioned the Society as the "fighting arm of the engineering profession," and who stated: "What our profession needs is the established of a clear-cut line of demarcation between the engineer and the nonengineer, and that is the goal of registration." Jones pledged that NSPE is still working toward Steinman's goals. Jones also spoke of the Society's willingness to work closely with other engineering groups to avoid a duplication of efforts and of NSPE initiatives to resolve conflicts between professional engineers and architects.

Awards

1993 NSPE New Product Awards

The New Product Awards were presented at the Joint Practice Division Luncheon. The winners were:

- *Large Company Category:* **Manitowoc Model M250**, a 275-ton capacity crawler crane that can be shipped, assembled, and operated more easily than any other crane its size—designed by the Manitowoc Engineering Company, a Division of the Manitowoc Company of Manitowoc, Wisconsin;
- *Medium Company Category:* **IMO-1/IM-101 Tank Containers**, which transport liquid safely, sanitarily, and efficiently and due to their light weight, can be easily moved by truck, train, or ship—designed by Brenner Tank, Inc., of Fond-du-Lac, Wisconsin; and
- *Small Company Category:* **The Saddle Vent Ventilation Technique**, which aspirates cleaner air into manholes or other confined spaces creating safer work areas—designed by Air Systems International, Inc., of Chesapeake, Virginia.

1993 Outstanding Engineering Achievement Awards

Eight outstanding engineering achievements were honored at the NSPE Awards Luncheon. The innovative projects were:

- The **Flue Gas Desulfurization Project** that will reduce sulfurous emissions—designed by the Northern Indiana Public Service Company, Pure Air of Allentown, Pennsylvania, and the U.S. Department of Energy;
- The **Main Pass Mine Project**, an

off-shore complex that produces a molten sulfur, crude oil, and natural gas—designed by McDermott Incorporated, Waldemar S. Nelson, Co., Inc., and Walk, Haydel & Associates of New Orleans, Louisiana, and owned by Freeport-McMoRan Resource Partners, Inc., IMC Fertilizer, Inc., and the Homestake Mining Company;

- The **Pittsburgh International Airport** for its passenger convenience, operational efficiency, expansion capability, and cost effectiveness—designed by Allegheny County, Michael Baker Engineering Group, and Tasso Katselas & Associates;
- The **Lied Jungle at the Henry Doorly Zoo** in Omaha, Nebraska, the world's largest simulated rain forest that incorporates the exhibit's support systems into the structural elements, such as hiding duck work in "tree" columns, concealing lighting in the rock walls, and camouflaging misting nozzles in the trees and vines—designed by Alvine and Associates, Inc., of Omaha;
- The environmentally friendly **Interstate 70 Glenwood Canyon**—designed by the Colorado Department of Transportation;
- A **long-term land-based sludge processing facility** that uses chemical fixation of wastewater residuals to produce a stable, soil-like product used as soil cover—designed by Jacobs Environmental, Inc., of Piscataway, New Jersey;
- The cable-stayed **Cochrane/Africa-town Bridge** in Mobile, Alabama, which can be repaired at any time without disturbing the flow of traffic. The Alabama State Highway Department, David Volkert & Associates, Inc., of Mobile, the Carlan Consulting Group of Pensacola, Florida, and Iberinsa, F.A., of Madrid, Spain, designed and constructed the bridge; and
- The **Standard Missile Assembly and Test Facility** at the U.S. Naval Weapons Station in Charleston, South Carolina, allows the Navy to test live missiles in the same building occupied by support personnel—designed by Booker Associates, Inc., of St. Louis, Missouri. **LE**

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 six 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, 1994, and one ending December 31, 1994.

The LES Board of Direction nominates Gordon E. Nelson, P.E., Baton Rouge, for the June 30 position and Charles E. Prewitt, 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 six months thereafter.

LES ENGINEERS SELECTION BOARD

1. Mark and return to LES, P. O. Box 2683, Baton Rouge, LA, 70821, by May 28, 1993. 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, 1993 - June 30, 1994)

☐ Gordon E. Nelson, P.E., Baton Rouge, LA

☐ _____
For write-in

POSITION TWO (Term January 1, 1994 - December 31, 1994)

☐ Charles E. Prewitt, P.E., New Orleans, LA

☐ _____
For write-in

**PLEASE VOTE. RETURN TO LES, P. O. BOX 2683,
BATON ROUGE, LA 70821 prior to May 28, 1993**

PLEASE CUT ALONG THIS 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 six 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, 1993 and ends June 30, 1994.

One nominee will be elected to fill the position whose term begins January 1, 1994 and ends December 31, 1994.

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

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,
May 28, 1993.**

POSITION ONE (Term July 1, 1993 and ending June 30, 1994)

☐ Robert W. McKenzie, P.E., Baton Rouge, LA

☐ _____
For write-in

POSITION TWO (Term beginning January 1, 1994 and ending December 31, 1994)

☐ Charles E. Perrault, P.E., Baton Rouge, LA

☐ _____
For write-in

Professional Engineers

CHEMICAL

Ronald Mark Panicucci
North Haledon, NJ

Dennis Arden Gracy
Alken, SC

Jeffrey William Noce
Mobile, AL

Terry Len Presley
Harvey, LA

Dirk Stephen Swanson
Harvey, LA

Archibald Govan Hill IV
Lafayette, LA

Donald Jene Jennings
Baton Rouge, LA

Stewart Guy Dietrich
Baton Rouge, LA

Roland Brett Thompson
Baton Rouge, LA

Nels Christian Kjeldsen
Baton Rouge, LA

Michael Weichih Hsieh
Ruston, LA

Alfred Allen Hunt, Jr.
Houston, TX

Robert William Pappenfort
Madison, MS

David Erich Drummond
Baton Rouge, LA

John Dean Gernon
Memphora, CA

CIVIL

Mareh Mafatiah Modi
Livingston, NJ

Abdolrasool Sheikh-Attar
Ramsey, NJ

Peter Schroder
Hampton, NJ

Edward Joseph Sapp
Monmouth Junction, NJ

Thomas Joseph Hoenninger
Blue Bell, PA

Gregory Neil Embriani
Douglassville, PA

James Madison Cutts
Bethesda, MD

Samuel Abraham Greenberg
Apollo Beach, FL

James Arthur Lowe
Birmingham, AL

Mark Dalton Harper
Hartsville, TN

William Paul McLaughlin
Nashville, TN

David Anderson Peaks
Jackson, MS

Dreux Allen Seghers
Stennis Space Ctr, MS

Paul Timothy Sanders
Sheboygan, WI

Robert Earl Vaughan
Lisle, IL

Niranjan Shamal Bhai Shah
Chicago, IL

Stephen Raymond Janke
Olathe, KS

Anthony Wayne Ogle
Chalmette, LA

Daniel Arthur Doty
Destrehan, LA

Kerwin Edred Julien, Sr.
Harvey, LA

Kenneth John Meyn
Kenner, LA

Michael Kirby Daigle
Kenner, LA

Dwayne Paul Templet
La Place, LA

Terry David Slaton
New Orleans, LA

Yazdan Emrani
New Orleans, LA

Jesse Bryan McClendon
Amite, LA

Stanford James Lummus
Mandeville, LA

Miles John Becnel
Mandeville, LA

Joseph Morton
Lafayette, LA

Matthew Edward Lancon
Breaux Bridge, LA

Marcia Romero Granger
New Iberia, LA

Kenneth Curtis Lewis
Deridder, LA

Bradley Dale Pogue
Sulphur, LA

Brian Edward Morgan
Sulphur, LA

Donald Lee Duberville
Sulphur, LA

Keith Joseph Rebello
Baton Rouge, LA

Stephen Wade Glascock
Baton Rouge, LA

David George Laurent, Jr.
Baton Rouge, LA

Kenneth Stephen Arceneaux
Baton Rouge, LA

Stephen Noel Bone
Baton Rouge, LA

Michael Blaine Boudreaux
Baton Rouge, LA

Jeffery Kurt Cook
Baton Rouge, LA

Lee William Forbes
Baton Rouge, LA

Anne Meltzer Chapman
Baton Rouge, LA

William F. Everhardt III
Baton Rouge, LA

Charles Daniel Smith, Jr.
Baton Rouge, LA

William MacKenzie Ray
Baton Rouge, LA

Laury Jill Hodges
Baton Rouge, LA

James Austin Kelley III
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1.D; 2.B; 3.E; 4.A; 5.E; 6.C; 7.D; 8.B; 9.B; 10.B

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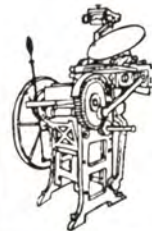
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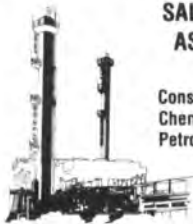


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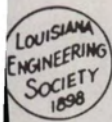
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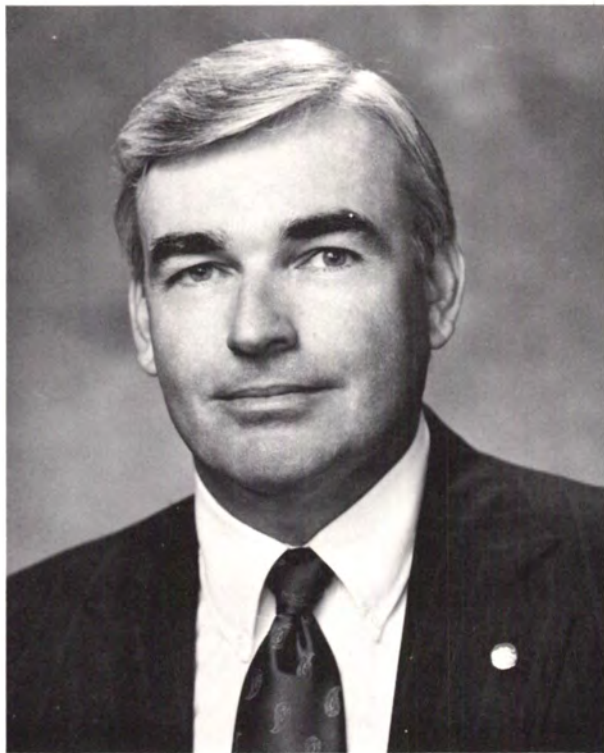
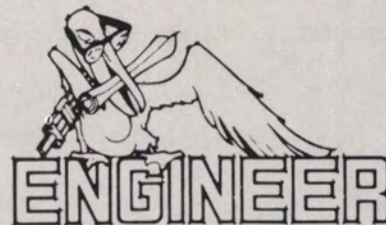


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LOUISIANA



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President
Louisiana Engineering Society
1993-94



T. Dudley Hixson, P.E./P.L.S.
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ON THE INSIDE:

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Action Requested - See request for information on the Roster of Engineering and Surveying Societies, page 17

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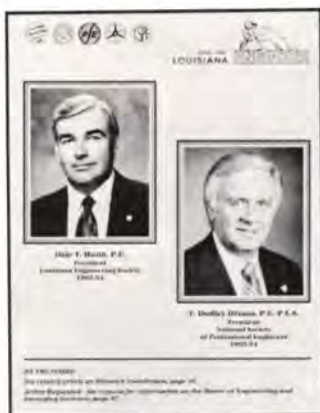
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Features Dale T. Hunn, P.E., President of LES, 1993-94, and T. Dudley Hixson P.E./P.L.S., President, NSPE, 1993-94.

LOUISIANA ENGINEER

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Presidential Privilege

The first message I want to convey to the members of the Louisiana Engineering Society is one of gratitude. I am honored by your vote to serve as your President for this administrative year and pledge to do my best on your behalf.

It has been my privilege to be a professional engineer and a member of the LES and the NSPE for almost twenty years. During my career I have crossed paths with many engineers. Some of these engineers have been clients, some have been co-workers, some have been competitors and some have been friends I've met during my association with LES. The common thread I have noticed running through all of these engineers is a deep sense of pride in the profession in which they work. ASCE is correct in its claim that engineering is a people serving profession. We do, in fact, make a difference! The world would be a less enjoyable place to live if engineers had not figured how to provide clean drinking water to the masses, electricity for our convenience and comfort and transportation systems that move millions great distances every day to name just a few accomplishments of our profession. It is hard to imagine the world without the significant contributions of engineers. It is equally difficult for me to imagine how the world would be if there was no licensing law for engineers. How many charlatans would be offering services to the unwary public? How would the public's safety and welfare be guarded? There are not many people who stop before crossing a bridge or entering a building wondering if it is safe. The public has almost been guaranteed safe facilities because of the registration laws for engineers. The question of safety is taken for granted.

The LES works closely with the Louisiana State Board of Registration for Professional Engineers and Land Surveyors (LSBRPELS) to help protect the public's interest and your interest as a professional. Your responses to the legislative



Dale T. Hunn, P.E.
President
Louisiana Engineering Society

questionnaire published in the February 1993 issue of this magazine were tallied and an overwhelming positive vote was cast on all seven items. Based on your input, the LES leadership has taken a proactive role by voicing your support at legislative committee hearings for HB 1480, which is a bill that addresses some house-keeping issues in the existing registration law; and for HB 1398, which is a bill that permits increases in the registration and renewal fees charged by the LSBRPELS. At the time of this writing, these bills have gone through the legislative process and are awaiting the Governor's signature. With the assistance of our lobbyist and our Executive Director we are continuing

to monitor these bills. The results on these bills will be reported in the August issue of this magazine.

LES is also working very actively with other professional groups that are seeking changes in the operations of the LSBRPELS. Another bill effecting the registration law, SB 461, was proposed by the Louisiana Chemical Association and other groups representing industry. The bill, which specifically addresses R.S. 37:701(C) has passed the Senate Commerce Committee and the Senate floor and at the time of this writing is awaiting action in the House Commerce Committee. LES worked with the industry groups to craft the language of the bill. SB 461 is a reasonable compromise that earns a "win" for parties on both sides of this issue. The bill as filed establishes an Industrial Advisory Committee (IAC) of the LSBRPELS that will be charged with assisting the Board in developing or revising rules concerning the practice of engineering in industrial operations. The LSBRPELS is to report to the legislature on the progress of discussions and the status of rule-making no later than April 1, 1994. The IAC will have six members. One member of this advisory committee will be a current member of the LSBRPELS appointed by that Board. This person will serve as the chairman of the IAC. Two IAC members will be appointed by LES. These will be LES members who are employed by industry. Three members of the IAC will be appointed by the industrial groups. All members of the IAC will be registered professional engineers in Louisiana. This legislative activity is a small sample of what you get for your dues in LES.

To build on the successes of last year's LES administration and to benefit from committee leadership continuity, the state chairmen of the LES Standing Committees have been reappointed for another term of service. Your participation on these committees at the chapter level is encouraged. **LE**

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Weather Patterns Combine to Produce '73 Flood in Louisiana

By Karen Chaney

For the Vicksburg District U.S. Army Corps of Engineers

From the early fall of 1972 through mid-summer 1973, Louisiana had the kind of weather that would have sent even Noah's sharpest critics scrambling to build their own arks.

Beginning in late September, a series of weather patterns combined to create the worst flood on the Mississippi River, in the Lower Ouachita Basin and the Red River Backwater since 1945.

Wave after wave of storm cells that included almost the weatherman's entire repertoire swept across Arkansas, Louisiana and Mississippi, giving the Corps of Engineers' Vicksburg District one of its stiffest challenges.

The severe weather arrived in the forms of intense thunderstorms, tornadoes, high winds, snow, sleet and freezing rain. It brought widespread flooding and extensive property damage, not only along the Mississippi River, but on the Ouachita, Black and Red Rivers.

At its peak, the flood of 1973 covered a total of 5.3 million acres in the Vicksburg District. The Corps' Mississippi River Commission reported that over 22 million acres were under water in a seven-state area.

Twenty years ago this year, in April 1973, 62 counties or parishes lying either completely or partially within the Vicksburg District's boundary were declared disaster areas by President Nixon.

Twenty-six percent of the land flooded, 1.4 million acres, was in Louisiana. Catahoula, Concordia, Morehouse and Tensas Parishes each had inundated areas exceeding 100,000 acres. Catahoula Parish was hardest hit with 300,980 total acres under water.

The toll on human life taken by the flood of 1973 came nowhere near the 300-plus people who died in the 1927 flood or the 118 lost during Hurricane Agnes.

Even though only 23 deaths within the Vicksburg District were attributable to the '73 flood, those deaths were no less tragic.

The 1973 flood was actually brought about by a combination of factors triggered by an entire winter of unprecedented rainfall.

By January 1973, veteran river watchers were concerned by rivers and streams that were already near flood stage heading into the traditionally wet spring months.

Following the '73 flood, Maj. Gen. Charles C. Noble, who was president of the Mississippi River Commission at that time, recalled, "We started to get indications that something was up potentially

in the fall of '72, when we failed to have a low-water period.

"We had almost constant rainfall. The main stem was receiving a lot of rain. Our tributaries were receiving a lot of rain. On the Mississippi, the Ohio, the Missouri, the White, the Arkansas, the Red, the Ouachita, the Black, the Yazoo - everything was full, or filling up. Flood-control reservoirs were in action, holding back water. The ground was becoming saturated."

These were the indicators, he said, that told the Corps that "floods had not been disinvented and that there was a great potential for a major flood in 1973."

While Corps officials began to prepare for a major flood fight, they also believed there was a good chance that the disaster could be avoided if the spring months brought below average rainfall. February brought some relief, and river stages actually began to fall slightly near the end of the month. But, recognizing the very high flood potential, Gen. Noble accelerated the time frame for a valley-wide flood fight exercise. For two days in mid-February, Corps districts from St. Louis to New Orleans practiced what they would do in a major flood event.

Less than a month later, the lessons learned during the drill were put to the test when on March 16 seven to ten inches of rain washed over the Yazoo Basin in Mississippi and a District Emergency Operations Center was set up and began operating 24 hours a day.

On April 27, with the Mississippi River at Vicksburg 10 feet above flood stage, the Vidalia Area Office, which included the Mississippi River levees in Louisiana, was placed in Phase II mobilization.

During March, three storm systems dumped rains averaging from 5-10 inches across the Ouachita River Basin causing lowland flooding and pushing the basin's streams above flood stages from Arkadelphia, AR, to Jonesville, LA.

With the Mississippi River already swollen, there was no place for the water to go. The major flooding in the Red River Backwater area occurred because high stages on the Mississippi, Red and Atchafalaya Rivers left the backwater drainage nowhere to go.

This backwater flooding caused the highest stages since 1945 from Harrisonburg, LA, on the Ouachita River, to the lower end of the district at Acme, LA.

For 191 days, the Ouachita River at Monroe remained at a minor flooding level of 34 feet. At Acme, the Black River

stayed above the flood level of 48 feet for 104 days.

Finally, in late May, the longest sustained rise on the Mississippi River in history began to slowly recede.

At the flood's peak, 500 Vicksburg District personnel were involved in the flood fight along with 62 people from other Corps districts, hundreds of private citizens and contractors.

On June 27, all areas were finally removed from Emergency Mobilization.

Total flood damages within the Vicksburg District topped \$300 million dollars with agricultural losses, estimated at about \$241 million, and urban damage, estimated at over \$39 million accounting for 83 percent of the total damage.

Losses in Louisiana made up 26 percent of the District total with over \$82 million in damages. Catahoula Parish suffered damages estimated at about \$30 million. Flood damages exceeded \$5 million in Caldwell, Concordia, East Carroll and Franklin Parishes primarily in the area of agricultural crops.

Most of the residential damage in Louisiana came in Catahoula, Franklin and Tensas Parishes.

Although the flood had not caused any major failures in the main line Mississippi River levees, it had taken its toll throughout the Lower Mississippi Valley on lives, homes, land, wildlife, timber, agricultural products, industrial development and navigation.

Corps and Levee Boards Worked Together in '73 Flood

All through the winter of 1973, Corps of Engineers' hydrologists and other veteran river watchers had been keeping a worried eye on the Mississippi River and the rain-soaked Ouachita River Basin.

Their hope was that, after an unusually wet winter, there would be an equally unusual dry spring that would allow them to diffuse a potentially disastrous combination of saturated ground and high river stages.

Those hopes proved futile, however, when in March 1973, a series of storm systems dumped rainfall that doubled the normal amount for the month. More than 10 inches of rain were recorded in most areas of the state.

Then again in the latter half of April, torrential rains moved across the Upper Ouachita Basin with daily rainfall amounts of five inches being recorded on four days between April 19-24.

The flood wave created by the storms in the upper portion of the basin moved south down the Ouachita River with flood stages recorded at Monroe on March 18. The lock and dam pools at Columbia and Jonesville on the Lower Ouachita and Black Rivers were 12 feet above normal.

As the water continued to rise on the Ouachita, the decision was made by Tensas Basin Levee District and Vicksburg District officials to close the opening in the floodwall that protected Monroe.

"Early on we tried to close the opening with sandbags, but then we decided to close them by building a levee right down the street," remembered Wedon Smith, who was president of the levee district at that time.

"One of the things we learned was that a new levee couldn't withstand the wave wash, so we sealed it all with visqueen."

By the first part of May, the high stages on the Ouachita and rising levels on the Mississippi River combined to produce extensive backwater flooding in the Red River backwater area. "We already had a major flood on the Ouachita, and those flows, along with high Red River flows, met with high flood stages on the Mississippi and Atchafalaya Rivers. This created a severe backwater flood situation in the area around Jonesville," said Larry Banks, who was a hydraulic engineer with the Vicksburg District in 1973. Banks is now chief of the district's hydraulics branch.

At Caldwell, LA, pumps were needed to keep unprotected areas dry, and a temporary levee was built at Harrisonburg.

But, the biggest part of the flood fight in Louisiana came at Jonesville. In mid-April it became apparent that a levee built to protect an area south and west of the Jonesville ring levee proper would be overtopped. Construction began on an emergency levee around an area just west of Jonesville.

Officials hoped this levee would protect the hospital, airport, industries and the many homes in that highly developed area.

"When we saw we were going to lose the Jonesville levee, we pitched in to build a levee system within the system," Smith said. "Even though we eventually lost the Jonesville levee, we gave those people enough time to get their belongings out."

"The miracle was that with the river as high as it was, we were able to get the dirt to build an emergency levee. Even after the levee was complete, we were constantly fighting to keep the culverts from blowing out."

James W. Harrison, chief of the district's operations division was assistant chief of the revetment branch during the 1973 flood. Fresh from completing a levee at

Belzoni, MS, Harrison spent two months working on the Jonesville levee.

"We actually dug the dirt for the levee out of a field that was under 2 to 3 feet of water," he recalled. "We used what we call 'high boy' drag lines, and built the levee out of saturated gumbo in about two weeks."

Harrison credited Jim Hawkins, an engineer with the La. Dept. of Public Works, with his design of the levee. "I remember there was a man who had a turtle pond north of Jonesville, and he didn't want to lose all his mama turtles," Smith said. "But, there was a big box culvert we were having trouble closing off. Finally, we found this man who had some bedsprings. We dropped those bedsprings in the culvert and that let us hold the sandbags in there."

The Bayou Cocodrie area in Catahoula and Concordia Parishes was also the site of an intensive flood battle in 1973.

By late spring, with the Bayou Cocodrie floodgates closed, the Red River was as much as 10.4 feet higher than the ponded water within the backwater levee. Storage from local rains couldn't be released and gradually spread over about 158,000 acres in Concordia Parish, threatening the towns of Ferriday, Vidalia and Ridgcrest.

The first week in May, district officials began raising 36 miles of Red River Backwater levee 1.2 feet to protect against wave wash as the levels of the backwater continued to rise.

"We used bulldozers on the land side and pushed the dirt up to make what is called a 'tater ridge.' The water never went over but we came awfully close," said Jerry McDonald, who was the assistant area engineer at the Corps' Vidalia office in 1973. He is now the area engineer there.

"We learned a lot of lessons from that flood," Smith said. "One of them was that wave wash is a real problem in eroding levees. You really need some kind of breakwater, like trees."

"Someone said that pallets would break wave wash. Before 1973, I hardly knew what a pallet was, but I bought about a 1,000 pallets to try to cut the waves."

Another problem, McDonald said, was getting access to the trouble spots on the levees. The roads on the tops of the levees were one way and this created a lot of confusion and congestion.

"We had to station people on the levees 24 hours a day to control the traffic and look for developing trouble spots," he said.

As far as economic losses were concerned, the big losers in the 1973 flood were the farmers in Louisiana. It was estimated that almost \$69 million in damages were inflicted on agricultural interests.

Actually, the farmers were hit hard for two crop seasons. Because of the soggy ground conditions during the fall of 1972,

many farmers were either unable to harvest those crops, or gathered damaged crops that were sold at a reduced price.

Then, in the spring of 1973, when they should have been preparing their fields for planting, much of that land was still under water and stayed that way until late May or early June.

"The flood fight was primarily the responsibility of the levee boards," McDonald said. "They used their resources wherever they could, but the '73 flood was just more than they could handle. We really worked side by side with them."

"We couldn't have done half of what we tried to do without the Corps," Smith said. "I am a great believer in the work the Corps does. The Corps supported us in everything we were able to accomplish."

Another '73 Wouldn't Be as Destructive

If the conditions that caused the flood of 1973 were repeated tomorrow, things would be very different, according to U.S. Army Corps of Engineers' officials who were involved in the flood fight 20 years ago and have made careers of preventing such devastation from happening again.

"The flood of 1973 gave me a lot of experience in the field," said Larry Banks, now the chief of the Corps' Vicksburg District's hydraulics branch. In the 1973 flood, Banks was a hydraulics engineer.

"It is that experience, to this day, that gave me the knowledge and background to know which way the water is going to go and what it's going to damage."

"I've been through a lot of floods since 1973," Banks added. "The 1991 flood event was worse on the Ouachita Basin but, not as bad in the backwater as 1973 because the Mississippi was not as high."

One of the biggest Corps' projects completed since 1973 is the Tensas-Cocodrie Pumping Station in Concordia Parish. Also finished now is the Larto Lake levee system, which protects Jonesville and other communities west of the Black River, south of Little River and east of Catahoula Lake.

Rainfall runoff within Concordia Parish that was unable to drain in 1973 because of high stages on the Mississippi and Red Rivers can now be pumped away by the Tensas-Cocodrie Pumping Plant.

"In fact," said Jerry McDonald, area engineer in the Corps' Vidalia office, "the Tensas-Cocodrie Pumping Plant is pumping frequently. It is a tremendous improvement for Concordia Parish because they are able to keep the water pumped down when we receive heavy rains."

"The completion of the Larto Lake levee system is a big advantage," said Wedon Smith, who was president of the Tensas Basin Levee District in 1973. "That was the area where we lost a levee in 1973. In that area now there are probably 200,000 acres of cultivated land."

Completion of the Sicily Island levee system, which is now under construction, would have prevented the flooding northeast of Jonesville between the Tensas and Ouachita Rivers in north Catahoula Parish, Banks said. A drainage structure has been completed on Bayou Louis near Harrisonburg, which would lessen overflow into residential areas around Lake Louis, and the Corps is in the process of constructing other drainage structures as part of the Sicily Island system which would lessen overflow of water through the Lake Louis community. Another advancement in Corps procedures since 1973 is the work done to better forecast flows and the use of computers for hydraulic modeling.

The Corps' hydraulics engineers also are better able to predict how high the

streams will go and when they can be expected to peak. Based on these forecasts, flood fighters know where they can expect the water to overtop or go through low areas and where to build emergency levees or use sandbags.

Major strides have been made since 1973 in computer communications capability between the Corps and other agencies such as the National Weather Service River Forecast Center (RFC) in Slidell, LA.

"We normally maintain daily telephone communication with RFC personnel during flood times, but now our computers are talking to each other in exchanging up-to-date rainfall, river stage and river forecast data," Banks said.

"This drastically improves both agencies' capability to respond promptly to predict emergency flood conditions."

Another problem during the 1973 flood, according to McDonald, was access to the trouble spots. The roads on the top of the levees were narrow and one way, often causing confusion and congestion.

Since that time, he said, the roads have been widened and some of the levees have been raised.

"In floods since 1973," McDonald said, "people didn't get nearly as concerned because the levee systems are in place."

The need for an up-to-date communications system is another lesson learned from the 1973 flood," said Smith. "After the flood, we got the authority to put in a top-flight communications system with two towers, one in Monroe and one in Jonesville."

After nearly 30 flood-free years prior to 1973, most of the Corps officials and levee boards had never been involved in a major flood battle.

Now, many of the communities in the area have been involved in flood fights and know what to do and where to seek help.

"It was a very hectic time," said McDonald of the '73 flood. "There had been a 20-year span when the river hardly got to flood stage. We'd never been in a real flood fight. It's the type of experience you just can't get out of a book." **LE**



**T. Dudley Hixson, P.E./P.L.S.,
to be Installed as President of
the National Society of Professional Engineers**

Thomas Dudley Hixson, P.E./P.L.S., of Alexandria, Louisiana, will be installed as President of the National Society of Professional Engineers (NSPE) at the Society's Annual Meeting in Pittsburgh, Pennsylvania, on July 23, 1993. He is presently serving as President-Elect.

Hixson is Vice President and Partner in the firm of Meyer, Meyer, LaCroix & Hixson, Inc., a consulting engineering and land surveying firm, in Alexandria. He is a past chairman of the NSPE Professional Engineers in Private Practice (PEPP) practice division. He has also served on many NSPE committees, including chairing the Registration and Qualifications for Practice Committee and Program Evaluation Committee. Hixson is also an active member of the Louisiana Engineering Society, where he served as state president. He is a recipient of the LES Andrew M. Lockett Medal for Distinguished Civic Service. Hixson is also a member of the American Society for Testing & Materials, the Consulting Engineers Council of Louisiana, a Fellow of the American Society of Civil Engineers, and a Diplomat of the American Society of Environmental Engineers.

Hixson, who holds a Bachelor of Science Degree in Civil Engineering from the University of South Carolina, is an active member of the Alexandria community. He is a past president of the Downtown Lions Club and the Central Louisiana Chamber of Commerce; Chairman of the Alexandria Board of Adjustments and Appeals and a member of the Regional Mental Health Center Advisory Board. He is also an active member of St. Timothy's Episcopal Church.

Hixson and his wife, Reba, reside in Alexandria and have three children.

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



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Baton Rouge, LA

MATHCOUNTS - 1993



Chris Mohme
Boyet Junior High
School
Slidell, LA



Daniel Adkins
McKinley Middle
School
Baton Rouge, LA



Steven Reynolds
St. Margaret Mary
School
Slidell, LA



Travis Fossett
Kinder
Elementary School
Kinder, LA



Marilyn Harsch,
Coach
Boyet Junior High
School
Slidell, LA



Laura Novotny,
Asst. Coach
Boyet Junior High
School
Slidell, LA

The challenge for U.S. students to be top performers in mathematics and science continues to be a national priority. Throughout all segments of American society there is widespread agreement that U.S. global competitiveness depends on our ability to define the cutting edge in a high-tech marketplace. By the turn of the century, a workforce with a mastery of mathematics and science will be an unequivocal prerequisite to maintaining our status as a world leader.

Over the last decade, hundreds of thousands of educators, business leaders, government officials, and community volunteers have committed themselves to improving the academic performance of our students. Working together as partners, they have assumed responsibility for achieving academic excellence in the communities where they live and have begun the hard work of revitalizing American education.

It is critical that we maintain our momentum in reaching new world-class educational standards. We must continue to call on those in our country's highest offices to keep education at the forefront of national concern. Our agenda must persist in urging our leaders to rally the support and participation of every citizen in making U.S. students second to none.

Only with the involvement of every member of the community in our education system will students develop positive attitudes about mathematics and develop the motivation to excel. Students need to hear a clear and consistent message that society values and expects competency in mathematics. Ensuring that students perceive mathematics as inviting, relevant, and essential to their success in a job whose importance and scope demand that it be shared by every American.

For the past ten years, the MATHCOUNTS Foundation and the Louisiana

Engineering Society have been proud to be a part of the nationwide effort to increase mathematics achievement among our nation's youth. We are grateful to our sponsors for making MATHCOUNTS possible, and are indebted to our volunteers for bringing MATHCOUNTS to millions of students.

State Competition

Louisiana State University, Alexandria, was the setting for this year's state MATHCOUNTS competition. The top three teams from each of the eight LES chapters as well as four other individual winners from chapter competitions battled for the right to represent our state at the national finals in Washington, D.C.

The mathletes were housed at the Ramada Inn, and for the second year, mathletes were provided an opportunity to be introduced to the field of engineering through demonstrations, questions and answer sessions, and hands-on activities. The exhibits were designed to emphasize how engineering and mathematics can be applied to their lives. The small group format provided an opportunity for the mathletes to discuss engineering careers during the question and answer sessions.

On Friday evening, all attendees to the MATHCOUNTS competition were treated to a catfish cookout. Our special thanks to the Alexandria chapter volunteers who made this meal a tremendous success. For the second year, McDermott, Inc. hosted breakfast for the mathletes and coaches and snacks for all attendees during the break in competition. Our thanks to McDermott, Inc. for their dedicated support of the MATHCOUNTS program.

National Competition

The 1993 Louisiana MATHCOUNTS contingent comprised of Chris Mohme, Boyet Junior High School, Slidell, (this was Chris' second year to be a participant in

the national competition) Daniel Adkins, McKinley Middle Magnet School, Baton Rouge, Steven Reynolds, St. Margaret Mary School, Slidell, and Travis Fossett, Kinder Elementary, Kinder, and Coach Marilyn Harsch of Boyet Junior High School made their mark in the national competition by placing 28th in a field of 56 teams. This group of 56 teams was narrowed down from over 7,300 teams representing the 50 United States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, the Department of Defense Schools, and the State Department School System.

The Louisiana Engineering Society takes extreme pride in acknowledging the accomplishments of these four outstanding young individuals and their leader and coach, Marilyn Harsch, and her assistant, Laura Novotny. Our mathletes proved equal to the task and returned with national placements with randomly listed scores of 82, 104, 116, and 120 out of 224 competing students. (Ms. Novotny was also provided an opportunity to accompany the team to Washington through the dedicated efforts of parents and the school who strongly support the MATHCOUNTS program.)

As part of the national program, the mathletes were given a brief journey through the land of "fractals" by Dr. Monica Neagoy. The word "fractal" (adjective and noun) was coined in 1975 by Benoit Mandelbrot to denote the objects and describe the dimensions of his new geometry.

The team also had an opportunity to visit and tour our nation's capital. Included among the places visited were Arlington National Cemetery, the National Air and Space Museum, the Washington Monument, the Lincoln Memorial, and the Vietnam Memorial.

Continued on page 20

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**Paul L. Landry, P.E.,
Executive Secretary**

**Louisiana State Board of Registration for
Professional Engineers and Land Surveyors**



Professionalism and Ethics Reinvent the Wheel or Piggyback?

We have a choice of either reinventing the wheel or piggybacking on to what someone else is already doing.

At this writing, the Louisiana Legislature is still in session. Senate Bill 461 authored by Senator Foster of Franklin, Louisiana and sponsored by the Louisiana Chemical Association, the Louisiana Mid-Continental Oil and Gas Association, the Louisiana Chemical Industry Alliance, and the Louisiana Association of Business and Industry would amend Louisiana Revised Statute 37:701 (c) by trying to better define what is required of industry when engineering is involved. Among other things, the bill requires the Board to form an Industrial Advisory Committee no later than September 1, 1993 composed of two representatives from the Louisiana Engineering Society and four representatives from industry (one from each of the organizations listed above). The bill furthermore states that no later than April 1, 1994, the Board shall report to the Senate and House Commerce Committees of the Louisiana Legislature on the progress of discussions and the status of rule making needed to implement this section of the law.

Simply stated, Rules of the Board must be developed which will apply to engineering work performed within an industrial operation. This is indeed a great challenge.

Where shall we begin? Where do we start? Let us not reinvent the wheel — . Let's piggyback on what others have already done. The forty-eight issues raised by industry participants at a professional development and ethics for engineering related businesses in Texas mini workshop held in Dallas on August 25, 1992 should give us a good starting point. With my friend, Charles Nemir, P.E., Executive Director of the Texas Engineering Registration Board's permission, the summary report on this mini workshop is printed for your information and consideration. I believe that Texas is on to some-

OCTOBER, 1993 EXAMINATION SCHEDULE AND DEADLINE DATES

Examination	Pre-Application Deadline Date	Application Deadline Date	Examination Date
Fundamentals of Engineering Examination (8 hrs.)	July 15, 1993	August 1, 1993	October 30, 1993
Principles & Practice of Engineering Examination (8 hrs.) Civil (Including Structural & Sanitary), Mechanical, Chemical, & Electrical	July 15, 1993	August 1, 1993	October 29, 1993
Agricultural, Industrial, Metallurgical, Mining Nuclear, & Petroleum			
Fundamentals of Land Surveying Examination (8 hrs.)	May 1, 1993	May 15, 1993	October 30, 1993
Principles and Practice of Land Surveying (6 hrs.)	May 1, 1993	May 15, 1993	October 29, 1993
Louisiana Laws and Procedures of Land Surveying (2 hrs.)	October 1, 1993	October 15, 1993	April 15, 1994

Pre-Application is required of applicants for certification as an Engineer-in-Training or Land Surveyor-in-Training and for registration as a Professional Engineer or Professional Land Surveyor.

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.

thing which all of us need to get into and understand. Are you willing to take on this challenge? Shall we piggyback with what's going on in Texas or shall we reinvent the wheel ourselves.

The time is right, the challenge is here, industry has a need — leadership is needed to get the job done. Where are you?

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.

1993

July 26-27
Sept. 27-28

Nov. 8-9

"LES FORUM"

Remember, the "LES Forum", a feature section of the *Louisiana Engineer*, is available for your comments on matters of interest to the profession. Comments should be brief, courteous, and timely, and will be edited by the Publications Committee for balance and pertinent content.

The *Louisiana Engineer* is published six times annually in February, April, June, August, October and December. Comments to the "FORUM" should be mailed to the *Louisiana Engineer*, P. O. Box 2683, Baton Rouge LA 70821, no later than the 10th of the month preceding the month of publication.

Summary Report on Mini-Workshop

on

Professional Development and Ethics for Engineering Related Businesses in Texas

Tuesday, August 25, 1992, DFW Airport Marriott Hotel

Goals and Objectives

A half-day workshop was organized and conducted by the Murdough Center for Engineering Professionalism for the Texas State Board of Registration for Professional Engineers. The State Board desired information on needs of engineering related businesses in the state regarding engineering ethics and professionalism programs. This workshop was a method of personally contacting a wide variety of engineering related business leaders in Texas to identify and discuss such needs. Specific attention was given to how these needs could be met by continuing education and formal education. This meeting of Texas engineering business leaders resulted in preliminary action plans to address the identified needs.

Summary of Content

Dave Dorchester, former State Board member and chairman, was the general chairman of the workshop which was attended by thirty-one (31) participants representing a wide variety of engineers and engineering administrators of industry, private practice, and government agencies in Texas. After initially identifying and discussing several general topics on professional issues of interest to the Board and participants, the group divided into several smaller groups for more detailed examination. After lunch, Carl Skooglund, Vice President and Ethics Director for Texas Instruments, gave a presentation on "Ethical Leadership in Industry," highlights of which are included in this newsletter. The agenda, a list of participants and individuals involved in organizing and coordinating the workshop, and the list of issues raised by the participants are included herein.

Conclusions and Recommendations

During the several hours of discussion in both small and large groups, a list of issues was developed. It was noted that many of these issues will need to be addressed by the Texas Society of Professional Engineers and other professional and technical engineering societies. **Regarding future actions by the State Board, the preliminary action plan and general conclusion was that the issues involved in professional development programs needed to be studied in more detail, perhaps by forming an industrial advisory committee to the State Board.** All in attendance expressed willingness to assist in the future.

Workshop Agenda

Briefings on Present Professionalism & Ethics Programs of the State Board.	Charles Nemir, P.E. Dave Dorchester, P.E. Jimmy Smith, P.E.
Assignments to Working Groups	Dave Dorchester
Working Lunch (work on assignment) Lunch provided by the Murdough Center for Engineering Professionalism	Small Discussion Groups
Ethical Leadership in Industry Example for small/medium size organization	Carl Skooglund
Discuss and prioritize items. Discuss applicability of Board's programs to engineering organizations. Discuss possible programs to address needs. Decide if future meetings will be held. Discuss possible programs to address needs. Discuss Industry Advisory Board Concept.	Group Discussions

Workshop Participants

Joseph J. Beal, P.E.	Espey Huston & Assoc., Inc., Austin	Robert Navarro, P.E.	Navarro Engineering, El Paso
Dan Becker, P.E.	HNT & B, Dallas	Charles Nemir, P.E.	State Board of Registration, Austin
Dan Clinton, P.E.	Lockwood, Andrews & Newman, Houston.	Joe Novoa, P.E.	Albert Halff Associates, Dallas
Richard Coneway, P.E.	President, Texas CEC, Austin	Bob Patton, P.E.	Rone Engineers, Dallas
Elmer Cox, P.E.	H.B. Zachry Co., San Antonio	Jimmie Schiendenwolf, P.E.	Asst. to the Mayor, City of Houston
Frank Durda, III, P.E.	Asst. District Engr., DOT, Fort Worth	Carl Skooglund	VP & Dir. of Ethics, TI, Inc., Dallas
John Focht, P.E.	Fugro-McClelland, Inc., Houston	Richard Sivals, P.E.	Sivals, Inc., Odessa
William B. Hagood, P.E.	HDR Engineering, Inc., Dallas	Albert A. Smith, P.E.	Utility Engineering, Amarillo
Bill Harper, P.E.	Southwestern Laboratories, Houston	J. R. Stone, P.E.	Texas Highway Department, Fort Worth
Robert E. Hogan, P.E.	Hogan Engineering, Dallas	Bob Wartens, P.E.	Brown & Root, Inc., Houston
James Huffman, P.E.	Texas Highway Department, Dallas	Clayton Yeager, P.E.	Parkhill, Smith & Cooper, Lubbock
Derrell Johnson, P.E.	Rady & Associates, Fort Worth		
Joe Paul Jones, P.E.	Freese & Nichols, Inc., Fort Worth		
John Lampe, P.E.	Ethics Committee, CEC-Texas		
Sonny Loper, P.E.	Texas Highway Department, Dallas		
Ramon Miguez, P.E.	Director of Public Works, Dallas		
Col. John Mills, P.E.	U.S. Corps of Engineers, Fort Worth		

Workshop Coordination

D. "Dave" Dorchester, P.E.	Workshop Moderator, Midland
Jimmy H. Smith, P.E.	Murdough Center Director, Lubbock
Patricia A. "Trish" Diers	Program Coordinator, Lubbock

Issues Raised By Industry Participants

(number shown in parentheses indicates number of participants giving a high importance ratings to these issues.)

- Selection of engineers based on quality and service not on politics or minority status. (15)
- Price competition: (a) Public Works
(b) Private Works. (8)
- Educate all engineers on liability issues. (7)
- Continuing Education: (a) Requirements, (b) Cost. (7)
- More formal education required to be a "professional engineer". The Board has the ability to do this today with no legislative changes required. (Sec. 12.a.1.) (6)
- Industry Exemption. (6)
- Enhance professionalism in now exempt industry. (3)
- Fear of litigation. (3)
- Need to be politically active. (3)
- Most trusted profession -- BUT -- perceived to be money-driven and non-caring by clients and public. (3)
- Ethics part of all course work. (3)
- Require an examination on Texas Engineering Law before registration as a P.E. (3)
- Bidding for work. (2)
- Lack of resources for training. (2)
- Engineers, contractor, owner coalition (Partnering). (2)
- Political contributions (state/local elected officials). (2)
- Image improvement by working with other allied groups.
- Registration exemptions.
- International business ethics.
- Support network for "ethics" decisions.
- Lack of appreciation for "responsibility to public."
- Get graduates under the "professional umbrella" as soon as possible. Make them think of themselves as "professionals."
- Need to distinguish between Engineering and Engineering Technology.
- Professional Selection process. (reduce cost).
- TSBRPE (Board) should make available (require) a short course on law that could (must?) be taken by potential registrants.
- Family Values.
- Need to embrace TQM.
- Registration, review Code and quiz.
- Legislation vs. ethics based decisions.
- Owners needs vs. acceptable engineering standards.
- Specialty certification.
- Define quality.
- Continuing professional development.
- Design vs. bottom line.
- Adversarial relationship between public and private sectors.
- Avoidance/deferring registration fees.
- Erosion of credibility in environmental arena by attorneys, biologists, accountants, etc.
- Acceptance of gifts.
- Education: (a) need for design background, (b) five year curriculum, (c) promoting Engineering Technology without telling student what he is getting.
- Corps leadership development (ethics module).
- Total Quality Management - "Ethics Ownership".
- Continuing education requirement.
- Golden Rule.
- Code of Conduct.
- Registration examination will help.
- Ethics of engineers educated in other cultures.
- Certification of federal, state and local agency ethics programs.
- Seminars, across state, to get team members together.

IN MEMORIAM

David A. Hunter, Jr.

David Andrew Hunter, Jr., P.E., civil engineer and lifelong resident of New Orleans, died Thursday, April 1, 1993.

David Hunter was born on May 31, 1932 in New Orleans. He attended Metairie Park Country Day School and graduated in 1954 from Yale University with a B.E. in Civil Engineering, and in the same year married Patricia deLaurel, also a native New Orleanian. Hunter served two years in the Air Force, stationed in Tokyo and Fuchu, Japan. Returning from the Air Force to New Orleans, he went to work for B.M. Dornblatt & Associates, Inc.

He was first registered as a professional engineer in Louisiana in 1957, and received his M.S. in Civil Engineering from Tulane in 1959. That same year, Hunter went to work for deLaurel Engineers, Inc. He was made Vice President at deLaurel in 1964, and the following year was placed in charge of the firm's engineering operations.

Hunter stayed at deLaurel until 1969, when he left to join Robert P. Linfield, who already had a successful structural engineering practice established in 1957. Until his association, the firm had strictly handled structural engineering projects for architects. Hunter diversified the firm's practice to include wastewater collection and treatment, water distribution and purification, gravity and pumped drainage systems, waterfront terminal facilities, streets and highways, and materials handling.

The year 1979 brought with it the deaths of firm principals R.P. Linfield, Ashby Gibbons, and Bob Cooper. Hunter not only kept the firm going, but the next five years saw the strongest growth in the firm's history. He announced his association with Ralph W. Junius, Jr. in 1982 and the name of the firm was changed to Linfield, Hunter and Junius, Inc. In 1987, the firm further expanded the scope of its services to include architecture with the purchase of Green and Green, Architects.

During the last fourteen years of Hunter's life, the firm produced its most impressive body of work including a \$32 million Port of New Orleans Intermodal Terminal, a dozen major water and sewage treatment plants, a \$20 million urban drainage project, and a comprehensive 10,000 acre urban drainage basin study that forms the basis for drainage improvements to a large part of Orleans and Jefferson Parishes, to name a few.

David Hunter was tireless not only in his in-office pursuits, but with his professional and community service, as well. He was a Fellow of the American Concrete Institute and a member of ACI Committee 318, Standard Building Code, from 1971-74, and 1983 to the time of his death. He served on the ANSI/ASCE Technical Committee on Minimum Design Loads for Buildings and Other Structures since its establishment in 1985, and its predecessor committee at the National Bureau of Standards since 1978. He was a member of the Board of Building Standards and Appeals for the City of New Orleans for the past ten years. He was a Board Member of the Consulting Engineers Council of Louisiana and a Past-President of the New Orleans Chapter, a member of the American Association of Port Authorities, member of the American Society of Military Engineers, structural engineer for the Historic Districts Landmark Commission, and a registered engineer in six states. At the time of his passing, David Hunter was concluding a term as CEC/L's representative on the Louisiana Engineers Selection Board, the panel of professional engineers that awards state agency design service contracts.

As President of the Yale Alumni Association of Louisiana, member of the Metairie Park Country Day School and a member of Christ Church Cathedral, Hunter distinguished himself in community involvement.

He is survived by his wife, Patricia, four sons, and seven grandchildren.

The Board of Governors, General Membership and staff of Consulting Engineers Council of Louisiana, Inc. offer their heartfelt condolences to the Hunter family and mourn his passing. We will all very much miss his presence and leadership.

*"Know ye that the Lord he is God: it is he that
hath made us, and not we ourselves."*

Psalms 100:3

DOD Panel Calls for Repeal of Six Percent Fee Limit

Since 1939, the fees for architectural and engineering services under federal contracts have been limited to six percent of the estimated construction cost, but that figure is not as limiting as it might first appear because it applies under the wording of the law only to the preparation of designs, plans, drawings, and other specifications. "Front-end" services, such as initial site visits, surveys, feasibility studies,

environmental impact studies, and other services of that type are not included within the six percent figure. Services during the construction phase are likewise not covered.

The design professions have generally been comfortable with this limit except in special cases of projects with small construction costs requiring considerable design effort or of particularly complex projects such as facilities with nuclear components. In January of this year, how-

ever, a panel of the Department of Defense studying overall defense acquisition laws has concluded that the six percent limit is obsolete and should be totally replaced, leaving it to each contracting agency to negotiate the "fair and reasonable" fee mandated by the Brooks Act.

The DOD report says that retention of the limit no longer serves its original purpose of restraining excessive fees. The Brooks Act procedure has not resulted in exorbitant A/E fees, it states. In the era

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Consulting Engineers Section

Warren J. Wilder

CEC/L Executive Director



of modern federal A/E procurement, the report says the fee limit adds to cost and diminishes quality. It goes on to say that because of the fee limit, design is often short-circuited, leading to substantial contract modifications, contract award protests, and higher repair or maintenance costs. Many of these flaws, it states, are attributable to the greater reliance placed on standard plans and designs to hold costs within the six percent figure.

"Finally, the administrative burden to both the government and private sector is significant. Individual agencies have enacted their own standards delineating those costs that are subject to the fee limit and those that are not. Great effort is typically expended by the contracting parties attempting to apply those standards. This effort is particularly difficult given the extremely broad ranges of technical services now routinely required in modern A/E procurements. This entire regulatory web will be eliminated by repeal of these statutes."

It is not likely that the DOD recommendations will be acted upon soon by Congress inasmuch as the A/E portion is part of a larger defense procurement study. When it does receive consideration, an alternative proposal first advanced by Sen. Pat Moynihan (D.N.Y.) to raise the limit to eight percent will probably receive consideration. Sen. Moynihan's bill was primarily addressed to fostering more design competitions for federal buildings, but included the overall increase in the fee limitation as well.

As a historical note demonstrating how times have changed, when Congress enacted the law in 1939 to allow the use of private A/E firms without advertising for bids, the committee report stated that "standard fees have been established by reputable professional societies for various kinds of engineering works, so that the question of the magnitude of the fee does not enter into the selection of an engineering or architectural firm." Little did the author of those words realize that in later years the Department of Justice would move to have professional society fee schedules held to be in violation of the antitrust laws. (From: "Liability Update", April 1993, Newsletter of Office of Professional Liability Research, Inc., Schinnerer Management Services, Inc.)

American Consulting Engineers Council Says:

"Forewarned is Forearmed"

From a recent issue of "The Last Word", newsletter of the American Consulting Engineers Council, comes this little tidbit of useful advice:

Have you ever copied software to use on that computer you just bought? If so, you are violating the law and the potential consequences are staggering. The crime is software theft, commonly called piracy. Industry groups such as the Software Publishers Association (SPA) estimate piracy losses range from \$1.5 billion to \$2.4 billion annually. They are very serious about cutting these losses and they have the law on their side.

Generally one does not buy software. Rather, you pay for a license. The license specifies how widely the software may be used, typically restricting installation to one computer, and to backup copies on one other. If a firm has a network, most software companies offer a "site license," allowing use on multiple workstations within some range. This license usually becomes binding when the buyer opens the packaging.

While software theft may be neither intentional nor malicious, it remains illegal. It is a violation of the federal copyright protection laws and of the license agreement. A software developer typically requires a violator to destroy the illicit copies, buy replacements at full list, and be audited again.

Refusal can bring civil and criminal penalties, and lawsuits. Last year one of the world's largest engineering/construction companies was raided by federal marshals and Lotus Development Corporation officials. It had to destroy all illegal copies, pay \$300,000 and agree to submit to audits for years.

Who's to know, you say? A disgruntled current or former employee; a service technician; the shop that sells you software. Example: the computer store knows how many workstations a firm has, and that it never buys more than one copy of any software. And why would these people who get business from you get you in trouble? Money. The industry pays incentives, or bounty, and they never reveal their sources. The informants do not care how big or small a firm is.

If you have unlicensed software in use, the prudent thing to do is conduct your own software audit, clean house of any illegal copies, and implement a no piracy policy. That's the only way to eliminate the risk. (ACEC's Publications Department offers a variety of resources on computer and software issues, including *Computer Security, A Comprehensive Controls Checklist*, ACEC #1044, available for a prepayment of \$46.95 plus \$4 shipping.)

Consulting Engineers Council of Louisiana, Inc. (CEC/L) Lauches a Unique Membership Drive

In an effort to increase its membership both at the state and national levels, CEC/L and the American Consulting Engineers Council is offering a "deal you can't refuse." For the next six months (through December 31, 1993), engineering firms that join CEC/L and ACEC will pay only ONE-THIRD of the dues normally assessed that firm for the entire first year of its membership! SOUNDS GREAT! It gets better! That same firm will pay only TWO-THIRDS of its normal assessment for the entire SECOND year of membership. Only at the beginning of the third year of membership, does the firm pay its regular assessment.

If you are interested in information on membership, please complete the form below and mail it to CEC/L, P. O. Box 1549, BATON ROUGE, LA 70821. Don't miss out of this unique opportunity! **LE**

Please send me information on membership in CEC/L and ACEC

(Name)

(Firm)

(Address)

**In order to be eligible for membership, a firm must be in business primarily to offer consulting engineering services. The principal must be a Louisiana licensed professional engineer.*

Hixson's Presidential Installation

The Louisiana Engineering Society is proud to announce the election of one of its own, Thomas Dudley Hixson, P.E./P.L.S., (past President of LES and Vice President and Partner in the firm of Meyer, Meyer, LaCroix & Hixson, Inc.) of Alexandria, as President of the National Society of Professional Engineers. Dudley is to be installed during the Society's Annual Meeting on July 23, 1993, in Pittsburgh, PA. In the National Society's fifty-nine year history, Dudley is the first Louisianian to be honored with this prestigious position.

Following tradition, the Louisiana Engineering Society will host the reception following the Installation and provide mementos commemorating his presidency. In addition to these essentials, the State plans to provide attendees with a taste of Louisiana through its Mardi Gras decorations theme and beignets.

In February the Society solicited contributions toward a \$4,000 goal to make Dudley's installation an unforgettable "Louisiana Night" for all by assisting LES with the means to share our fine Louisiana heritage. \$3,445 of our goal was reached and we gratefully acknowledge the following who contributed to Hixson's Presidential Installation:

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The Society is still accepting both personal and corporate contributions to offset expenses for Dudley's Installation. You may join this outstanding celebration by making your contributions payable to LES/Hixson Presidential Installation and mailing to LES, P. O. Box 2683, Baton Rouge, LA 70821. All contributions are greatly appreciated.

In Memoriam Francis C. Roy, P.E.

Francis C. Roy, P.E., President of LES in 1979-80 and recipient of the 1982 Leo M. Odom Award for Services to the Profession, expired on February 12, 1993. He was a native of Iowa and a resident of Lake Charles since 1965. At the time of his death, Mr. Roy was Vice-President of Industrial Equipment & Engineering and had been an adjunct professor of electrical engineering at McNeese State University since 1983.

He received his Bachelor of Science Degree in Electrical Engineering from Louisiana State University in 1949 and his Master's Degree from the University of Texas (Austin) in 1958. Mr. Roy was employed with Allis Chalmers for three years, then was a physics, mathematics and graphics instructor at Jeff Davis Vocational-Technical School. From 1955 to 1965, he taught engineering courses at Louisiana Tech University and, during the summers, computer programming for engineering faculties at American and Canadian universities. In 1965, he received the Tau Beta Pi award as Outstanding Engineering Teacher.

Mr. Roy served a nine year term on the Louisiana State Board of Registration for Professional Engineers and Land

Surveyors. During this time, he served on a number of committees within the National Council of Examiners for Engineers and Surveyors.

Mr. Roy was listed in Who's Who in Engineering, Who's Who in the South and Southwest, and the Dictionary of International Biography.

The LES Board of Direction, the General Membership, and Staff extend our deepest sympathy to his wife, Pauline and daughter, Mary Monica.



Vernon F. Meyer, P.E./P.L.S. Appointed to State Board of Registration

On September 1, 1992, Governor Edwin Edwards appointed Vernon F. Meyer, P.E., to a six year term on the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

Mr. Meyer is President of one of the three corporations in The Meyer Group, Meyer and Associates, Inc. He received his Bachelor of Science Degree in Civil Engineering from Iowa State University and is a registered professional land surveyor in Louisiana and a registered professional engineer in Louisiana and Mississippi.

He is Past President of the Consulting Engineers Council of Louisiana and holds membership in the Louisiana Engineering Society, National Society of Professional Engineers, American Society of Civil Engineers, American Consulting Engineers Council, and the Louisiana Society of Professional Surveyors.

Mr. Meyer and his wife, Carolyn, have three children.



Leta G. Bueto
Executive Director
Louisiana Engineering Society



**U. S. Army Corps of Engineers
and National Society of
Professional Engineers
Partnering Agreement**

Mission Statement

The U. S. Army Corps of Engineers (USACE) and the National Society of Professional Engineers (NSPE) seek through this agreement to promote our mutual engineering interests. We are committed to working together toward the following goals.

Goals

- Promote the ethical and competent practice of engineering in the public interest
- Promote engineering quality through open communication, teamwork, and continuous improvement
- Advance the engineering profession through support of education and continuing professional development
- Promote the participation of diverse populations in the engineering profession
- Enhance the public's image of engineers and engineering

This agreement was developed at a USACE/NSPE Partnering Meeting in Alexandria, VA, on March 4-5, 1993. Ratified, March 30, 1993, and signed by Arthur E. Williams, P.E., Lieutenant General, U.S. Army, Chief of Engineers, and Joe Paul Jones, P.E., President, National Society of Professional Engineers.

1993 NSPE Annual Meeting

The 1993 NSPE Annual Meeting will be held July 17-24, 1993, at the Vista International Hotel, Pittsburgh, PA. The schedule includes practice division meetings, a NAFE seminar, a NABIE seminar, committee meetings, board of directors meeting, and many excellent tours, some historical, some for their engineering excellence. In addition to these activities,

a State of the Society Banquet and an Installation Banquet will be held.

The block of rooms at the Vista International Hotel will be held until June 26, 1993. You may make your hotel reservations by calling (800) FOR-VISTA.

Additional information on the meeting may be obtained by calling the LES State Office at (504) 344-4318.

**Roster of Engineering and
Surveying Societies**

Each year the Louisiana Engineering Society attempts to compile a roster for publication in this magazine, a list of other engineering and surveying societies and technical organizations. The purposes of this effort are to identify contacts and

improve communications among the entire engineering and surveying communities in Louisiana for such inter-society activities as coordination of legislative actions, technical seminars, Engineers' Week seminars, etc.

If you serve as an officer for another organization at either the state or chapter level, please submit to the Society the name of your organization, your name, your position, your address, and phone number for inclusion in this roster. All information should be mailed to LES, P. O. Box 2683, Baton Rouge, LA 70821 no later than July 20, 1993, for the August issue. Let's work together to make this a successful effort! **LE**



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Plan Revisions

In LSPECS April 1993 column in the *Louisiana Engineer*, the concept of a Program Management System at DOTD was presented. A Program Management System was discussed because in previous years the DOTD has designed more projects than the DOTD has funds to construct. Some consequences of overloading the design program were discussed. One such consequence is that plans can remain on the shelf long enough that by the time they are let for construction, they require minor to extensive modification due to policy changes, design standard changes or specification changes. Whether or not the design was performed by in-house or consultant staff, the majority of times changes are made by in-house staff. If changes are made before the plans are signed by the Chief Engineer, the changes are not noted in the revision block and the consultants are usually not notified of the change.

Borrowing a page from the *Engineering Times* *You Be the Judge* column, is the DOTD violating Board of Registration rules when it revises plans stamped by a consultant? LSPECS would like to know what those in the consultant community think about this. Please send comments to: LSPECS Public Information Committee, P.O. Box 44311, Baton Rouge, LA 70804-4311. Comments will be reported on in future columns.

DEQ

In 1991, the Louisiana Department of Environmental Quality (DEQ) petitioned the Department of Civil Service for the creation of an environmental chemical specialist job series. The series was approved with duties and qualifications requirements that indicated those in the positions would be practicing engineering. Presently, the positions are active. One qualification which was and is still not required of the incumbents is possession of an engineering license. Current registration law requires engineering work

to be performed by a registered engineer or under the supervision of an engineer.

LSPECS has challenged the establishment of this series from its inception. While the series undoubtedly results in non-registered engineers practicing engineering, DEQ claims that the series is legitimate because of the agency's supervisory structure. After reviewing DEQ's organizational charts and job descriptions, LSPECS believes that the unlicensed engineers are performing engineering functions without direct professional engineering supervision. LSPECS also believes the unregistered engineers supervise professional engineering work since their responsibilities may include the review of professional work from consultants.

LSPECS's goal on this matter is to ensure engineering professionalism in all of state government. LSPECS has corresponded with the Board of Registration on several occasions, and as a result, the Board has established an ad hoc committee to investigate LSPECS's concerns. This committee is in place and has met with DEQ; however, it appears the Board has not yet decided if any action is appropriate.

LSPECS has offered to assist the Board of Registration in its investigatory efforts. LSPECS has also requested its own legal counsel to research recommendations which might lead to an expeditious decision on this matter.

Design Distribution Guidelines

At the October 1992 LES board meeting, the LSPECS made a presentation concerning the distribution of the Louisiana Department of Transportation and Development's (DOTD) work between in-house staff and contracted consultants. The presentation concluded with a request of LES to issue a statement of support of guidelines recommended by LSPECS for the determination of how the DOTD design workload should be distributed. The LSPECS guidelines are based on concepts endorsed by the National Society of Professional Engineers (NSPE), the

Louisiana Legislative Auditor and the Louisiana Inspector General.

The LES Board of Directors referred the issue to the PEPP and PEG practice divisions. Representatives of those divisions met with LSPECS in January of 1993. Subsequently, representatives of PEPP met again with LSPECS on May 3, 1993. LSPECS is working with PEPP on the wording of the guidelines to make them more palatable; however, the basis behind the guidelines will remain. Both PEPP and PEG hope to present recommendations on the LSPECS distribution guidelines to the LES Board of Directors at the June board meeting.

LSPECS Annual Meeting

At its annual meeting held March 27, 1993, LSPECS introduced its new and re-elected board members: Mr. Steve Strength, Mr. Murphy Ledoux, Mr. Ronald Watts, Mr. Neal West, Ms. Robin Romeo and Ms. Ann Wills from DOTD District 02, District 03, District 04, District 58, District 61 and Headquarters respectively. Their two-year term began April 1, 1993. Serving out the final year of their term are: Mr. Kirt Clement, Mr. Richard Paulus, Mr. John Davis, Mr. Patrick Landry, Mr. Rhett Deselle, Mr. Joel McWilliams and Mr. William Raborn from DOTD Headquarters, District 05, Headquarters, District 07, District 08, District 62 and DEQ respectively. The following board members were elected as officers for the year beginning April 1, 1993: Mr. Kirt Clement, President; Mr. Neal West, Vice-President; Ms. Ann Wills, Treasurer and Ms. Robin Romeo, Secretary. Mr. John Davis is Past-President. **LE**

LSU and LTU Students Win Vincent A. Forte Award

Kerry Frances Reed, Louisiana State University, and Charles R. Plummer, Louisiana Tech University, are recipients of the Louisiana Engineering Foundation 1992-93 Vincent A. Forte Graduate School Fellowships. The \$2,000 Fellowships are presented annually to graduate students who express a sincere desire to enter the teaching profession at the university level.

Dean E. McLaughlin, P.E., College of Engineering, Louisiana State University, and Dean Barry A. Benedict, P.E., College of Engineering, Louisiana Tech University, along with Mrs. Vincent A. "Florence" Forte will make the presentations to Ms. Reed and Mr. Plummer on June 25, 1993 at the Louisiana Engineering Society Annual Meeting Banquet in Lafayette.



Kerry Frances Reed was born in Minneapolis, MN, the daughter of Jim and Judy Fitzpatrick. Her parents reside in Florence, MS., where her father is President of Spencer Engineering, Inc., a civil engineering firm in Jackson, MS. Her mother works as a marriage and family counselor and is a professor of psychology at Hinds Community College. Ms. Reed graduated from Florence High School, Florence, MS. After graduation,

she attended Mississippi State University for five semesters before transferring to Louisiana State University where she earned a Bachelor of Science Degree in Civil Engineering. She is presently working toward a Ph.D. in civil engineering.

She is married to Shannon Reed, who is employed by the Ethyl Corporation, where he is an R&D Chemist in Ethyl's technical center in Baton Rouge.

The Reeds enjoy living in South Louisiana where they spend their free time biking and enjoying the local attractions. They attend St. Jean Vianney Catholic Church.

Ms. Reed has outstanding academic records. She shows character and notable leadership among her fellow graduate students at LSU. Her performance makes her an outstanding recipient of the Vincent A. Forte Graduate School Fellowship.



Charles R. Plummer graduated from Erath High School, Erath, Louisiana. He received bachelor degrees in Education and Civil Engineering from Louisiana Tech University. He is married to Pamela M. Plummer, daughter of former Governor John J. McKeithen, who holds a bachelor degree in education from

Louisiana Tech University. They have two children, Jennifer, 12, and Casey, 9. Mr. Plummer has held various positions from varsity football coach, Vernon Parish, LA, to Hogan Drilling and Exploration Company, Inc., Columbia, LA, and presently with the U.S. Army Corps of Engineers, Vicksburg, MS.

His many honors include recipient of the McDermott Incorporated Scholarship, 1991-92; Ben T. Bogard Scholarship, 1992-93; National ASCE Samuel Fletcher Tapman Scholarship, 1992-93; and the ASCE Louisiana Section Undergraduate Scholarship, 1992-93. He is now enrolled in a masters degree program in civil engineering at Louisiana Tech University.

The Plummer's attend Christ Community Church and are involved with the church youth group. They list swimming and water skiing as involvement away from the job.

Mr. Plummer is a hard worker, is conscientious about his work, has an inquisitive mind and is professional in his efforts. He is ethical in his conduct, mature in character and has the respect of his peers and the faculty. His outstanding performance is in keeping with the ideals of the Vincent A. Forte Graduate School Fellowship.

The Louisiana Engineering Foundation is a tax exempt organization founded in 1978 by the Louisiana Engineering Society. Its goals are to provide opportunities to practicing engineering professionals for development programs; to provide fellowships to serve the educational needs of young men and women pursuing a career in engineering; and to maintain a Center to serve all the engineers. The Foundation is headquartered at 1213 Nicholson Drive, Baton Rouge, Louisiana. **LE**

Calendar of Events

We invite all technical and professional organizations to submit their meeting dates for publication in the *Louisiana Engineer* to: Editor, P. O. Box 2683, Baton Rouge, LA 70821.

June 23-26, 1993

LES Annual Meeting
Holidome, Lafayette, LA

July 16, 1993

Professional Land Surveyor
Oral Exams

July 18-24, 1993

NSPE Annual Meeting
Vista International Hotel
Pittsburgh, PA

July 18, 1993

CEC/L Board of Governors Meeting
Site - TBA

July 26-27, 1993

State Board of Registration Meeting
New Orleans, LA

August 11-15, 1993

NCEES Annual Meeting
Nashville, TN

August 20, 1993

CEC/L Board of Governors Meeting
Site - TBA

September 10, 1993

LES Board of Direction Meeting
Baton Rouge, LA

September 12-13, 1993

NSPE State Presidents-Elect Conference
Alexandria, VA

MATHCOUNTS

Continued from page 10

Congratulations to the following top Louisiana teams and individuals:

TOP TEN SCHOOLS	CHAPTER
Boyett Junior High School	New Orleans
McKinley Middle Magnet School	Baton Rouge
Caddo Middle Magnet School	Shreveport
Pineville Junior High School	Alexandria
Paul Breaux Middle School	Lafayette
Lake Castle School	New Orleans
Sherwood Middle School	Baton Rouge
Eual J. Landry Middle School	Bayou
Moss Bluff Middle School	Lake Charles
Edgar A. Martin Middle School	Lafayette

TOP TEN INDIVIDUALS	SCHOOL
Chris Mohme	Boyett Junior High School
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Steven Reynolds	St. Margaret Mary School
Travis Fossett	Kinder Elementary School
Chandra Donepudi	Caddo Middle School
Byron Foret	Moss Bluff Middle School
Krishna Donepudi	Caddo Middle Magnet School
Joey Ledet	Paul Breaux Middle School
Jarrold Roy	Lake Castle School
Gitesh Chheda	Sherwood Middle School

The Louisiana Engineering Society would like to recognize our Louisiana sponsors who have made this program possible and who made a valuable investment in the youth of our state. Our sincere thanks to the following:

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Competition Day: (Left to right) Travis Fossett, Chris Mohme, Steven Reynolds, Daniel Adkins

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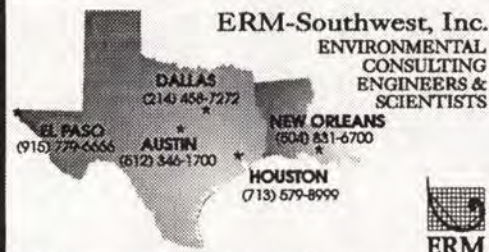
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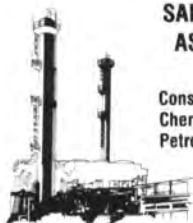


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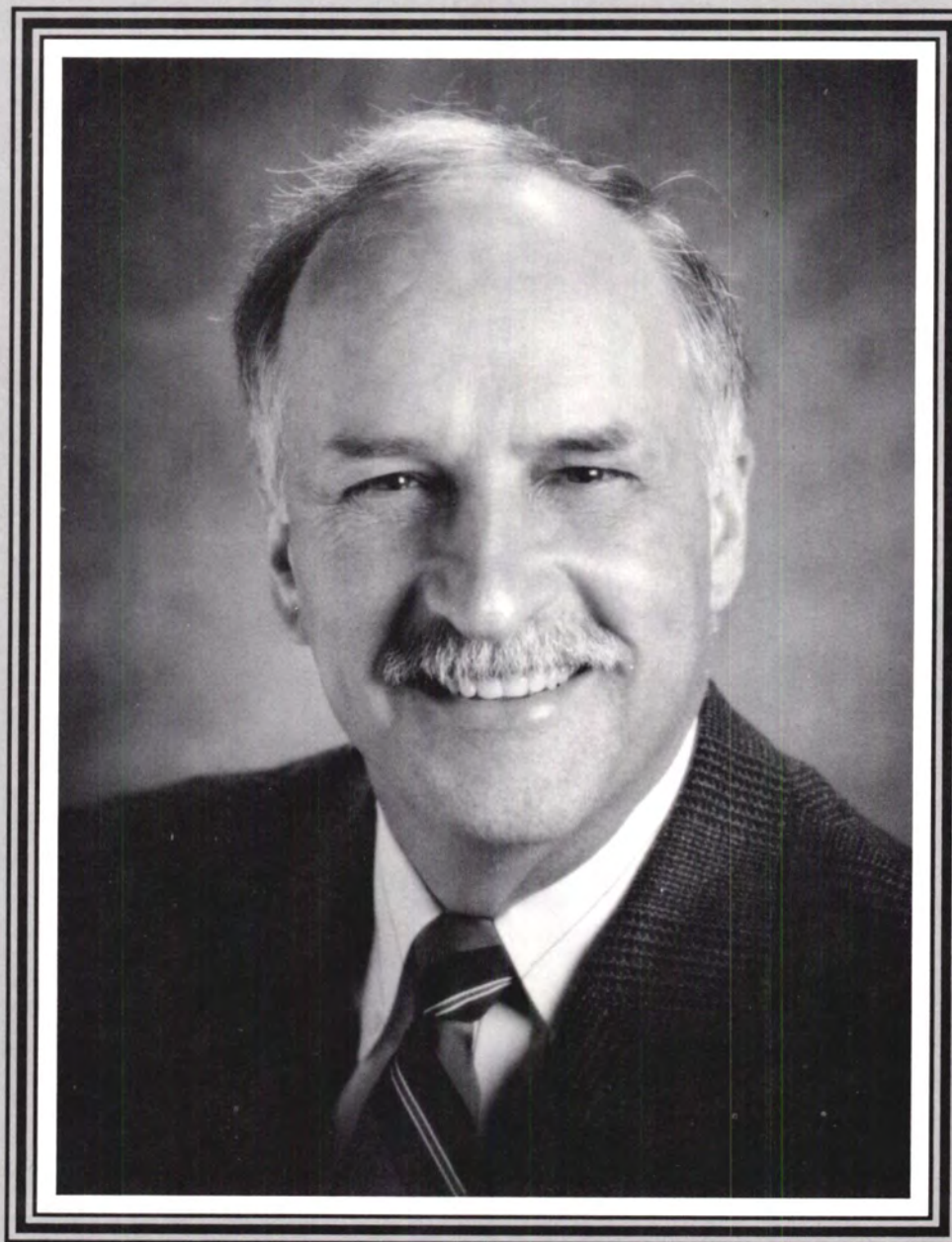
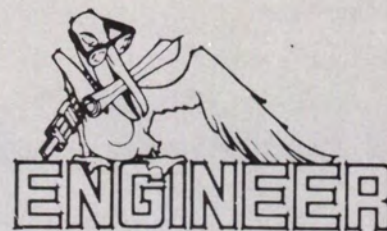
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Calendar of Events

We invite all technical and professional organizations to submit their meeting dates for publication in the *Louisiana Engineer* to: Editor, P. O. Box 2683, Baton Rouge, LA 70821.

August 20, 1993

CEC/L Board of Governors Meeting
Site - TBA

September 10, 1993

LES Board of Direction Meeting
Baton Rouge, LA

September 12-13, 1993

NSPE State Presidents-Elect
Conference
Alexandria, VA

September 15, 1993

Deadline/Award Nominees
to State Office

September 17, 1993

Professional Land Surveyor
Oral Exams

September 27-28, 1993

State Board of Registration Meeting
New Orleans, LA

September 30 - October 1-2, 1993

NSPE Southwest Regional Meeting
Hot Springs, AR

October 7-9, 1993

50th Anniversary AIA/Louisiana
Convention & Products Show
Hilton Hotel
Baton Rouge, LA

October 21-23, 1993

ACEC Fall Membership Conference
Lexington, KY

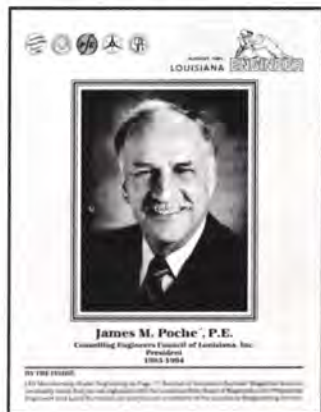
October 27, 1993

Professional Land Surveyor
Oral Exams

October 29-30, 1993

NCEES Exams

AUGUST, 1993



ABOUT THE COVER
Our cover this month features 1993-94 CEC/L President James M. Poche, P.E.

LOUISIANA ENGINEER

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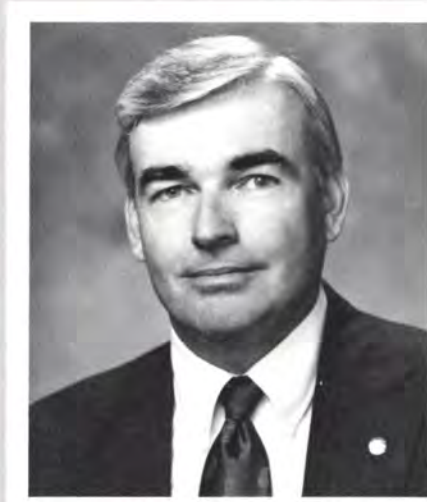
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Presidential Privilege

I read the Notre Metier column in the April issue of this magazine and was concerned to learn that the overall passing rate on the Principles and Practices of Engineering (PPE) Examinations in Louisiana during 1992 was only 51%. The column indicated that the passing rates varied by branch from a low of 0% in two branches to a high of 67% in one branch. Further study revealed that Louisiana is not the only state experiencing this dilemma. In two nearby states, the overall passing rates were equally troubling at 43% and 40%. The low passing rates were not unique to the PPE examination. Nationwide, the passing rate on the Fundamentals of Engineering (FE) Examinations during 1992 was only 50%. This indicates that there may be a serious flaw in the current engineering registration and/or education process!

The passing rate on the FE examination from 1983 to 1988 was over 84%. Why has this passing rate declined so dramatically? There are two reasons which quickly come to mind. Could it be that the students graduating from college now are being inadequately prepared? Or, could it be that the examinations currently being offered are not addressing what is being taught or what is being practiced? Of course, to answer these simple questions without the benefit of the volumes of background information available on the subject would lead you to believe that the solutions to these complex issues are easy. Considerable time, effort and money are being spent by many concerned groups to solve the problem.

However, it is difficult to accept that students can pass four years of college level work and one-half of them are not able to pass an exam which tests their understanding of the fundamentals of engineering. If a student cannot grasp engineering fundamentals, then they simply should not be graduated! It is equally difficult to accept that a person who has passed the FE exam and then gained at least four years of experience cannot pass the PPE exam. One would think that employers would steer non-performers



Dale T. Hunn, P.E.
President
Louisiana Engineering Society

to other lines of work long before four years of experience was achieved.

The question of the fairness of the examinations remains. I have heard complaints from several individuals who state that the exams are just too difficult. Often the criticisms of the tests are that the questions have too many parts or that they ask for answers which are too specific and detailed to complete in the allotted time; or that questions offered do not cover a broad enough spectrum of practice. It has been suggested that only questions which can be read and answered in approximately twenty to thirty minutes should be included on the PPE exams. I have been requested to notify practicing engineers that they are encouraged to submit questions involving "real world" design problems for consideration for use on future examinations. If your question is selected for use, you are paid an honorarium of \$100. The process to submit "items" for

consideration is straightforward. For information on submitting "items", contact the Louisiana State Board of Registration for Professional Engineers and Land Surveyors (LSBRPELS). If a more appropriate line of questions does not improve the passing rate, then the problem is larger than any of us would care to know.

To wrap up the legislative agenda, note that both of the bills which were supported by LES regarding the LSBRPELS were signed into the law by Governor Edwards on May 20. The bill proposed by the Louisiana Chemical Association (LCA) affecting the registration law for engineers was not moved from the legislative calendar. The LSBRPELS has agreed to continue working with the LCA and other industry groups to address their concerns regarding the practice of engineering in industrial operations. An eight member committee of Louisiana licensed professional engineers is being appointed by several groups at the time of this writing. LES has two appointments to this Industrial Advisory Committee. The progress of this committee will be reported in future issues of this magazine.

Several popular items reappear in this issue and will continue in future issues. These items include information on the activities in our chapters, committees and practice divisions. The reports in this issue are from our Lake Charles Chapter; our Legislative and Membership Committees, and our Professional Engineers in Industry Practice Division. Other chapters, committees and practice divisions will be highlighted in future issues. This information is provided to demonstrate to our inactive members and to non-members the important and interesting activities that are occurring in LES.

September has been designated as LES Membership Drive Month. An organizational meeting was held in Alexandria on July 9 to prepare for the drive. If you are a member of LES, do some non-members a favor and ask them to join and become active members. They will thank you for getting them involved. Also, encourage some non-active members to rekindle their interest. **LE**

Guest Forum

The new Board of Governors of Consulting Engineers Council of Louisiana (CEC/L) comes to you filled with ideas, energy and enthusiasm. The Board will be meeting this month to formulate specific goals and objectives. It is a distinct privilege to have been selected by my peers as President and I look forward to working with everyone in the organization during this term.

To further our goals we should consider reaching out to other professional groups, and even extend our efforts and abilities into communities and civic areas. I plan to ask the Board to consider devoting attention and time toward this goal, and by doing so the impact of CEC/L's work can be more fully realized.

There's no question that the work which is done by CEC/L is important to each and every citizen in this state. Their public safety and welfare is insured by the standards that we set. To continue to promote the issues and concerns of our profession, it is essential that we communicate, coordinate and cooperate with other entities within our area of expertise, and beyond. I hope we can incorporate these ideas into our thoughts and actions during the coming year.



James M. Poche, P.E.
1993-94 President
Consulting Engineers Council
of Louisiana, Inc.

Outgoing president Morgan Watson did an outstanding job of coordinating the efforts to establish the newly formulated statement and its specific objectives. This past year, the CEC/L Board of Governors met with past presidents and national officers for two days to draft the organization's five-year plan. We applaud their productivity, and look forward to implementing the strategies and plans to achieve these goals in the coming years.

The CEC/L mission statement modifies the ACEC purpose statement, by placing increased emphasis on ethical obligations. It reads, **"The mission of the Consulting Engineers Council of Louisiana is to assist member firms in achieving a higher professional, ethical, and business image, thus enabling them to better provide quality engineering services in the interest of their clients and the public."**

The role of this year's CEC/L Board of Governors is to begin implementation of this plan, and establish continuity in future years by updating the five year

goals and objectives. One of these objectives is to "increase interaction with other organizations," specifically the Louisiana Engineering Registration Board, the Louisiana Engineering Society, the Louisiana Architect's Association and other professional societies.

Our goal is to work in harmony with these companion groups to make the engineering profession in this state the best that it can be.

Community Involvement

In order for CEC/L to achieve its great potential, each member needs to get involved. I present this approach in the broadest sense. Volunteering with other segments of society will increase our professional stature and heighten the public's awareness of our work.

Our presence in civic and social arenas also strengthens the communities we live in and reaps untold benefits for our cities, our neighborhoods and all of our families. The time that we devote to this type of service demonstrates the concern our profession has for the general public which we are charged by law to protect.

It has been my personal experience that this involvement is especially meaningful in the realm of education. At Poche Associates, Ltd., we promote the concept of university support. It's easy for us to do considering that most of our professional staff are USL alumni. Whether it is scholarship donations or service on a university board or committee, the benefits that we provide are returned many-fold.

I encourage your participation and involvement on many levels, but especially with CEC/L. Our professional cooperation with other organizations is crucial for mutual growth and achievement. And beyond this, community service is yet another avenue to better our profession and extend our personal horizons.

Cooperate, communicate and coordinate. I encourage all members of our profession to join CEC/L to embrace this philosophy. We'll all reap the benefits! **LE**

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James M. Poche', P.E. - A Profile

James M. Poche', P.E., Lafayette, was installed as the 1993-1994 President of the Consulting Engineers Council of Louisiana, Inc. at the organization's recent installation banquet in Baton Rouge. This comes after several years of meaningful service on the CEC/L Board of Governors as President-Elect, Vice President, Treasurer, Secretary, two years as Member-at-Large, and three years as Lafayette Chapter President. He received his Bachelor of Science Degree in Mechanical Engineering in 1970 from the University of Southwestern Louisiana, Lafayette, Louisiana. Poche's is President of Poche' Associates, Ltd., a Lafayette consulting engineering firm which provides 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 the American Society of

Heating, Refrigerating, and Air Conditioning Engineers, Inc., the Association of Energy Engineers, the Louisiana Engineering Society, the National Society of Professional Engineers, and the Louisiana Architects Association. Poche' is on the Board of Directors 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. Eight years ago, he served as Chairman of the Louisiana Engineers Selection Board, a committee empowered to award state agency design contracts to engineering firms. He is married to the former Linda DeRousselle, and they have two grown children.

"Jimmy Poche' is a planner and a doer," says Warren J. Wilder, the Council's Executive Director. "His mind is always in gear thinking out ways to improve the operation of this group. He is not satisfied

to sit back and accept what is at the present time. From what I have seen over the years, this is apparently the way he runs his business, always seeking avenues to improve the efficiency and marketing capability of his firm. As an example, a few years ago, Lafayette was the site of the CEC/L Annual Meeting. Jimmy and his staff planned the entire meeting and made it one of the most memorable events in CEC/L history."

On a personal note, Wilder comments, "We tend to stereotype our South Louisiana Cajun brothers as laid back and easy going. Jimmy is both of these, and he and Linda are a lot of fun to be around. But don't misunderstand, he is one of the most dynamic and intense businessmen and professionals around. In the world of movers and shakers, Jimmy Poche' ranks right up there with the best at the top of the heap!"

Biographical Sketches of the Board Members

Joe E. Roach, P.E., is Vice President of BaLaR Associates, Inc., a Shreveport, Louisiana based consulting engineering firm offering general civil engineering services including structural and sanitary engineering. He has assumed the office of President-Elect after completing terms as Vice President, Treasurer, Secretary, two years as Member-at-Large, and two years as Shreveport Chapter President. Roach is a graduate of Louisiana State University with a Bachelor of Science Degree in Civil Engineering. He is a Registered Professional 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 design. He is a Registered Land Surveyor in the State of Louisiana and is a member of the American Society of Civil Engineers,

the Louisiana Engineering Society, the National Society of Professional Engineers, the Professional Engineers in Private Practice, the American Water Works Association, the Water Pollution Control Federation, the Construction Specifications Institute, and the Louisiana Conference on Water Supply and Sewerage and Industrial Waste. He continues to serve as one of two Louisiana representatives on the ACEC/EPA Region 6 Liaison Committee. Roach and his wife, Bea, have three children.

Continued on page 8

Frank Nicoladis, P.E., was elected to the CEC/L Board of Governors to serve as Vice President. He has served on the board as Secretary, Treasurer, and New Orleans Chapter President. Nicoladis is a licensed engineer in Louisiana, Florida, Mississippi, Texas, and Arkansas, and is a licensed surveyor in Louisiana. He is President of N-Y Associates, Inc., Metairie, Louisiana, a consulting firm providing services in civil, electrical, mechanical, and structural engineering, architecture, planning and surveying. He is a member of the Water Environment Federation, American Water Works Association, American Public Works Association, Louisiana Engineering Society, Mississippi Engineering Society, National Society of Professional Engineers, American Planning Association, and the American Society of Consulting Planners. Nicoladis has served on the Board of Directors of the Society of American Military Engineers (1988-1993), First Vice President, Louisiana Post of SAME (1992-1993), and is currently serving as the organization's Vice President. In 1992-1993, he was a member of SAME's Senior Executive Group, was the 1990-1991 President of the New Orleans Branch of ASCE, and currently serves on the Board of Directors of the Louisiana Section of ASCE. A 1957 graduate of Mississippi State University with a Bachelor of Science Degree in Civil Engineering, Nicoladis is married to the former Peggy Yemelos, and they have three children. He is listed in *Who's Who in Engineering*.

Jerry G. Lazenby, P.E., was recently elected to the office of Treasurer of CEC/L. He has served on the board as Secretary last year and Member-at-Large the year before. Lazenby is a 1965 graduate of Louisiana Tech University with a Bachelor of Science Degree in Civil Engineering. He is President of Lazenby & Associates, Inc., a West Monroe, Louisiana consulting firm offering civil engineering and land surveying services. He is Past Chairman, PEPP Division of the Louisiana Engineering Society, Monroe Chapter President of LES, Past President of the Monroe/West Monroe Chapter of CEC/L, and holds membership in the Louisiana Engineering Society, the National Society of Professional Engineers, the Louisiana Society of Professional Surveyors, the Institute of Transportation Engineers, and the Water Environment Federation. Lazenby is the 1993 recipient of the Charles M. Kerr Public Relations Award of the Louisiana Engineering Society. He is serving as chairman of the West Monroe Chamber of Commerce Transportation Committee and is Vice President of the West Monroe Rotary Club. He and his wife, the former Christine Wilson, have two sons and a daughter.

F. Bren Kramer, P.E., was recently elected Secretary of CEC/L after serving two terms as a Member-at-Large and one as Baton Rouge Chapter President. He was

graduated from Louisiana State University with a Bachelor of Science Degree in Electrical Engineering in 1963, and with a Master's Degree in Electrical Engineering in 1965. A member of the Louisiana Engineering Society, Kramer is licensed to practice engineering in Louisiana, Mississippi, Texas, and Maryland. He is Director of Project Management with Marrero, Couvillon & Associates, Inc., a Baton Rouge firm with branch offices in New Orleans and Lafayette providing a full complement of electrical engineering services for investigations, planning, studies, design and troubleshooting of electrical power generation and distribution systems, electronic controls and communication systems. He is married to the former Susan Curtis, and they have three children.

Morgan M. Watson, P.E., is serving the Council this year as its National Director after having held the office of President during the preceding year. He has given his talents to the Board of Governors as President-Elect, Vice President, Treasurer, Secretary, two years as Member-at-Large, and two years as Baton Rouge Chapter President. He heads the Baton Rouge headquartered design firm of MEL, Inc., a multi-discipline firm providing civil and mechanical engineering, surveying, and construction services to government and private sector clients. Watson is a 1966 honor graduate of Southern University, and a 1971 graduate of Louisiana State University, receiving the Bachelor and Masters of Science degrees respectively, both in Mechanical Engineering. Registered as a professional engineer in four states, he holds membership in a number of professional societies including the American Society of Mechanical Engineers, the Society of American Military Engineers, AEE, ASEE, and Pi Tau Sigma Honorary Engineering fraternity. He enjoys teaching and is a part-time professor at both Southern University and Louisiana State University, teaching courses in Thermodynamics and Thermal Environmental Engineering. Watson is a deacon at Mt. Pilgrim Baptist Church, where he has served as Sunday School Superintendent for thirteen years, Vice President of the Baton Rouge Private Industry Council, member of the Early Risers Kiwanis Club, life member of the Southern University Alumni Federation, and a member of Omega Psi Phi fraternity. Both Watson and his wife, the former Helen Johnson, are natives of Tensas Parish, and they are the parents of three grown children.

Robert A. Basinger, P.E., was elected CEC/L Member-at-Large after having served on the board for two consecutive years as Shreveport Chapter President. He is President of BBC Engineering, Inc., a Shreveport based firm providing civil engineering services, land planning, and land surveying. Basinger was graduated

from Louisiana Tech University in 1970 with a Bachelor of Science Degree in Civil Engineering and is licensed to practice in Louisiana and Texas. He is a member of the Louisiana Engineering Society and the Shreveport Chapter of ASCE. He is married to the former Marcia Dolin, and they have three children including a married son who is attending dental school. Basinger is a member of Springs of Grace Baptist Church where he is an ordained deacon and teaches an adult Sunday School class. He enjoys church activities and sports of all kinds with his wife and children. He serves on the Municipal Relations Committee, a CEC/L Shreveport Chapter task force for the Mayor regarding the structure of the Department of Public Works and Water & Sewerage. He is also a member of the Shreveport Chamber of Commerce, Greater Shreveport Economic Development Foundation, Downtown Shreveport Unlimited and Bossier Chamber. Basinger serves on the Board of Directors as Treasurer of the Shreveport/Bossier Rescue Mission.

Donald W. Clayton, P.E., was elected to serve another term as a CEC/L Member-at-Large after completing a three year stint as Alexandria Chapter President. He is Executive Vice President of Ballard & Associates, Inc., an Alexandria, Louisiana consulting firm providing services in civil and mechanical engineering, surveying, construction management, laboratory analysis, structural engineering and building design. Licensed to practice in Louisiana, Georgia, and Oklahoma, Clayton was graduated from Georgia Tech in 1973 with a Bachelor of Science Degree in Civil Engineering. He is a member of the Louisiana Engineering Society, the National Society of Professional Engineers and the American Society of Civil Engineers. He is married to the former Kathryn Byrd, and they have two children.

Vincent C. Provenza, P.E., was elected to serve on the Board of Governors as Member-at-Large, having represented the New Orleans Chapter as its President last year. He has also served as the Chapter's Vice President, Secretary and Treasurer. Provenza is Vice President and New Orleans Branch Manager of URS Consultants, Inc., a Metairie design firm offering services in regional water supplies, flood control and drainage facilities, streets and highways, railroads, port facilities, bridges, airports, and environmental permitting risk assessment, audits and design including hazardous and solid waste. He was graduated from Tulane University in 1971 with a Bachelor of Science Degree in Chemical Engineering, and he is licensed to practice in Louisiana and Texas. Provenza is a member of the Louisiana Engineering Society and the Water Environment Federation. He is Past Chairman of East Jefferson Chamber Transportation Committee, a member of the Louisiana Wildlife Federation, Friends

of City Park, and the Jefferson Performing Arts Society. He is married to the former Sheila Tubre, and they have two daughters, Kristen and Kerri.

Donald L. Richard, P.E., was elected Member-at-Large after serving a two year stint as Lafayette Chapter President. A graduate of the University of Southwestern Louisiana, he is President and CEO of Domingue, Szabo & Associates, Inc., a Lafayette consulting firm providing services in civil, structural, and environmental engineering including drainage, water supply, sewerage, water and wastewater treatment, land surveying and development. He is a member of the American Society of Civil Engineers, the Louisiana Engineering Society, the Louisiana Society of Professional Surveyors, the Society of American Military Engineers, the National Society of Professional Engineers, and the Professional Engineers in Private Practice. Richard is married to the former Maxine Easley, and they have five children and an equal number of grandchildren.

William Clifford Smith, P.E., has been elected to serve on the Board of Governors as Member-at-Large. Smith is President of the Houma based design firm of T. Baker Smith & Son, Inc., specializing in streets, roads, and bridge design and supervision of construction, solid waste management reports, as well as environmental research, environmental impact statements, assessments, and monitoring. A Louisiana and Mississippi licensed engineer, he was graduated from Louisiana State University in 1958 with a Bachelor of Science Degree in Civil Engineering. He holds membership in the American Congress of Surveying & Mapping, American Society of Civil Engineers, National Society of Professional Engineers, and the Louisiana Engineering Society. Smith serves on the Board of Directors of the American Bank & Trust Company of Houma, the Board of Directors of American Bancshares, Inc., the Board of Directors of Louisiana Power & Light Company, and the Board of Directors of Entergy Operations, Inc. He and his wife, the former Jo-Anne Toups, have seven children.

Thomas A. Stephens, P.E., Baton Rouge, Louisiana, was elected Member-at-Large of CEC/L after serving as the Baton Rouge Chapter President. He is owner of Stephens Engineering, a consulting firm providing services in civil and structural engineering and land surveying for flood control and land planning, transportation and industrial development. Stephens was graduated from Louisiana State University in 1977 with a Bachelor of Science Degree in Civil Engineering. A licensed professional in the states of Louisiana, Mississippi, and Georgia, he is a member of the Louisiana Engineering Society, the National Society of Professional Engineers, and the American

Society of Civil Engineers. He is Chapter President of Tau Beta Pi Honor Society, a member of Chi Epsilon Honor Society, and serves as the CEC/L representative on the East Baton Rouge Department of Public Works Subdivision Regulation Review Committee. Stephens is married to the former Karen Lynch, and they have three children, ages 5, 7, and 10.

Richard A. Van Wootten, P.E., has been elected to continue his service on the Board of Governors as a Member-at-Large. Last year he represented the Council on the ACEC Board of Directors as its National Director. Van Wootten was CEC/L's President two years ago after having served two years as a Member-at-Large, New Orleans Chapter President, CEC/L Treasurer, Vice President, and President-Elect. He is Senior Vice President - Engineering Operations - for Walk, Haydel & Associates, Inc., New Orleans, Louisiana, a multi-discipline consulting engineering firm specializing in industrial plant design, and the design of deep water terminals, fertilizer facilities, docks, paper and pulp mills. Walk, Haydel & Associates, Inc. maintains branch offices in Baton Rouge, Louisiana, and Mobile, Alabama. A Louisiana Registered Professional Engineer, Van Wootten was graduated in 1957 from Rensseler Polytechnic Institute, Troy, New York, with a Bachelor of Science Degree in Civil Engineering. He holds membership in the Louisiana Engineering Society, the American Society of Civil Engineers, and the National Society of Professional Engineers. Van Wootten is married to the former Linda McIlvain, and they have a son, Peter, and a daughter, Wendy.

Gasper A. Chifichi, P.E., has been elected President of the Baton Rouge Chapter and represents his peers on the CEC/L Board of Governors. Licensed to practice in Louisiana, Chifichi was graduated from Louisiana State University in 1973 with a Bachelor of Science Degree in Civil Engineering. He is an associate of Camp Dresser & McKee, Inc., a Baton Rouge, Louisiana branch office of CDM, Cambridge, Massachusetts, a consulting firm providing services in civil and environmental engineering. Chifichi maintains active memberships in the Louisiana Engineering Society, the American Society of Civil Engineers, the American Water Works Association, and the American Public Works Association. He is Vice Chairman of the UNO Civil Engineering Advisory Board and serves as a representative of the American Consulting Engineers Council on the Engineers Joint Contract Documents Committee. Chifichi is married to the former Denise Trahan, and they have two daughters, Amy, 18, and Ellen, 16.

John W. Holtgreve, Jr., P.E., was elected President of the CEC/L New Orleans Chapter and represents his peers on the Board of Governors. He is Vice President

of Design Engineering, Inc., a Metairie based consulting firm providing services in civil and structural engineering, economic analysis and project development. Holtgreve attended Tulane University where he earned a Bachelor of Science Degree in Civil Engineering in 1970 and a Master of Science Degree in Civil Engineering in 1975. Licensed in the State of Louisiana, he holds membership in the American Concrete Institute, the American Water Works Association, the American Public Works Association, the Water Environment Federation, the Louisiana Engineering Society, and the National Society of Professional Engineers. He is Past Director of the Louisiana Section of the American Society of Civil Engineers and is Past President of the Society of Tulane Engineers. He is married to the former Cheryl Ann Cerise, and they have two daughters, Paige and Mary.

Arthur E. Meyer, Jr., P.E., has been elected President of the Alexandria Chapter and once again serves on the Board of Governors. 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 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, President-Elect, President in 1987-1988 and National Director. He has served on several important committees during those years including Ways & Means Committee (chairman), the Legislative Committee, Rule 1 Ad Hoc Committee, the Joint Professional Societies (CEC/L - LES - ASCE) Committee and the CEC/L Transportation 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 Water 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 American 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 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. Burnaman, have five children.

Robert R. Aillet, P.E., was elected President of the CEC/L Shreveport Chapter and serves on the CEC/L Board of Governors. He is Principal and CEO of Aillet, Fenner, Jolly and McClelland, Inc., a Shreveport consulting firm offering services in the fields of civil and structural engineering, planning, feasibility studies, land surveying, land development, and structural and foundation systems. He is a 1950 graduate of Louisiana Tech

University with a Bachelor of Science Degree in Civil Engineering and is licensed to practice engineering in Louisiana, Texas, Arkansas; and land surveying in Louisiana. Aillet is a Fellow in the American Society of Civil Engineers, a Life Member in the American Water Works Association, and a member of the National Society of Professional Engineers, Louisiana Engineering Society, American Congress of Surveying and Mapping, Society of American Military Engineers and the Water Environment Federation. He is a member of Chi Epsilon, Civil Engineering Honor Society, 1987, received the Distinguished Alumnus Award, Civil Engineer, in 1990 from Louisiana Tech University, and the Distinguished Alumnus Award from Louisiana Tech in 1989. In 1990 he was the recipient of the Professional Engineering Achievement Award, presented by the Engineering and Scientific Council of Shreveport. He is married to the former Dorothy Adams, and they have eight children.

J. Terry Gaudet, P.E., was recently elected President of the CEC/L Lafayette Chapter and serves on the Board of Governors in that capacity. He is retired President of Terry Gaudet & Associates, Inc., a Lafayette consulting firm offering services in mechanical and electrical engineering, technical assistance reports, energy conservation measures and asbestos sampling and planning. Professionally licensed in Louisiana, Mississippi, Texas and Oklahoma, Gaudet was graduated in 1959 from Louisiana State University with a Bachelor of Science Degree in Mechanical Engineering. He holds membership in a number of other organizations including the Louisiana Engineering Society, National Society of Professional Engineers, American Institute of Architects, NFPA, and ASHRAE. Gaudet has been recognized as having served a number of years ago as the CEC/L Lafayette Chapter President for eight consecutive years. He is married to the former Beverly Richard, and they have two children. **LE**

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



Who is the NCEES?

by: Roger B. Stricklin, Jr.
NCEES Executive Director

The National Council of Examiners for Engineering and Surveying (NCEES), commonly referred to as the Council, is comprised of engineering and surveying boards. These Member Boards represent all states and U.S. territories.

Organization

Representing the Member Boards are citizens appointed at the state level to serve and safeguard the general public. These board members serve as delegates to the NCEES and its committees. There are no individual members of the NCEES, rather the delegates represent their respective registration board. The NCEES has 70 Member Boards which are geographically divided into four zones: Central, Northeast, Southern, and Western Zones. Meeting twice a year, the zones serve as a forum on topics of regional interest and concern as a prelude to the NCEES Annual Meeting held in August. The NCEES is governed by a Board of Directors nominated by the zones and elected at the Annual Meeting.

The majority of NCEES business is conducted under a committee system. Council committees study, review, and recommend appropriate actions and procedures to the NCEES Board of Directors and the Council. During the Annual Meeting, each committee submits a report of activities and makes recommendations to the Council regarding their activities.

Functions of the Council

One of the prime functions of the NCEES is the preparation of engineering and land surveying examinations. The

examinations are administered twice a year on specific dates. In cooperation with a number of participating technical societies, examination problems are compiled from various professionals from industry, consulting, and academia. Providing these examinations has two important advantages for the Member Boards: first, the states do not incur the expense and inconvenience of having to create and score their own examinations, and second, they can license professional engineers and land surveyors from other states knowing that they passed the same examination that was given in their state. All Member Boards now administer the NCEES prepared engineering and land surveying examination.

To aid candidates, the Council prepares and publishes several examination study guides. The study guides are available for purchase from the NCEES headquarters. All study guides are updated and revised as needed to reflect current format and specifications of the examinations.

The Council provides and serves as a verifying agency for P.E.'s and L.S.'s seeking multiple state registration. Through this program, the Council verifies and houses the Record Holder's file containing their college transcripts, registration information, references, experience verifications, and other pertinent data. In most cases, the Council Record provides the necessary background information required; thus, reducing the applicant's paperwork when filing applications with registration boards. The Council Record is designed to be a recognized and reliable source of information for review by registration boards.

The NCEES, founded in 1920, is located in Clemson, South Carolina on the Clemson University Campus, and presently employs 23 full-time staff members.

Objectives of the NCEES

- To promote the protection of the public health, safety, welfare, and property by upholding the highest standards of the professions.
- Improvement in engineering and surveying registration laws and their administration and effectiveness.
- Uniformity of standards and practices

in engineering and surveying registration.

- General acceptance of interboard recognition of engineers and land surveyors.
- Definition and maintenance of nationally recognized qualifications for professional engineering and land surveying registration.
- Identification and monitoring of international professional engineering registration procedures and maintenance of liaison with international registration agencies.

The Louisiana Board and NCEES

by: Paul L. Landry, P.E.,
LSBRPELS Executive Secretary

The Board Members and the Staff of the Louisiana Board have historically been on the forefront on NCEES activities. It has been through this organization that Louisiana has been effective in influencing the future of registration in these United States. The following is a list of NCEES Committee Assignments for 1992-93.

NCEES COMMITTEE	Board Member or Staff
Examination Policy and Procedures Examinations for Professional Engineers	Chris Demopoulos Robert D. Fenner Malcolm L. Hurstell Sam L. Sullivan, Jr.
Examinations for Professional Surveyors	Morris P. Hebert
International Relations	Paul L. Landry
Law Enforcement	Benjamin S. Harrison
Professionalism and Ethics	Coan J. Bueche
Records Verification	Albert J. Dunn

You might note that Chris Demopoulos and Bob Fenner, Former Board Members, continue to serve on NCEES Committees. Committee assignments are made each year by the new President of NCEES. Members who have made contributions in the Council, and who have demonstrated willingness to serve, receive appointments.

Mr. Benjamin S. Harrison, the Board Investigator, is Chairman of the Law

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.

1993

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Enforcement Committee. The Louisiana Board is indeed proud of Mr. Harrison's contribution and the recognition he received in being given this appointment. Ben is recognized by his peers throughout these United States as a national leader in law enforcement.

Drawing the Line

Engineer—Engineering

Engineer — is a person.

Practice of Engineering — is what an engineer does.

My surveyor friends tell me that we have to start some place and that some place is called a "point of beginning". That sounds good to me. Let's define our terms.

Engineer — Louisiana Revised Statutes 37:682 (4) states "shall mean a person who, by reason of his special knowledge and ability to apply the mathematical, physical, and engineering sciences and the principles and methods of engineering analyzes and design, acquired by an engineering education and experience is qualified to practice engineering as such term is hereafter defined, as evidenced by his registration as such by the Board". In Louisiana and in most states in these United States, an engineer by statute is a professional engineer. A person who may be an engineering graduate from MIT, a member of Tau Beta Pi, registered as an engineer in several other states but not registered as an engineer in Louisiana is by statute, **not** an engineer in the state. Unfortunately, the majority of engineering graduates residing in Louisiana are not registered with the Board of Registration therefore they may not legally present themselves to the public as engineers. Why do we have this situation? Some may say it is pure politics. Consultants want the number in their "club" to be small for obvious reasons. Others say industry wants to have "slaves". If you are an engineering graduate and not registered as a professional engineer, where can you work? You cannot present yourself to the public as an engineer and offer your services. You cannot be employed by the State of Louisiana or its political subdivisions as an engineer. Nor can you teach engineering design at a university in the State of Louisiana unless you are a professional engineer. Some professors are currently teaching engineering design without being registered because they were grandfathered when the rule requiring registration for the teaching of engineering design was passed by the Board.

Whatever the reason may be the facts are that less than thirty (30) percent of engineering graduates in these United States are registered professional engineers. Isn't it ironic that the airport runway was designed and constructed under

the supervision of a professional engineer and the airplane in which you are travelling was not. What is the logic?

If we go beyond our borders to western Europe, we may learn something. In Germany, for example, when my wife was formally introduced she was introduced as Frau Ingenieur (Mrs. Engineer) Landry. I am of the opinion that in that country the engineering profession has evolved to being an accepted profession. No one would introduce himself as an engineer unless he is in fact one. In the United States everyone wants to call himself an engineer. The latest to get on the band wagon are **Financial Engineers**. Many who are not engineers want to use the title of engineer yet only thirty (30) percent of those individuals who are educated as engineers take the legal steps necessary to become professional engineers. Why?

Practice of engineering — Louisiana Revised Statute 37:682 (A) states "shall mean responsible professional services which may include consultation, investigation, evaluation, planning, designing, or inspection of construction in connection with any public or private utilities, structure, machines, equipment, processes, works, or projects where in the public welfare, or the safeguard of life, health, and property is concerned or involved, when such professional services require the application of engineering principles and the interpretations of engineering data.

A person shall be construed to practice or offer to practice engineering, who practices in any branch of the profession of engineering, or who, by verbal claim, sign, advertisement, letterhead, card or any other way represents himself to be a professional engineer, or who represents himself as able to perform, or who does perform in any engineering service or work or any other professional service designed by the practitioner or recognized by educational authorities as engineering. The practice of engineering shall not include the work ordinarily performed by a person who himself operates or maintains machinery or equipment."

Where do we draw the line as to what is the practice of engineering and what is not. Let me get to specifics.

Heating, ventilation and air conditioning (HVAC) — is expanding or adding on to an existing building requiring (HVAC) engineering? Construction contractors (not engineers) advise clients everyday as to what they need and then install new add-on systems without any involvement of an engineer. Is that not a violation of Law? In some cases, equipment suppliers (not engineers) offers engineering as it relates to (HVAC) system. Is the public being protected when this is being done?

I'm picking on HVAC systems but there are many other examples.

Engineered products such as pump controllers, computer hardware, computer software, wastewater treatment systems, automobiles, airplanes, etc. What has a responsibility for protecting the public in the use of these products? It had better be a professional engineer registrar of the Board in the state in which the application is being used. If that is not the correct answer, how then is the public being protected?

I earlier mentioned the airplane you fly in and the runway used for the landing of the airplane. In this particular case, I'm satisfied that the public is being protected in that the federal government through the Federal Aviation Administration [FAA] does an outstanding job of protecting the public in the use of the airplane. The FAA's methodology for certification and inspection of aircraft is accepted and recognized throughout the world. A number of years ago, the Russians designed and built the YAK-40, a civilian type airplane. The YAK-40 is about half the size of the Boeing 727, it had a three engine configuration with soft field landing capabilities. It was brought out to air shows in Western Europe for marketing. We offered to certify this aircraft to our FAA standards which meant that the USSR would have to allow us to visit their production facilities. They didn't want us to do that, the aircraft was never certified by FAA and as a result it did not sell in the western world.

Another area where we need to draw the line or understand who has the responsibility for protecting the public is in ocean going vessels. The federal government through the United States Coast Guard service certifies and inspects ocean going vessels that operate in these United States. The docking facilities for these vessels, on the other hand, are designed by professional engineers registered in the state in which the facility is built.

In some areas, the federal government has stepped in to protect the public. In the areas which are not in the domain of the federal government, the states must act for the protection of the public and only for the protection of the public. Ask yourself three questions!

1. Is it engineering? If the answer is yes;
2. Who is responsible? It had better be an engineer — which by legal definition is a professional engineer. If not;
3. How is the Public protected?

Engineers and only Engineers should be the ones to draw the line as to who we are and what we are responsible for. Not for the purpose of protecting our turf but for the purpose of protecting the public.

If we fail to draw the line, we have a world of volunteers just waiting to do it for us.

Registration Law Changes in 1993

On May 20, 1993, Governor Edwards signed into law all of the proposed changes to the Registration Law which were published in the February, 1993 issue of the *Louisiana Engineer* except for the definitions of the practice of engineering and of land surveying. After publishing all of the proposed changes and a questionnaire to receive direction from the LES membership, the Society did not file legislation to amend the definitions during the 1993 regular session. The amendments became Act 47 and Act 53.

Engineers in Government

The definitions are still under advisement by the ad-hoc committee formed to address the changes.

NCEES Memorializes Francis C. Roy, P.E.

To the memory of Francis C. Roy, P.E., the National Council of Examiners for Engineering and Surveying dedicates the 1993 *Pre-Convention Reports* ...

... because of his dedication to his chosen profession;

... because of his accomplishments on the Louisiana Board;

... because of his involvement on behalf of the Southern Zone;

... because of his work and foresight on the NCEES;

... because of his devotion to his family;
... because of his winning personality;
... because he was Francis.

The NCEES Board of Directors voted to dedicate the 1993 *Pre-Convention Reports* and the 1993 *Proceedings* to the memory of Francis C. Roy, P.E., who died on February 12, 1993. He also will posthumously receive the Distinguished Service Award with *Special Commendation*. He received the Distinguished Service Award in 1990. He is survived by his wife, Pauline, and one daughter. Pauline and Francis' sister will attend the 1993 Annual Meeting in Nashville as NCEES' guest to accept his award. **LE**



Louisiana Society of Professional Engineers in Civil Service

by: James C. Porter, P.E.

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors (Board) alleges that it is protecting the public from "plan stamping." When a registrant stamps a set of plans, it does no more and no less than certify that the registrant followed an acceptable standard of care - in the legal sense - to determine the adequacy of the project represented by the plans to meet accepted public health and safety standards. "Plan stamping" implies that a registrant's stamp is affixed though an acceptable standard of care was not followed. This is essentially a falsification and total disregard for the health, safety and welfare of the public - a direct violation of the Board's rules in Chapter 21 - Rules of Professional Conduct.

The Board uses logic that engineering plans are part of the engineering process. This ostensibly justifies parts D and E that indirectly provide proprietary protection.

D. No registrant shall affix his seal or signature to... engineering... documents developed by others not under his complete direction and control...

E. documents will be deemed to have been prepared under the personal supervision and complete direction and control of a registrant only when:

1. the client requesting preparation for such... documents makes the request directly to the registrant...
2. the registrant supervises the

preparation of the... documents and has input into their preparation prior to their completion;

3. the registrant supervises the preparation of the... documents; **and**

4. the registrant has the authority to, and does, make any necessary and appropriate changes to the final... documents.

Also, an ethical connection appears to be thinly stretched concerning giving proper credit for engineering work as provided for in ASCE's Guide Lines to Practice:

Engineers shall give proper credit for engineering work to those to whom credit is due, and shall recognize the proprietary interest of others. Whenever possible, they shall name the person or persons who may be responsible for designs, inventions, writings or other accomplishments.

This guideline appears appropriate for citing research reports, published and/or copyrighted papers and patented products in published new works but not engineering plans. If not, a whole generation of engineers should be sternly admonished for not giving Euler, Hardy-Cross, and a host of others proper credit for their work we have used time and again in our plan development.

Parts D and E void the legal standing of the ownership of engineering documents that has been a nationally accepted precedent for years in both the legal and engineering communities. Part 7.2 of the

"Standard Form of Agreement Between Owner and Engineer for Professional Services" is titled *Reuse of Documents*. It is prepared by the Engineers' Joint Contract Documents Committee (EJCDC) and issued and published jointly by the Professional Engineers in Private Practice of the National Society of Professional Engineers; the American Consulting Engineers Council; the American Society of Civil Engineers; and the Construction Specifications Institute states:

All documents... prepared or furnished by (the) engineer... pursuant to this agreement are instruments of service (Note: Not the service itself.) in respect of the project and (the) engineer shall retain an ownership (Note: Not exclusive ownership) and property interest therein whether or not the project is completed. (The) owner may make and retain copies for information and reference in connection with the use and occupancy of the project...; however, such documents are not intended or represented to be suitable for reuse (Note: This does not prohibit reuse) by (the) owner or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by (the) engineer for the specific purpose intended will be at (the) owner's sole risk and without liability or legal exposure to (the) engineer...

The Society Reports

Beginning with this issue of the Louisiana Engineer, a collection of articles on the activities of Louisiana Engineering Society chapters, practice divisions, and committees will be published. It is the Society's goal to keep both the membership and the professional engineering community of our great state apprised of our endeavors in the many arenas of activities including professional, educational, and legislative.

What is the Lake Charles Chapter Doing?

by: Theodore H. Thompson, P.E.
Lake Charles Chapter President

The Louisiana Engineering Society (LES) is about to begin a membership drive campaign and valid questions asked by all are: "Why join LES?" and "What does LES do?"

The many sound reasons to join LES, the benefits, and the tasks LES is doing at the state level are being explained by others in this issue. I would like to tell you what the Lake Charles Chapter has done and is planning for the upcoming year.

During 1992-1993 business year the Lake Charles Chapter actively supported our local MATHCOUNTS competition, with twenty chapter members volunteering their time to help our chapter coordinator, Melissa Jessen, P.E., organize and execute the very successful local program.

At our regular noon membership meetings we had well-informed and capable speakers talk to us on various topics that affect all engineering disciplines. Larry Regan, Assistant U.S. Attorney for the Western Region of Louisiana, spoke to us in October. In November Max Jones, Executive Director of Chennault Industrial Airpark, advised us of current operations and future plans of the local airpark. Wayne McElveen, Calcasieu Parish Sheriff, spoke to us at our January meeting of the need for increasing the size of the parish jail, and the reasons for a needed tax increase. In March, we viewed a film showing the history of the Chicago Tunnels, which flooded two years ago. Our April meeting was a plant tour of the newly started Kronos facilities.

At our annual Engineers Week banquet, BG J.W. Patin, U.S. Army, Ret., Secretary of the Louisiana Department of Transportation and Development, addressed 150 members and guests on his visions for the future. Many of McNeese State University's engineering students were present as guests of local business and industry leaders.

The Lake Charles Chapter of LES provides an avenue for communication between engineers; a forum where we can

discuss events that affect all engineering branches. Whether you are practicing "partnering", Total Quality Management, or management by another name, communication is a key to success — something LES has provided since 1898; in itself, a reason to join.

This coming year will be even more beneficial and exciting as we have planned for an additional meeting with speaker, lined up our speaker and location for the engineering week banquet, planned for new speakers at our monthly meetings, begun plans for a joint society meeting, and have started our fund raising campaign for MATHCOUNTS. Additionally, we are taking steps to reach out to the less active members and involve them in our activities. With these plans, 1993-1994 promises to be an exciting year. Please join us!

Professional Engineers in Industry

by: J.M. Drake, P.E.
State PEI Chairman

I am writing this article on a notebook computer in Pittsburgh where the NSPE meeting is taking place. The PEI Practice Division is doing its best to represent you, the practicing engineer in industry, by debating important issues and acting on business related to our profession. Yesterday, we discussed at length "Engineering unemployment/reemployment; What can NSPE do about it?" At the Southwest Regional Caucus we produced a set of recommendations: 1) Provide retraining opportunities, 2) Provide referral services, 3) Facilitate certain changes to the registration laws, 4) Promote several contract related recommendations, and 5) Foster the development of "portable benefits" programs. You can learn more about these issues by giving me or Edgar Benoit a call.

Dr. W. Edwards Demming received the PEI Distinguished Service Award at the Annual Awards luncheon. His presence and the testimonial to him and to the Quality Revolution he has spawned throughout the world provided a moving experience for all who attended the ceremony. NSPE is actively and effectively applying the principles of Total Quality Management in all of its activities and staff work.

At the State Level: Activities related to the industry practice division include: The successful appointment of Mr. Richard E. Ruckstuhl, P.E., from the five nominees employed in industry to the Governor of Louisiana for appointment to the State

Board of Registration for Professional Engineers and Land Surveyors. The State Board of Registration is establishing an Industry Advisory Committee (IAC). You will be kept informed about the activities of the IAC as it begins its work. LES/PEI is planning a series of teleconferences with Chapter PEI Chairmen and the State Officers. We hope to better facilitate communications throughout the state and to identify those issues that are affecting us all. Following the Lafayette meeting, \$50.00 each was contributed to the Chapter MATHCOUNTS programs of the Bayou, Baton Rouge, and New Orleans Chapters. These three chapters had PEI representatives at the meeting. This policy will be continued to encourage all chapters to send representatives to the state meetings.

PEI has many good programs in place and working to address various needs of the Society. These include the Industry Visitation Program, the Distinguished Service Awards, the Congressional Fellow Program, the Education Assistance Limited, and the Professional Development Awards, to name but a few. We need and encourage all our members to become involved, to get active and to express some of that pride and love for the profession that moved us to become engineers in the first place.

LES Legislative Report

by: Raymond G. Areaux, P.E.
Legislative Committee Chairman

The 1993 regular session of the Louisiana legislature proved to be a very active one for LES. LES (1) authored and successfully supported key legislation amending our registration law; (2) joined with the Consulting Engineers Council of Louisiana, the Louisiana Society of Professional Surveyors, the Louisiana Architect's Association, and the Louisiana Landscape Architect's Association in sponsoring a rather diverse portfolio of laws; and, (3) reacted to certain unexpected challenges to the integrity of the registration law authored by the Louisiana Chemical Association, the Louisiana Mid-Continent Oil and Gas Association, the Louisiana Chemical Industry Alliance, and the Louisiana Association of Business and Industry. From my view, LES experienced its fair share of successes, surprises and disappointments, as detailed herein.

If you have any questions about any of these matters, or if you believe that any new legislation is needed to support or protect the profession, please call or write me at the following: Milling, Benson, Woodward, Hillyer, Pierson & Miller, 909

oydras Street, Ste. 2300, New Orleans, LA 70112-1017, Phone, (504) 569-7127, Fax, (504) 569-7001.

Act No. 47, Louisiana Regular Session 1993 (HB 1398 by Representative Hammett)

Professional Registration Fee Cap/Registration Renewal Fee Cap

Authored by LES, Act No. 47 amends the engineering/surveying registration law (LA R.S. 37:681 et seq., hereinafter, the "Registration Law") by increasing the renewal cap from twenty-five dollars to one hundred dollars. The Board may not increase said registration or certification fee by more than fifteen dollars in any three year period. Act No. 47 also amends the application and registration fee by increasing the registration cap from one hundred dollars to two hundred dollars. The Board may not increase said registration or certification fee by more than thirty dollars in any three year period.

This legislation was the subject of considerable study and discussion within the profession prior to its introduction at the legislative session. (See the February 1993 issue of *Louisiana Engineer*.) Those efforts included the formation of an ad-hoc committee composed of representatives from LES, CEC/L, ASCE, and LSPS which was chartered to investigate the need for such increases and was chaired by the author.

LES, in its self-appointed role as private watch-dog for the engineering profession in Louisiana, introduced this measure to strengthen the means by which the profession is regulated. LES expects that this law will place the State Board of Registration for Professional Engineers and Land Surveyors on a firm financial footing, and will thus allow the State Board to continue its crucial role of policing, and maintaining the integrity of, the profession.

LES and the entire profession owe a special thanks to Representative Hammett who shepherded this bill through the legislative process.

Act No. 53, Louisiana Regular Session 1993 (HB 1480 by Representative Hammett)

Housekeeping Amendments to Engineer/Survey Registration Law

Also authored by LES, Act. No. 53 is a collection of housekeeping amendments to the Registration Law. These housekeeping measures, set forth as items 2 through 7 on pages 15-17 of the February 1993 issue of the *Louisiana Engineer*, were also reviewed by, and favorably endorsed by, the ad-hoc committee. (Amendments were not filed on the definitions to the practice of engineering and surveying.)

Again, LES and the entire profession owe a special thanks to Representative Hammett.

**SB 462 by Representative Foster
Expansion/Stacking of State Board of Registration**

This bill would have expanded the State Board from eleven members to thirteen members, with nominations for the additional two members selected by the Louisiana Chemical Association, the Louisiana Association of Business and Industry, and Mid-Continent Oil & Gas Association (collectively the "LCA/Mid-Continent Lobby"). This bill, authored by the LCA/Mid Continent Lobby, would have been opposed by LES if the bill had been heard in committee. The bill was never brought on for hearing as LES and the LCA/Mid-Continent Lobby devoted their time and efforts to negotiating a compromise version of this bill's companion bill, SB 461.

**SB 461 by Representative Foster
Clarification/Expansion of Industrial Exemption**

This bill, companion bill to SB 462, would have been opposed by LES in its initial form. As originally introduced, this bill would have broadened and, in some cases, clarified the so-call "industrial exemption" (LA R.S. 37:701 C). LES advised the LCA/Mid-Continent Lobby of its intention to oppose the bill. Thereafter, LES and the Mid-Continent Lobby negotiated a compromise version of the bill which was heard and favorably reported by the Senate Committee. The bill, as amended, attempted to clarify certain provisions of this section of the Registration Law and mandated the establishment of a committee to further study the issue. This bill was passed by the Senate but ran into trouble in the House Committee.

Although the bill was not enacted into law, the State Board, LES and the LCA/Mid-Continent Lobby have voluntarily agreed to establish, and in fact have established, a committee to review certain provisions of LA R.S. 37:701 C. The committee is composed of eight members. Two members appointed by the State Board, two appointed by LES, and one appointed each by the LCA, LMCOGA, LCIA and LABI. It is the author's hope that the parties can address their concerns through the committee process and that, if clarification is deemed necessary, clarification can be implemented in a rule-making proceeding rather than in the legislative arena.

**HB 1460 by Representative Hammett
Parish and Local Governments/QBS**

This bill, developed jointly with, and supported by, LES, LSPS, CEC/L, LAA, and LLAA, would have required advertising and a quality-based selection process for design professional services (exceeding certain threshold amounts) in all realms of parish and local governments. The bill, which would have enacted LA R.S. 38:2320.1 et seq., was opposed by the Louisiana Municipal Association and never cleared the committee.

**SB 205 by Senator Bean
Certificate of Merit Law**

This bill, developed jointly with, and supported by, LES, LSPS, CEC/L, LAA and LLAA, would have required a plaintiff, complaining of design professional malpractice, to file with his or her suit an affidavit of a competent expert. The affidavit would have had to have set forth at least one negligent act or omission claimed to exist and the factual basis for such claim. This bill, would have amended Article 894 of the Louisiana Code of Civil Procedure, was defeated in the first reading.

**SB 808 by Senator Bankston
Good Samaritan Law**

This bill, developed jointly with, and supported by, LES, LSPS, CEC/L, LAA and LLAA, would have shielded design professionals from liability for performing certain voluntary professional services during natural disasters. In effect, this bill would have afforded design professionals benefits currently provided to other professionals. The bill, which would have enacted LA R.S. 9:2777, was opposed by the Louisiana Trial Lawyers Association and never cleared the committee.

**SB 807 by Senator Bankston
Public Contracts: Liability in Connection with Pollutants**

This bill, developed jointly with, and supported by, LES, LSPS, CEC/L, LAA and LLAA, would have allowed design professionals to obtain indemnity protection when working for a public body in rendering professional services related to asbestos or other pollutants in facilities owned by the public body. The bill, which would have amended LA R.S. 38:2195, passed favorably out of committee, but gaining support for the floor hearing proved unsuccessful. The bill was never moved from the calendar.

**Louisiana Engineering Society -
Are You a Member?**

by: Richard J. Primeaux, P.E.

Membership Committee Chairman

If you could belong to an organization that gave you a voice in legislative matters that affect your everyday business life, would you be interested? Would you be interested in an organization that promotes ethics and professional conduct or maybe an organization that gives you a voice in whom is selected to be on the State Board of Registration? What if this organization could place you in contact with influential and highly successful individuals in the engineering profession? Wouldn't that be an excellent organization to be associated with? Yes, there is such an organization that can give you all this and more, the **LOUISIANA ENGINEERING SOCIETY**.

Many engineers receiving the LE magazine feel they belong to the Louisiana Engineering Society (LES). Not necessarily true. The LE magazine is made available

not only to LES members; it is also distributed to all registrants of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors (LSBRPELS). The simple reason all registrants receive the LE magazine is because the magazine is the official journal of the LSBRPELS and is a direct tie between LES and the State Board. Therefore, you may be receiving the LE magazine but you may not be an LES member. There are 9600 Louisiana state registrants of LSBRPELS but only 2300 are members of LES. A listing of all LES members is printed in this issue. Look through it. If you're not listed, then you are not a member.

Why is it important to be an LES member? LES was created in 1898 to protect the engineering profession and it is our (Engineers in Louisiana) representation with other groups affecting the engineering profession. E.E. "Buddy" Moncla wrote an LE article in 1972 entitled *What Does The Society Do For Me?* The following are excerpts from that article concerning LES membership and the value LES has been to the engineering profession:

"the vast majority of the engineers who ask this question (What Does The Society Do For Me?) are not familiar with the Society and therefore, have limited involvement in the function of his professional society." Buddy explains "A true LES member will explain and enumerate the Society's continuing work in salary studies, guidelines for contracts, engineering education, work in the State Legislature combating harmful legislation, obtain passage of Society sponsored legislation, assembling technical information, promoting young engineers, honoring and awarding the outstanding engineers of our Society, and fellowship with engineers on both a local and state level." Buddy also writes "It is becoming more and more apparent to engineers that if they are to realize the professional economic and social goals they desire they must first attain unity." Buddy summarized "Engineers are basically individualists and like to exercise their individual prejudices. We can no longer afford that luxury and while we may not like the restrictiveness of membership it is more desirable than to have engineering degenerate into a trade." Buddy concludes by saying "Membership in our Society, LES, is reasonable and voluntary. Let's all join in and keep it that way. I am very proud

of my profession and will continue to give it my full support. Will you?"

The Louisiana Engineering Society must continue with its mission to give the engineers in this state the protection and representation we need. In today's political atmosphere, success can only be achieved in numbers. This society, LES, desperately needs all of its members to assist in giving this message to our non-members.

The LES Membership Committee therefore, will be conducting a Membership Recruitment Drive in September aimed at informing engineers of the benefits of LES Membership and how easy it is to become a member. The cost of this powerful membership is minimal, about that of the cost of a cup of cof-

fee a day. If you are not reached by membership committee personnel, please call the LES office at (504) 344-4318 and ask for LES membership information.

The Membership Committee is also formulating means to keep its members better informed and strategies to help its members become active and reap the benefits of LES membership. The committee is also implementing payment of dues through a Payroll Deduction Plan; and effective means of assisting with membership dues. The details of the Plan will be forthcoming.

Become a member of LES today, see what LES is doing for the profession. Better yet, see what you can do for your profession with LES as the vehicle. **LE**

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ENGINEERS IN GOVERNMENT

Continued from page 13

Though engineers employed in government would seem to be immune to the effects of these rules and their impact on private practice organizations, we are not. The past and present practices of the engineers employed by government which are predicated on the normally accepted precedent in both the legal and engineering communities are voided by the Board's rules in parts D and E of Chapter 17. Engineers employed in government act as agents of the owner. They routinely modify and reuse engineering documents provided by engineering organizations in private practice through professional services contracts to their government agency-employer - a direct violation of the cited rules. It is the practice of engineers in DOTD to lift details and

sometime full plan sheets from consultant and in-house plans to develop new plans - a clear violation of parts D and E. This is not an unusual practice, it is a prevalent practice throughout the engineering community in spite of the cited rules.

It is accepted by the EJCDC in the "Standard Form of Agreement..." that there are no exclusive proprietary rights to engineering documents and processes once they are paid for by the client. This form of agreement was developed with extensive legal advice from attorneys and it is used extensively by the engineering profession throughout the United States - and Louisiana too. Simply put; once engineering plans are paid for by the client or the employer they are and should be considered in the public domain unless specifically copyrighted.

Parts D and E are believed to have much less to do with protecting the health, safety and welfare of the public and much

more to do with protecting the proprietary rights of the large inventory of plans developed by long established engineering organizations in private practice. The Board has no authority by law to protect the proprietary rights directly or indirectly. To better protect the public and not certain proprietary rights most of Chapter 17 could be replaced with a simple statement such as:

The application of a registrant's seal and signature on any engineering document certifies that the registrant has performed a complete engineering review justifying its contents by using an appropriate standard of care and appropriate documentation of this review is maintained in the registrant's personal records. **LE**

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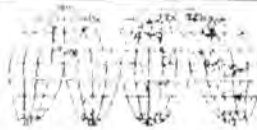
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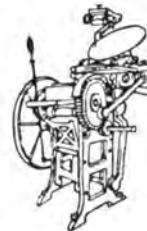
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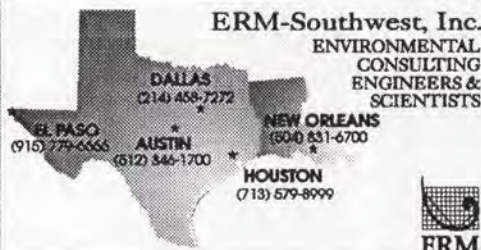


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The Trade Mart will be open all day, and the Seminar agenda will include excellent speakers on such topics as: "The Quality, Price, Perception, Specifications and Certification of Recycled Products", "Purchasing Recycled and Reclaimed Products", and "Recycled Building Materials."

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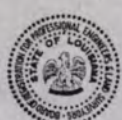
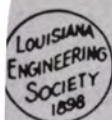
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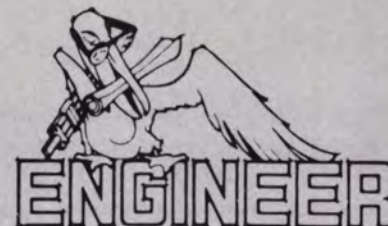
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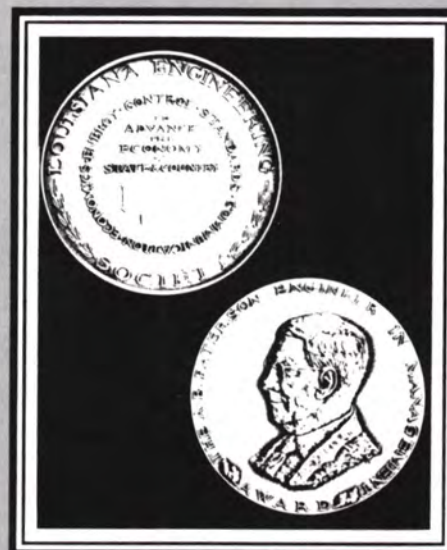
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October 27, 1993

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November 8-9, 1993

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January 8-15, 1994

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OCTOBER, 1993



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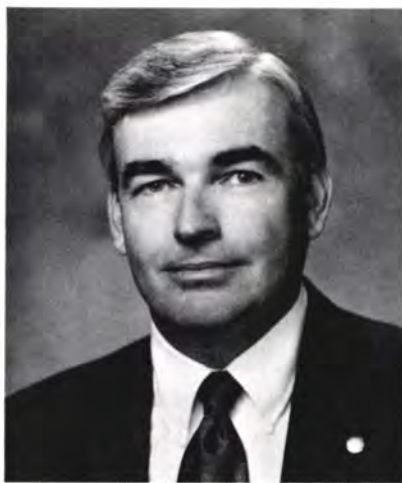
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Presidential Privilege

I want to thank those of you who offered comments on my last article regarding the low passing rates on the Fundamental and Principles and Practice Examinations. The majority of the comments that I received were very positive. It would not be a realistic goal of this administration to try to solve all of the problems facing LES or the profession of engineering. It is one of my goals to call to the attention of the readers of this magazine the issues that are facing the profession and the Society. Resolution of the issues MUST come from the members of LES and the other members of the profession. The most viable tool at the disposal of the practicing professional engineer to address the issues that affect the practice of engineering is LES. Through the Society, the collective voice of all concerned engineers can be presented to the appropriate group.

The LES State Office received scores of telephone calls after the August issue of this magazine was published. The LES membership list which was printed called to the attention of many engineers that they are not currently members of LES. Most of the calls went something like this, "I believe that you left my name off the list of LES members." After the caller was identified, the records were double checked and the caller was informed that he or she was not a member. The caller would then say that he had just sent a check to renew his license. The individual would be advised that the State Board of Registration and LES are not the same. This was surprising information to many of the callers. The good news is that several dozen of the engineers indicated that they would join LES. The confusion in the profession about the relation of the State Board of Registration and its purpose to



Dale T. Hunn, P.E.
President
Louisiana Engineering Society

safeguard the life, health, and property, and to promote the public welfare of the citizens of Louisiana by regulating the practice of professional engineers and professional land surveyors; and the Louisiana Engineering Society and its purpose to represent the professional interests of all engineers must be eliminated. Hopefully, the publication of the LES membership list has clarified some of the

misunderstanding and may be the first step in the abolition of this problem.

The leaders in the chapters, the practice divisions and the standing committees have identified their goals for the administrative year. The activities of these respective groups are beginning. This month's magazine features reports from the Lafayette Chapter, Professional Engineers in Private Practice and the Public Relations Committee. I have attended general membership meetings in four of our chapters and am pleased to report to you that a spirit of professionalism and a comradery among the membership is apparent at all of these functions.

At the September LES Board of Direction meeting, a motion was passed to increase LES dues by \$5.00 beginning with the 1994 billing cycle. A notice regarding the deductibility of your dues on your income tax return will be included in your dues statement. The LES Board will consider adoption of a new Constitution and Bylaws for the Society at its next meeting. Additional highlights of the June and September Board of Direction meetings are listed elsewhere in this magazine.

The Industrial Advisory Committee of the State Board of Registration has met twice. A synopsis of this committee's activities to date is included in this issue. This committee needs to hear from you regarding your thoughts on the practice of engineering in industrial operations. Input from LES members should be sent before the end of the month to the LES State Office. Registrants of the State Board who are not members of LES should send their comments to the State Board of Registration. **LE**

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The Society Reports

What is the Lafayette Chapter Doing?

by: Frederick J. Trahan, P.E.
Lafayette Chapter President

As with all of the local Chapters, Lafayette has pledged to rededicate ourselves to better informing our members (and potential members) of the advantages of being involved in LES. Notice I said INVOLVED in LES. LES wants your input, not only your membership. With each ACTIVE MEMBERSHIP LES becomes stronger and stronger.

In order to accomplish this, the Lafayette Chapter will be calling upon each member to seek just one recruitment. Much can be accomplished by all, but little by I alone. In addition to our annual programs, our Chapter has embarked on a comprehensive recruitment and retention program. Our Membership Committee Chairperson, our Young Engineers Committee Chairman, and myself attended State Membership Committee Meetings in the months of July and August in order to share ideas on membership enrollment. We are very encouraged to see the enthusiasm and ideas that were formulated there. Since then we have met twice in order to formulate our own game plan. We have selected a three-tier system basically comprising Delinquency, Retention and Recruitment.

Our first meeting was held on September 15, 1993. The meeting gave us a chance to present the Chapter's Membership Program which will include 1) a telephone contact with all potential members as well as members who have become inactive in the Society, 2) a USL tail-gate party has been scheduled for October 2, 1993, in an effort to promote LES in the public eye, 3) joint meeting with ASCE and IEEE are in the works, 4) our Chapter will contact the USL Student Chapter in an effort to be more visible during Engineer's Week, and others are in the preliminary stages. Congratulations to those who have already answered our call for participation.

These will not be easy, but with the assistance I have already received, I feel it can and will be accomplished. On that note, I wish to thank all who have made my term so pleasant so far. As I stated ear-

lier, with participation from all we can accomplish many good things.

Professional Engineers in Private Practice (PEPP)

by: Charles L. Eustis, P.E.
State PEPP Chairman

Leaders of this division are consultants. They come from eight local chapters and participate at the state level. They are the apex of a board base representing many engineering disciplines. Those who actively serve the division define the profession and protect the public.

The profession's leaders discuss issues with local, state, and national organizations. They coordinate meetings with sister engineering organizations for sharing information regarding LDOTD selection and evaluation of their consultants, and LSBRPELS issues. A legislative committee gets strong support from our division of consultants. Other issues, such as "Continuing Professional Competency", "Engineer's Registration", and "Services Procurement", are also discussed by our leaders at regional and national meetings. Our professional division and the Louisiana Engineering Society (LES) have been recognized as well organized, productive, viable organizations. T. Dudley Hixson, P.E./ P.L.S., current President of the National Society of Professional Engineers (NSPE), is a past LES PEPP Chair, PEPP Chair for NSPE, and President of LES. Other PEPP representatives are, and have been, recognized as leaders from an organization "doing things right".

Stating that PEPP serves you refers to: the base members, engineers who should be a part of that membership, and the public. Being a member of the professional practice division, even in a passive role until issues demand one's activity, provides the needed base. Professional activity helps develop one's career and contributes to his or her profession. Participate! Be a consultant to your profession.

Public Relations Committee

by: John J. Plaisance, P.E.
Public Relations Committee
Chairman

We, the members of the LES Public Relations Committee are working toward

letting the rest of the world know how important it is to have qualified, professional engineers. Although most of us in the profession know the contributions we make to society every day, there are many of us - inside and outside the profession - who have never given engineering a second thought.

The LES Public Relations Committee is putting the finishing touches on a Public Relations Master Plan. This document, to be presented to the Board of Direction at their November meeting, will act as a blueprint for LES and its local chapters to let the world know what contributions engineers make. Engineers not make only professional contributions, but personal ones as well. It is important for everyone to know that we make it possible for them to drink clean water and work in safe buildings, but we also need to let them know about the other side of us. We need to let them know about how we work with students with MathCounts and the Baton Rouge Chapter's Math Initiative. We need to let them know that we are leaders in our civic, social, and religious organizations. We need to let them know that we are more than just machines crunching numbers.

As a preview to the document, some of our main points follow. We should show pride in our accomplishments by publicizing the major projects we design. We should also keep the quality of the *Louisiana Engineer* and the chapter newsletters high to let our members know what we are doing to represent them. We should develop contacts with the local media at the chapter level to have an outlet for our news. We should recruit and train engineers to talk to the news media whenever an engineering topic is newsworthy. In general, we should publicize every good thing that we do, and we should be there to give accurate information when something goes wrong.

The Public Relations Committee is working hard to let you know what LES (and NSPE) is doing for you. At the same time, we are working hard at letting the rest of the world know what engineers are doing to make the world a better place in which to live. **LE**

CEC/L Implements 5-Year Strategic Plan

In July, 1992, members of a special ad hoc committee met in Natchez, Mississippi for a two-day skull session to hammer out a draft of a strategic plan and to set some short and long range goals for the organization. This preliminary task was accomplished and the CEC/L Board of Governors finally adopted a final rendering of the plan after several months of discussion and editing. A number of the action plans and tasks incorporated in the document has already been implemented. The 1993-94 Board of Governors is currently revisiting the document with the purpose of adding another tier to the plan. The CEC/L 1992-1997 Strategic Plan is reprinted below for your information.

Strategic Planning Team Members

Name	Firm	City
Bob Basinger*	BBC Engineering	Shreveport
Dale Hodges	Pan American Engr. - BR	Baton Rouge
Fielding Johnson	Barber & Johnson	Baton Rouge
Ralph Junius	Linfield, Hunter & Junius	New Orleans
Bren Kramer*	Marrero, Couvillon & Assoc.	Baton Rouge
Kerry LaBauve*	LaBauve and Company	Alexandria
Jerry Lazenby*	Lazenby and Associates	West Monroe
Larry McKee	PECC	Baton Rouge
Frank Nicoladis*	N-Y Associates	Metairie
Jim Poche*	Poche' Associates	Lafayette
Joe Roach*	BaLaR Associates	Shreveport
Tom Stephens*	Stephens Engineering	Baton Rouge
Morgan Watson*	MEL, Inc.	Baton Rouge
Larry Bory	ACEC	Washington, D.C.
Donald Hoover	Planning Facilitator	Baton Rouge
Warren Wilder	Executive Director, CEC/L	Baton Rouge

* Indicates current board members of CEC/L

Definition of Strategic Planning for Consulting Engineers Council of Louisiana.

The strategic plan is an ongoing process for creating the long range future of the practice of consulting engineers in the state of Louisiana. It is both reactive and proactive in nature and addresses the welfare of practicing consulting engineers as well as the quality of service the clients and public receive.

The Process

In June of 1992 the Board of Governors of the Consulting Engineers Council of Louisiana met and discussed the possibility of developing a strategic plan for the organization in an effort to establish a unity of purpose and effort over the next five years. Upon unanimous approval of the proposal a consultant was employed to map out a process within given constraints of time and access to persons appropriately involved in developing a strategic plan.

The process agreed upon utilizing available members of the Board of Governors as well as some representatives of other engineering organizations as Strategic Planning Team members. On Thursday and Friday, July 30-31, 1992, fourteen planning team members and the Executive Director of CEC/L met in Natchez, Mississippi to develop a strategic plan. The process involved clarification of the purpose of CEC/L. This was done

by a review of the history of the organization and a general discussion by the Planning Team regarding their reasons for joining CEC/L and what their expectations were in regard to the efforts of CEC/L. There was initially some polarization of the group centering around welfare of the consultants on one hand and welfare of the clients and the public on the other hand. The ultimate consensus was that what benefits the client and public also benefits the consulting engineer.

These mutually acceptable purposes and expectations were condensed into a mission statement that contained both purpose and function of the organization. The mission statement provides focus and concentration of efforts of CEC/L. Further focus is provided by a consensus of the objectives of the organization over the next five years. The objectives are not exclusive of additional organizational efforts but are targeted as a focus of the organizations commitment. The direction provided by the objectives is further refined by strategies which generally describe how the objectives will be accomplished. These strategies are further refined by action plans which were developed on the second planning day. These plans specifically define how the strategies will be carried out and identify human and physical resources necessary to carry out the strategy and fulfill the objectives.

All of these decisions should be presented to the general membership for review and to the Board of Governors for approval. Implementation should begin upon approval and each summer thereafter, outgoing presidents of CEC/L should give progress reports of the strategic plan and incoming presidents shall reform the Strategic Planning Team to update the plan and maintain its 5 year span.

Critical Issues

1. Communications between CEC/L, its membership, and other professional groups.
2. Public image of engineers.
3. Relationship of principals and employees to participate in activities.
4. Legislative activities by CEC/L.
5. Organizational structure of CEC/L, including the various committees.
6. Retention of members.
7. Cost benefit of CEC/L to members.
8. Six percent fee limitation on federal projects.
9. Membership involvement.
10. QBS vs bidding (public sector), also QBS with non negotiated ads with stipulated fees.
11. Design/build - the growing trend, and how to deal with it.
12. Professional liability.

Definition of a Mission Statement:

A general statement of the unique purpose of the organization and the function it performs.

Rationale: This statement should, in a clear, concise way, describe the primary focus of CEC/L. The statement represents the commitment of the resources, both human and fiscal toward that purpose.



Consulting Engineers Section

Warren J. Wilder

CEC/L Executive Director



The mission of the Consulting Engineers Council of Louisiana is to assist member firms in achieving higher professional, ethical, business and economic levels and in improving their public image, thus enabling them to better provide quality engineering services in the interest of their clients and the public.

Definition of Objectives: A statement of the desired, measurable end results of the efforts of the organization. These objectives take into consideration the strengths and weaknesses of the organization.

Rationale: As we focus the efforts of CEC/L, commitment is required to the accomplishment of specific, measurable objectives. Each is a step toward fulfilling the mission and is a reaction to the critical issues facing the organization. It is the feeling of the Planning Team that these objectives must be met if CEC/L's mission is to be accomplished.

Objectives

1. Increase awareness of business practice resources available to members as evidenced by a 30% increase in resources provided to CEC/L membership by ACEC, by May 31, 1995.
2. Increase membership by enlisting 25% of non-member registered firms by May 31, 1995.
3. Improve the organizational structure of CEC/L by implementing a recommended committee reorganization plan developed by the Board of Governors by December 1, 1992.
4. Develop and adopt, by December 1, 1992, a public relations program designed to improve the image of CEC/L.
5. Improve participation and attendance in Chapter, State and Board meetings by 50% by February, 1993.
6. Improve the quality of CEC/L's legislative activity by establishing a standing Legislative Committee by October, 1992, and instruct the committee to develop a legislative program and identify key legislative constituents by January, 1993.
7. Review the Bylaws regarding the qualifications and term of the National Director and revise if necessary by May, 1993.

Definition of Strategies and Action Plans: Strategies are broadly stated means of deploying resources to achieve the organization's objectives and action plans describe the specifics of each strategy identifying who does what when.

Rationale: Since the objectives specifically define the destination of CEC/L then the strategies and action plans define how that destination is reached. They are an effort to concentrate our resources and efforts to accomplish all our objectives and thereby fulfill the mission.

Strategies and Action Plan Summaries

Strategy 1

We will develop and maintain an effective legislative program.

- Improve the quality of the legislative program by strengthening the Legislative Committee.
- Develop an annual legislative program which is presented at each annual meeting.

- Establish a key constituent program that matches legislators with CEC/L members.
- Coordinate legislative efforts with other impacted groups.
- Develop a procedure for initiating legislation and another procedure for reacting to proposed legislation.

Action Plan

I. Legislative Program

A. Improve Quality of Legislative Program

1. Strengthen Legislative Committee
 - a. Revise Bylaws to create two-year term for chairman
 - b. President-Elect to serve as liaison to board
 - c. President to appoint members at large
 - d. Chapters appoint members to Legislative Committee
2. Develop annual legislative program
 - a. Committee to have program for approval at Annual Meeting
 - b. Include "Selection by Qualification" bill as #1 priority
 - c. Create key constituent program to identify engineer for every member of Legislature
 - d. Executive Directors of LES, LAA, LSPS, ASCE must be contacted by CEC/L Exec
 - e. Contact local public groups for support of QBS (president contacts presidents)
3. Sponsor Annual Meeting social events with members of legislature at both state and local levels
4. Consider hiring lobbyist to advance legislative program, when needed, with board approval
5. Legislative Committee will be responsible for drafting legislation and for developing strategy for getting legislation passed. There will actually be two committees: (1) Legislative Development Committee that will be charged with developing the legislative package, drafting the bill(s), and developing the legislative program, and (2) Legislative Implementation Committee that will be charged with carrying out the legislative program.
6. Consider ACEC's QBS Facilitator Program to assist with QBS bill.
7. Legislative Committee will provide a written "exit report" within 30 days of the end of any legislative session. This report will include successes and failures of past session and preliminary plans for next legislative session. This should eliminate starting too late for the next session.

Strategy 2

We will develop and maintain an effective membership recruitment and participation program.

- Increase membership by developing a potential membership list and changing the Bylaws to strengthen the membership committee.
- Identify and target new chapters.
- Target qualified disciplines not traditionally recruited for membership.
- Develop chapter incentives for membership.

- Continue National Trial Membership program and create a six-month state Trial Membership program.
- Improve and emphasize the benefits of membership.

Action Plan

II. Membership Program

A. Increase membership

1. Develop potential member list
 - a. Review Registration Board records
 - b. Review Yellow Pages in each major area (South Central Bell may be contacted)
2. Strengthen Membership Committee
 - a. Revise Bylaws to create two-year term for chairman
 - b. Chapter membership chairman to be member of state committee (Bylaws change)
 - c. Vice President liaison to board
 - d. Identify and target new chapters
 - e. Target disciplines not traditionally potential members
 - i. Testing labs
 - ii. Petroleum engineers
 - iii. Environmental assessors
 - iv. Construction management firms
 - v. Branch offices of national firms
 - f. Develop chapter incentives for membership
 - g. Develop quotas for membership
 - h. Continue trial membership for national dues
 - i. Create state trial membership program for six (6) months
 - j. Send meeting notices to non-members
3. Membership retention and involvement
 - a. Publish membership directory annually
 - b. Provide copies of directory to public and private client groups
 - c. Create membership certificates
 - d. Recruit more members for committees
 - e. Conduct more seminars and business events

Strategy 3

We will improve the effectiveness of the CEC/L staff and board.

- Improve board attendance at scheduled meetings by incentives and sanctions.
- Improve the decision making process by providing committees and membership with notice of meetings and agenda items for organizations and decision-making bodies which impact consulting engineers.
- Improve the CEC/L committee performance by clarifying responsibilities and establishing timeliness for progress reports and task completion.
- Improve staff effectiveness by more clearly defined expectations from the Board and quarterly reports from the Executive Director to the Board.

Action Plan

III. Improve Effectiveness of Staff and Board

- A. Improve board attendance at scheduled meetings (assuming present monthly schedule)
 1. Orientation of candidates for board positions of responsibilities and duties, both state and local
 2. Automatic dismissal of member from board after three (3) absences with a warning after second absence
- B. Improve decision making process
 1. Require distribution ten (10) days prior to meeting of pertinent information, data, reports, etc. relating to agenda items requiring board action
- C. Improve committee accountability
 1. Make specific and clear charges as to tasks given to committee

2. Establish specific time frames for accomplishing tasks with meaningful monthly reports
3. President-Elect and Executive Director shall monitor progress of committee work monthly
4. Established committees shall be in place within thirty (30) days of the beginning of the administrative year
- D. Determine expectations and responsibilities of staff
 1. Create general job descriptions
 2. Require accountability of Staff Evaluation Committee quarterly
 3. Require Executive Director's report quarterly, assessing staff's implementation of the board's directives
 4. Monitor, on behalf of the president, status of committee activity monthly
- E. Study 2 year term for all board members.

Strategy 4

We will increase interaction with other organizations.

- Expand the relationship with the Registration Board by the Liaison disseminating the notice of meetings and agenda items so membership can be more informed of the Registration Board actions.
- The President will meet with the leadership of LES, LAA, LSPS, ASCE, etc. to develop a more compatible, cooperative relationship.
- CEC/L's Legislative Committee chairman will meet with his counterparts in other professional associations to coordinate legislative efforts.

Action Plan

IV. Increase Interaction With Other Organizations

- A. Expand relationship with Registration Board
 1. Establish board liaison as a standing position
 2. Request that Registration Board provide CEC liaison with agenda (prior to meetings) and minutes of all meetings, both regular and special meetings with the Architects Licensing Board
 3. Liaison to meet regularly with Registration Board members (Private Practice) informally
 4. Liaison to report to CEC/L board regularly and when appropriate
- B. Expand relationship with other professional organizations - LES, LAA, LSPS, ASCE
 1. Direct the president to meet with the presidents of LES and other groups to develop a more compatible relationship between the various organizations
 2. #1 to apply to the chairman of the CEC/L Legislative Committee

Strategy 5

We will improve communication throughout the entire organization.

- To establish editorial committee to improve the format, appearance and content of "The Pipeline" and "The Spec Sheet" article in *Louisiana Engineer* to make them more effective communication tools.
- Reorganize annual meetings to make them more attractive and useful to CEC/L firms, focusing on operation and management issues.
- Support the Executive Director in utilizing the media, both statewide and local, to disseminate the accomplishments of CEC/L firms and to promote CEC/L.
- Encourage member firms to provide news worthy articles about their firms to the Executive Director. Executive Director shall edit and forward articles to papers, etc. Also, Executive Director shall report CEC/L member success

in acquiring state or federal projects.

Action Plan

V. Improve Communication Throughout the Entire Organization

A. Improve Pipeline

1. Redesign graphic format and composition
 - a. Single page, 8 1/2 x 11 printed on both sides
 - b. Colored stock
 - c. Printing company to assist with layout and mailing
2. Develop uniform content format
 - a. List officers, board, chapter presidents
 - b. Calendar of events for each month
 - c. National Director's comments
 - d. President's comments
 - e. New business for next board meeting
 - f. A/E selection
3. First issue to include annual calendar of events on separate page
4. Back page (or first, second or last) to be president's message. Remainder of months available for other business
5. Final redesign plan to be adopted by board
6. Establish committee to implement plan according to above guidelines

B. Improve Louisiana Engineer Article, "The Spec Sheet"

1. Direct content of article to meet specific CEC/L objectives
 - a. Membership
 - b. Image
 - c. Issues, i.e. QBS, etc.
2. Board of Governors to appoint an Editorial Committee
 - a. Evaluate cost/benefits of number of pages
 - b. Determine future intent
 - c. Evaluate audience

d. Reestablish Engineering Excellence and Scholarship programs

e. Establish program for Achievement Award for young principals (Johnny Aucoin Young Principals Award) and professionals who are not principals

3. Note that CEC/L participation is a factor in health of publication

C. Reorganize Annual Meeting

1. Structure format to be attractive to non-principals in firm (future principals)
2. Emphasize seminars related to operations and management of consulting engineering firms

D. Utilize media - statewide and local

1. Direct Executive Director, with assistance of local chapters, to prepare articles for publication in local media
 - a. For engineer selection
 - b. For elected officers
 - c. For personal achievements
 - d. For the promotion of CEC/L

Looking Ahead . . .

The reaction to the Strategic Plan and the efforts on the part of the Planning Team was most positive and gratifying. The end result is this booklet outline of the comprehensive plan. Implementation of the Action Plans will begin immediately. This is a working plan, a guideline to the successful and timely fruition of the listed objectives.

In order for this Plan to remain effective and workable, it will be necessary for each outgoing President to reconcile his efforts to implement it. It will then be imperative for each incoming President to continue the Plan by evolving an additional year annually. As with any successful effort undertaken by this organization, it is most important that the entire Membership supports the realization of the goals as set forth in this document. Only through this conscientious, unified effort will CEC/L continue to move forward and remain THE organization answering the business and professional needs of the engineer in private practice.

CEC/L: A Brief History

A meeting was held at 8:00 p.m., January 10, 1950 in the Library at Tulane University and which had been called by Messrs. George Heft, B.M. Dornblatt, Cary B. Gamble and W. David deLaureal. The objective of the meeting was to start the formation of a group of Consulting Engineers to improve the position of the Consultant and all resulting in a better service to the community (excerpts from the original minutes of that January 10th meeting).

Out of the efforts of a few concerned engineers was born the Gulf Institute of Consulting Engineers. The organization was duly incorporated in 1957 and the name was eventually changed to Consulting Engineers Council of Louisiana, Inc. (CEC/L). Original charter members included B.M. Dornblatt, David W. Godat, G.A. Heft, Albert M. Alexander, Lewis G. Hooper, Leo S. Weil, W. David deLaureal, Warren G. Moses, Cary B. Gamble, C.S. Crawford, T. Edward Ernst, and A.W. Thompson.

In 1956, CEC/L was one of ten Member Organizations which founded the Consulting Engineers Council of the United States at a meeting in Tulsa, Oklahoma. Later the name was changed to the American Institute of Consulting Engineers. Through the years, ACEC's and CEC/L's primary objective remains the enhancement of the business climate and interests of consulting engineers and the positive image of the profession. **LE**

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Engineers in Government



Louisiana Society of Professional Engineers in Civil Service

Reinventing Government

Reinventing government is a popular slogan. It seems that everywhere one turns governmental agencies are being scrutinized for their management, procurement and spending practices. Vice President Gore recently unveiled the report of the National Performance Review which recommended many changes at the federal level. While government reform is popular jargon, the actual implementation of reform can be very unpopular amongst those beneficiaries of the present methods of business. People often preach government reform—as long as the reform doesn't affect them personally. It's a similar ideology to Russell Long's classic, "Don't tax you, don't tax me, tax the fellow behind the tree."

Last year, LSPECS approached LES in an effort to garner support for LSPECS's recommended contracting-out guidelines for engineering designs at the Department of Transportation and Development (DOTD). The subject was broached with LES because LES purports to represent all Louisiana engineers. Also, many from the consultant community participate in LES and the consultant community is as much a part of DOTD's contracting dilemma as the inhouse staff. It has long been the concern of many of the DOTD career staff that the abdication of a disproportionate share of the design workload to consultant contract could result in the erosion of the technical skills of the career staff. We are now seeing this concern being fulfilled. It was also apparent that money was being spent on consultant con-

tracts for studies and plans for projects that would not be constructed for many years, if ever. This was, and is, reducing the amount of moneys available for actual construction. LSPECS elected to seek to facilitate change in the system, yet preserve and nurture both its essential design resources—inhouse staff and contracted consultants.

The LES board initially deferred the LSPECS proposal to the Private Practice (PEPP) and Government (PEG) divisions for recommendations. After months of meetings and a few editorial changes, LSPECS, PEPP, and PEG committees all agreed to endorse the guidelines (PEPP endorsed the guidelines minus one item—comparing costs of inhouse and consultant designs). The guidelines are the epitome of "good government" proposals, paralleling recommendations by the Louisiana Legislative Auditor, the Inspector General, and the National Society of Professional Engineers (NSPE).

At the September board meeting, the LES board voted against "adopting" the guidelines, even if the cost comparison item was eliminated (some directors objected to this item). The directors would not even co-endorse the proposal with LSPECS, stating that it was inappropriate for LES to make unsolicited recommendations to the state agency.

How is government ever going to be "reinvented" if each special interest is not willing to support reform in its own particular area? If we in this relatively small state cannot get by personal interests in affecting change on this one issue, how can we expect it to happen nationwide?

People need to stop scrutinizing only the government bureaucracy and begin assessing their own actions as they relate to government activity. As Tolstoi stated, "Everyone thinks of changing the world, but no one thinks of changing himself."

LSPECS Executive Assistant

On July 8, 1993 LSPECS contracted with Mr. Delano Clark to become the first Executive Assistant of the society. Mr. Clark began his career as Area Field Services Director of Kentucky Farm Bureau in the mid-60s. In 1969 he came to Louisiana as Director of Field Services for Louisiana Farm Bureau and continued to live in Baton Rouge while coordinating program activities in seven southwestern states for the American Farm Bureau. After six years as CEO for the Professional Insurance Agents of Louisiana, Mr. Clark spent the last three years in Oklahoma as CEO of the 85,000 member Oklahoma Farm Bureau Federation. Mr. Clark's community activities have included being president of the Louisiana Society of Association Executives, board member of the Oklahoma Society of Association Executives, president of National Society of PIA Association Executives, board member of the Public Relation Association of Baton Rouge, Lantern Awards chairman for the Southern Public Relation Federation and Chairman of the Board of Trustees for the Baton Rouge Broadmoor United Methodist Church. **LE**

In Memoriam

A donation to the

LOUISIANA ENGINEERING FOUNDATION

is a fine way to remember and honor a departed friend. A call, a fax or a letter to the Secretary of the LEF is all that is necessary to make your donation. The family of the deceased will be promptly notified, and the friend's name will be recorded on the Foundation's Memorial plaque.

LOUISIANA ENGINEERING FOUNDATION

P.O. Box 2683 • Baton Rouge, LA 70821 • Phone (504) 344-4318 • FAX (504) 344-4319



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



Environmental Engineers and Control Systems Engineers

Do you practice engineering in these two disciplines? If you do, you would be wise to apply for registration in either of these two new branches in engineering before July 20, 1994. Let me explain.

Under Board Rule, Section 909, current professional engineer registrants of the Louisiana Board "who present evidence that they are qualified by experience and education to practice" in these two new branches of engineering may be registered by the Board without taking the examinations. The Board has the authority to register individuals without examinations if they apply prior to July 20, 1994. After that date, applicants will have to take and pass the Principles and Practice of Examination. Call the Board office at area (504) 568-8450 if you wish to apply.

Report of Disciplinary Action

Acting upon charges filed by a Louisiana registered architect, and fully considered at a hearing, the Board unanimously found a civil engineering registrant guilty of stamping an entire set of plans for the construction of a private residence, and submitting those plans to the municipality to obtain a building permit, when only one sheet in the entire set — the foundation plan — had been prepared under the registrant's complete direction and control. Stamping the entire set of plans was found by the Board to be a violation of Rules 1701(D), 1701(E) and

2103(C)(2), all of which stipulate that the application of a registrant's seal and signature is only appropriate when the work being sealed was performed by the registrant or under the registrant's complete direction and control. The registrant in this case applied his seal and signature to plans that he admitted were photocopies of those that had been prepared by the registered architect complainant, in addition to the one foundation plan prepared under his own direction and control.

The Board ordered the registrant charged to pay a fine and the cost of the hearing stenographer and to successfully complete the Laws and Procedures examination, placed the registrant's engineering license on probation for one year, ordered that the registrant file quarterly reports with the Board about his engineering activities, and finally, ordered that a summary of this matter be published in the official journal of the Board.

The registrant appealed the Board's decision to the appropriate court. The court having taken no action on the case, the Board and the registrant agreed to a settlement whereby the registrant paid a slightly reduced fine and stenographer's fee, and complied fully with the remaining sanctions ordered by the Board and set forth above.

Registration Law Changes in 1993

Effective 5/25/93 Act 47 and Act 53
Regular Session, 1993

37:693. Requirements for Registration as a Professional Engineer or Professional Land Surveyor, and Certification as an Engineer-in-Training or Land Surveyor-in-Training

B. The minimum requirements for registration or certification by the board shall be as follows:

- (1) A certified engineer-in-training:
 - (c) Effective January 1, 1999, shall be a graduate of an unapproved engineering curriculum of four years or more who has a specific record of four years or more of progressive experience on engineering projects of a grade and

character satisfactory to the board, who is of good character and reputation, who has passed a written examination in the fundamentals of engineering, and who has satisfied the requirements of R.S. 37:694.

(2) A professional engineer:

- (b) Effective January 1, 1999, shall be a graduate of an unapproved engineering curriculum who has a record of eight years or more of progressive experience in engineering work of such quality that the applicant is competent to practice engineering, who is of good character and reputation, who has passed a written examination in the fundamentals of engineering, who has passed a written examination in the principles and practice of engineering approved by the board, and who has satisfied the requirements of R.S. 37:694, or

(3) A professional land surveyor-in-training:

- (b) 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 courses involving land surveying, mapping, and real property approved by the board, who is of good character and reputation, who has passed the oral and written examinations required by the board, and who has satisfied the requirements of R.S. 37:694.

(4) A professional land surveyor:

- (f) 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 courses involving land surveying, mapping, and real property approved by the board, who has had at least four years or more combined office and field experience in land survey-

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.

1993

Nov. 8-9

1994

Jan. 24-25	July 25-26
March 21-22	Sept. 26-27
June 6-7	Nov. 7-8

ing, 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, who has passed the oral and written examinations required by the board, who is of good character and reputation, who has satisfied the requirements of R.S. 37:694, or

- (g) Shall be a person who holds a valid certificate of registration to engage in the practice of land surveying issued to him by the proper authority of a state, territory, or possession of the United States, or the District of Columbia, based on requirements that do not conflict with the provisions of this Chapter, who has passed a written examination on the laws, procedures, and practices pertaining to land surveying in Louisiana, who is of good character and reputation, and who has satisfied the requirements of R.S. 37:649, and if the state, territory, or possession, or the District of Columbia, in which he is registered will accept the certificates of registration issued by the board on a reciprocal basis.

37:694. Application and Registration or Certification Fees

- B. (1) The registration or certification fee for professional engineers, professional land surveyors, engineers-in-training, land surveyors-in-training, and foreign and domestic corporations shall be established at the discretion of the board, but shall not exceed two hundred dollars, and said fee shall accompany the application. The board may not increase the registration or certification fee by more than thirty dollars in any three-year period.

37:697. Expiration and Renewals

Certificates of registration and certification shall expire at a time specified by the board and shall become invalid after that date unless renewed. 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 the expiration of the certificate and the amount of the 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. Renewal of registration as a professional engineer, professional land surveyor, or corporation, or certification as an engineer-in-training or land surveyor-in-training may be effected at any time during the two months prior to expiration by the payment of a fee not to exceed one hundred dollars per year, at the discretion of the board. The failure on the part of any person or entity to renew his certificate, as required above, shall not deprive such person or entity of the right of renewal. The maximum fee for delayed renewal shall be established by the board, provided that said renewal fee shall not exceed three times the normal renewal fee. The board may not increase the renewal fee by more than fifteen dollars in any three-year period.

37:698. Disciplinary Action; Revocation; Suspension; Reprimand; or Probation

- 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, place on probation, and 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 proceeding is required to take disciplinary action in a case of entry of a plea of nolo contendere to a criminal charge:
- (9) Using a seal or stamp or engaging in any other act constituting the practice of engineering or land surveying, or violating any order or terms of probation imposed by the board, at a time when his or her certificate of registration is suspended or revoked, or at a time when his or her certificate of registration has been expired for more than ninety days.
- D. In addition to any other action, the board may assess all reasonable costs incurred in connection with a disciplinary proceeding, including investigators', stenographers', and attorneys' fees in conjunction with any other disciplinary action taken.
- F. Consent orders may be considered disciplinary actions.

37:700. Violations and Penalties

- C. (1) (a) The board is charged with the duty of ensuring that the provisions of this Chapter are enforced. The board shall investigate any complaint relating to a violation of any provision of this Chapter and dependent upon the result of such investigation, the board may, after notice and hearing and by majority vote of its entire membership authorized to participate in the proceeding, issue an order prohibiting any such person, corporation, or business entity from violating this Chapter, and/or fine any such person, corporation, or business entity for any violations of this Chapter; provided that said fine does not exceed fifteen hundred dollars per violation in the case of an individual, or five thousand dollars per violation in the case of a corporation, company, partnership, firm, or business entity.

Industry Advisory Committee Update

by: *Larry A. McKee, P.E./P.L.S.*

Chairman and Member of the Louisiana State Board of Registration

Coan J. Bueche, P.E./P.L.S., Chairman of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors (Board) completed his appointments to the newly formed Industrial Advisory Committee (IAC) in July of 1993. The composition of the committee is as follows:

Board Representatives: Larry A. McKee, P.E./P.L.S., Chairman, Malcolm L. Hurstell, P.E., and Paul L. Landry, P.E., Executive Secretary

Louisiana Engineering Society Representatives: Thomas J. Graner, P.E., and Edgar P. Benoit, P.E.

Louisiana Chemical Association Representative: Oran J. Suire, P.E.

Louisiana Association of Business and Industry: Jesse L. Arnold, P.E.

Louisiana Chemical Industry Alliance Representative: Joseph C. Wink, Jr., P.E.

Mid-Continent Oil and Gas Association Representative: Kerry M. Hawkins, P.E.

To date, the committee has conducted two meetings. One on August 27 and a second on September 10. Subsequent meetings are scheduled for October 13; November 19; and December 8. The October and December meetings will be held at Ralph & Kacoos Restaurant in

aton Rouge and the November meeting will be held at the Board Office in New Orleans.

Open and candid dialogue between committee members began almost immediately and has continued. This open and candid exchange of ideas has proven to be extremely productive and enabled the committee to quickly narrow focus on important issues. Early in the discussion it became apparent that the committee members should agree on two very important items - (1) The intent of the Revised Statute 37:701(C) and (2) The charge of the committee.

The committee has agreed that the intent of the Revised Statute 37:701(C) is to exempt, except for civil engineers and land surveyors, employees of a person, firm, or corporation engaged in industrial operation from the registration law for professional engineers and land surveyors. Sub-section 37:701(C) reads in part as follows: "This chapter shall not apply to, affect, interfere with, or in anywise regulate employees engaged in industrial operations". This chapter, as used in 37:701(C) refers to the entire Registration Law for Professional Engineers and Land

Surveyors as contained in Louisiana R.S.37:681 through 37:703. However, Sub-section 37:701(C) does require that any activity within this sub-section which shall fall within the definition of the practice of engineering, as defined in Paragraph 8 of Sub-section 37:682, then such activity shall be under the supervision and charge of a professional engineer, duly registered under the provisions of the registration law. The committee further agreed that its charge is to make recommendations to the full Board in the form of proposed rules to facilitate the understanding of the intent of R.S. 37:701(C).

After extensive discussion and debate the committee narrowed its focus for subsequent work to the following:

- (1) To improve the definition of the practice of engineering as defined in Paragraph 8 of Sub-section 37:682. To accomplish this the committee will present to the Board proposed rules or proposed legislation. The proposed legislation would enact a new definition modeled after the definition for the practice of engineering as contained in the NCEES model law.

- (2) Define, with recommended rules, the intent of the term "supervision and charge" as contained within Sub-section 37:701(C) only.
- (3) Investigate the relationship of a private consulting engineering firm, working as an agent to an industrial operation, and the industrial exemption. Report to the full Board the committee's conclusion as to whether private consulting engineering firms, working in industrial operations should or should not be included in the exemption as provided by R.S. 37:701(C).

There will probably be some commentary from the committee to the full Board for the need and desire to register as many engineers as possible and the current impediments to becoming registered as a professional engineer with suggestions for removing or minimizing of these impediments.

The committee fully intends to complete its work as of December 8, 1993 and the final report will be delivered to the full Board at its January 1994 meeting. **LE**

LES Board of Direction Meeting Highlights

The June 1993 Board of Direction Meeting was held in Lafayette with twenty board members, four guests, and the LES staff in attendance. The next meeting will be held on September 10, 1993 in the state office.

1. The March, April, and May, 1993 financial statements were accepted subject to the annual compilation.
2. The 1993-94 Proposed Budget of \$164,636 was submitted to the Board. The proposal called for an increase in the State Board of Registration's contribution to the LE magazine, a draw from reserves, and a reduction wherever possible in expenses without eliminating services to members. Action was taken by the Board to reinstate travel expenses for the Executive Director and President to attend national meetings and to increase staff salaries in an amount not to exceed 5%. The Budget Committee was directed to review these directives and present final recommendations at the next meeting.

The lack of advertising in the LE has become a major issue the Society is addressing. The Publications Committee Chairman has been charged with appointing an ad hoc committee to seek additional advertising.

3. Constitution and Bylaws Chairman, Charles L. Eustis, P.E., distributed the commentary and draft #3 of the Constitution requesting any suggestions, comments, etc., be forwarded to him no later than August 15, 1993. Draft #3 of the Bylaws will be mailed to the Board no later than July 31, 1993. Both items will be on the September Board Meeting agenda.
4. The Long Range Planning Committee submitted a number of recommendations to the Board which were accepted regarding changes in the LE, joint meetings, sharing equipment with CEC/L, etc.
5. LSPECS is seeking LES's support to co-endorse guidelines for a "Systematic Approach to Defining an Annual Engineering Program at DOTD". PEG accepted the guidelines. PEPP also accepts the workload allocation guidelines with the exception to consideration of cost. Copies of the guidelines were distributed for action at the September Board Meeting.
6. PEPP is attempting to set up a QBS seminar for the Louisiana Municipal Association and a seminar on life safety codes for buildings.

7. The Board voted unanimously to hold a joint meeting with ASCE on March 16-19, 1994 in Baton Rouge. The Society will conduct its award presentations in conjunction with this meeting. This is an excellent opportunity for attendees to be participate in both professional and technical seminars/meetings.
8. The Liaison Committee submitted and the Board accepted recommendations on candidates to be submitted to the Governor to fill the expired term of Malcolm L. Hurstall, P.E., on the State Board of Registration. They are: Charles A. Cerise, P.E., Allison J.P. Launey, P.E., Marvin B. Paggen, P.E., David L. Ritter, P.E., and Richard E. Ruckstuhl, P.E.
9. James L. Meyer, P.E., LES National Director, reported that he must be prepared to vote on an issue at the NSPE Annual Meeting and requested direction from the Board. The net effect of the proposal is on a trial basis, but the proposal will replace the winter meeting of the NSPE Board of Directors with a meeting of state society presidents, presidents-elect, national committee chairmen, and the national executive committee, for the intended

- purpose of (a) improving the linkage and coordination of activities between states and national, and (b) formulating policy considerations for the Board of Directors to act on at their annual meeting. The NSPE Board will continue to meet twice a year through the 1994 calendar year, at the times and locations previously determined. The recommendation is for the calendar years 1995 and 1996. The LES Executive Committee had reviewed the recommendations prior to this meeting and endorses the proposed changes. Mr. Meyer indicated that other options might be up for consideration, such as, sanctioned regional meetings, etc. With the possibility of other options available for the NSPE Winter Meeting, Mr. Meyer was directed to act at his discretion.
10. Board meeting dates for 1993-94 were set by the Board.
 11. On May 20, 1993, Governor Edwards signed two registration board bills. The bill to increase fees became Act 47 and the housekeeping bill became Act 53.
 12. President Gautreau and President-Elect Hunn will appoint two industry members to serve as LES's representatives on an Industrial Advisory Committee. The committee is being formed by the State Board of Registration to address the practice of engineering in industrial operations. The committee will be composed of eight members; two LES/PEI members, two State Board of Registration members; and four members from industry, one each to be appointed by the Louisiana Chemical Association, the Louisiana Mid-Continent Oil and Gas Association, the Louisiana Chemical Industry Alliance and the Louisiana Association of Business and Industry.
 13. The LES/Baton Rouge Chapter and members of the professional engineering community are hosting a luncheon for U.S. Senator J. Bennett Johnston on Monday, August 9, 11:30 a.m. - 1:30 p.m., at Boudreaux's on Government Street, Baton Rouge. More information on this luncheon can be found in the June issue of the LE.
 14. Appreciation was expressed to PEI for sponsoring the seminar on communication and leadership skills held in conjunction with LES's annual meeting. Jim Dalton, Deputy Executive Director of NSPE, was the moderator and did an outstanding job.

The September Board of Direction meeting was held at the state office with nineteen board members, two guests, and the LES staff in attendance. The next meeting will be held on November 5, 1993, 1:00 p.m., in the Alexandria Chapter area. The Honors and Awards Selection meeting will also be held on this same day at 9:00 a.m.

1. The June, July, and August financial statements were accepted subject to the annual compilation.
2. The CPA's compilation for 1992-93 was submitted to the Board and tabled for discussion at the next meeting.
3. A \$5.00 dues increase was approved by the Board for member categories, Member, Associate < 30, Associate > 30, and Land Surveyor Members. A \$3.00 dues increase was approved for Affiliate Members. A portion of the dues increase is to be allocated to the chapters at \$2.00 per chapter member for project expenses. Chapters must submit a project plan to the board to be eligible for the funds. \$1,000 of the dues increase was allocated to pay back a 1992-93 loan to LES from the practice divisions. The dues increase will reduce the amount allocated to draw from reserves.
The Louisiana Engineering Foundation increased its contributions for services to the Society by \$100 per month. A final budget will be presented to the Board in November.
4. Mr. Meyer announced that the recently passed Omnibus Budget Reconciliation Act calls for elimination of the deductibility of dues or voluntary payments as a business expense, to the extent those dues funds are used for "lobbying activity". Under the new law, organizations such as NSPE and state societies that engage in lobbying activity are required to notify their members as to the percentage of such payments that are no longer deductible effective **January 1, 1994**. It is advantageous to members or corporations to make all dues or voluntary payments prior to the January 1, 1994 date. Following this date, LES and NSPE will determine what percent of a member's dues or voluntary contributions are allocated to "lobbying activities" and each member will be notified in future billings. For now, notification of this new act will be included in the 1994 dues billing.
5. The Membership Committee has selected September as its "membership drive month". All members

are encouraged to participate.

6. Bobby E. Price, Chairman of PEE announced that he had attended one day panel discussion on continuing professional competence conducted by the Texas State Board of Registration. He also advised the NSPE and other organizations are attempting to have the National Science Foundation renamed the National Science and Engineering Foundation.
7. Richard L. Savoie, P.E., Chairman of PEG, announced that PEG is seeking candidates to fill the February 18, 1994 expiration term of Albert Dunn, P.E., on the State Board of Registration. The term of Coan Bueche, P.E., the second government representative on the board, will expire on August 24, 1994. PEG will be seeking candidates to fill this vacancy as well.
8. J.M. Drake, P.E., Chairman of PEI, has been appointed to the national PEI nominating committee.
9. Charles L. Eustis, P.E., Chairman of PEPP, announced that LES/PEPP will submit the firm of Meyer, Meyer, LaCroix & Hixson for the 1994 NSPE/PEPP Professional Development Award. The division may also submit a candidate for the 1994 NSPE/QBS Award. PEPP in coordination with ASCE is attempting to establish a short course at LSU on the life safety codes for buildings.
10. Chapter presidents reported enthusiastic activities in their chapters. Activities include tours, seminars, joint meetings, etc.
11. Eustis reported that he had received written comments from the Executive Director on the proposed Constitution and Bylaws. A number of verbal recommendations and comments was offered by board members. It was agreed that each member of the Board would submit written comments to Eustis no later than October 15 so that the Constitution and Bylaws Committee can meet prior to the next board meeting to consider all suggestions. Revised documents will be mailed prior to the next meeting.
12. The Board voted not to co-endorse LSPECS' guidelines for "A Systematic Approach to Defining an Annual Engineering Program" stating its objection to give unsolicited advice to DOTD or any other agency.
13. Hunn reported that the Advertising Ad Hoc Committee is not in place, but the chairman will be contacting chapter presidents to name appoint-

- ments to this committee.
14. Highlights of the 1993 NSPE Annual Meeting were distributed. Meyer expressed his appreciation to the Board for their support and to those who contributed to Hixson's Installation. The installation was an outstanding success. Representatives from many states assisted Louisiana in getting the banquet room decorated. Appreciation was also

- expressed to Fred Trappey for his assistance in obtaining tabasco sauce and mementoes for officers serving with Hixson.
15. The Executive Director submitted a verbal report to the Board on her activities since the last meeting. She announced that she had completed her term as President of the State Societies Executives Council.
16. Guidelines for the distribution

- and/or sell of LES labels and rosters were adopted.
17. The Board endorsed Job Bank, USA a new member service being provided through NSPE.
18. The Board unanimously endorsed Arthur A. DeFraites, Jr., P.E. for the 1995-96 position of NSPE Southwest Regional Vice President. **LE**

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 the other engineering and surveying societies located in the state for publication in the *Louisiana Engineer*, on an annual basis. The purposes of this effort are to identify contacts and improve communications among the entire engineering and surveying communities in Louisiana for such inter-society activities as coordination of legislative actions, technical seminars, Engineers' Week seminars, etc. If your engineering and/or surveying organization is not listed and you wish to be included in next year's roster, please make the request through LES at P.O. Box 2683, Baton Rouge, LA / 70821.

American Association of Cost Engineers

Leonard Enger
4683 Lancelot Drive
New Orleans, LA 70127
(504) 734-4684

American Association of Drilling Engineers

Roger Jenkins, P.E.
Texaco U.S.A.
P. O. Box 61050
New Orleans, LA 70161-1050
(504) 595-1306

American Institute of Chemical Engineers

Bruce Blenkard
1220 Lake Louise
Gretna, LA 70056
(504) 394-0839

American Institute of Plant Engineers

New Orleans Chapter 67

George W. Hastings, III
Martin Marietta Manned Space Systems
P. O. Box 29304
New Orleans, LA 70189
(504) 257-3437

American Society of Civil Engineers

Kam K. Movassaghi, P.E., President
P. O. Box 42291
Lafayette, LA 70504
(318) 231-6511

New Orleans Section

Dr. John Nicklaus
Dept. of Civil & Environmental Engineering, Room 206
Tulane University
New Orleans, LA 70118
(504) 865-5778

American Society of Heating, Refrigeration, and Air Conditioning Engineers New Orleans Section

Ms. Mary Jenkins
Walk, Haydel & Associates
600 Carondelet Street
New Orleans, LA 70130
(504) 586-8111

Baton Rouge Section

Mike Determann
2130 Wooddale Boulevard
Baton Rouge, LA 70806
(504) 924-1977

American Society of Mechanical Engineers

Christopher Woods
3560 Rue Nichole
New Orleans, LA 70131
(504) 393-7695

American Society of Plumbing Engineers

E. Carlton Guillot, Jr., P.E.
Guillot-Vogt Associates, Inc.
2720 Metairie Lawn Drive
Metairie, LA 70002
(504) 831-2155

Consulting Engineers Council of Louisiana, Inc.

James M. Poche, P.E., President
224 Rue Dejean, Ste. 200
Lafayette, LA 70503
(318) 237-6517

Illuminating Engineering Society

Craig Clement
IMC Consulting Engineers
3120 20th Street
Metairie, LA 70002
(504) 831-9119

Institute of Electrical and Electronics Engineers New Orleans Section

Thomas Mayne, P.E.
Entergy Corporation
3838 N. Causeway Blvd., L-TLC-21K
Metairie, LA 70002
(504) 830-6050

Baton Rouge Section

Kenneth Hymel, P.E.
P. O. Box 80698
Baton Rouge, LA 70898
(504) 923-1641

Institute of Industrial Engineers

Jerry Logreco
1313 Melody Drive
Metairie, LA 70002
(504) 257-3741

Institute of Traffic Engineers Louisiana-Mississippi Chapter

Dean Tekell
City of Lafayette
Traffic Engineering
1515 E. University
Lafayette, LA 70501
(318) 261-8545

Instrument Society of America New Orleans Section

William R. Godsey
6645 Ahokolo Circle
Diamondhead, MS 39525
(601) 255-1631

Louisiana Chemical Association

Bill Senn, Jr.
Exxon Chemical Americas
P. O. Box 241
Baton Rouge, LA 70821-0241
(504) 359-4221

Louisiana Engineering Foundation

Charles L. Eustis, P.E., President
4747 Southpark Drive, #203
Baton Rouge, LA 70816
(504) 293-2460

Louisiana Engineering Society

Dale T. Hunn, P.E., President
W. S. Nelson & Co., Inc.
1200 St. Charles Avenue
New Orleans, LA 70130
(504) 593-5282

Louisiana Society of Professional Engineers in Civil Service

Kirt A. Clement, P.E.
P. O. Box 44311, Capitol Station
Baton Rouge, LA 70804
(504) 929-9102

Louisiana Society of Professional Surveyors

John J. Avery, Jr., President
2900 Clearview Parkway
Metairie, LA 70006
(504) 454-2493

National Association of Corrosion Engineers

Peter Bock
Glidden Company
6135 River Road
Harahan, LA 70123
(504) 737-6550

National Society of Black Engineers

Karl A. Quezergue
P. O. Box 51755
New Orleans, LA 70151-1755
(504) 586-6013

National Society of Professional Engineers

T. Dudley Hixson, P.E., President
Meyer, Meyer, LaCroix & Hixson
P. O. Drawer 5444
Alexandria, LA 71307
(318) 448-0888

Society of American Military Engineers

Louisiana Post

Col. Michael Diffley
P. O. Box 60267, CELMN-FX
New Orleans, LA 70160-0267
(504) 862-2204

Society of Naval Architects and Marine Engineers Gulf Section

Anil Raj
Trinity Marine Group
P. O. Box 3029
Gulfport, MS 39595
(601) 896-0029

Society of Petroleum Engineers

Jeffery Lucas
Coutret & Associates
810 Louisiana Tower
Shreveport, LA 71101
(318) 221-0482

Society of Women Engineers

Greater New Orleans Section

Ms. Bernice Kausman
1214 Race Street
New Orleans, LA 70130
(504) 257-3977

NEW REGISTRANTS Of the State Board

New Professional Engineer and
Land Surveyor Registrants for the
Period 11/17/92 - 03/09/93

AGRICULTURAL

Scott Malcolm Bergeron
Baton Rouge, LA

CHEMICAL

Frank Powers Williamson
Baton Rouge, LA

Alan John Stacey
Baton Rouge, LA

Thomas Gillman Hippe
The Woodlands, TX

George Frederick Mather
Golden, CO

Thomas Jay Chittenden
Pasadena, CA

Stanley Paul Newton
Largo, FL

Perumal Mohan
Franklin, TN

David Michael Fulton
Metairie, LA

Sanjay Prakash Bhargava
Metairie, LA

Maurice Brant Singleton
Destrehan, LA

Gregory Allen Harbison
Laplace, LA

Kathryn E. Buess Harbison
Laplace, LA

Richard Jody Sebesta
Luling, LA

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Hixson's Presidential Installation

The Mardi Gras theme decorations and beignets for the installation and reception for T. Dudley Hixson, P.E./P.L.S. were an outstanding success. Dudley was installed as President of the National Society of Professional Engineers on July 23, 1993 in Pittsburgh, PA.

The Society gratefully acknowledges the following contributors who made it possible to provide an unforgettable "Louisiana Night" for all who participated:

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Letters to the Editor

Editor:

LES - VISION

by: James C. Porter, P.E., Member
Long Range Planning Committee

Planning for our future should emanate from a commonly shared or collective vision. A vision must emanate from the current desires, dreams and ideals we, the concerned individuals, in our organization have and share about what we want our profession to be and achieve. It is in no way an assessment predicated on the current needs or deficiencies in the capabilities or limitations in resources of the LES. It is about direction. However, a vision can change and therefore we must revisit it regularly and test its validity.

If we can truly free ourselves from trudging through the mire of day to day existence - the practical limitations we understand and essentially feel we must accept - it is possible for us to develop a constructive vision. It is the first step that will allow us - if we can find the courage - to move past the typical mind set that "If it ain't broke, don't fix it" to an atypical - but productive - mind set that "If it ain't broke, break it." Only through a valid, strongly held, collective vision can we rise above what appears to be today's impossibilities make them tomorrow's possibilities.

I believe a clearly articulated, collective vision will give us the direction and cultivate the courage we need to constructively break things and then fix them to better fit our vision. Such a vision can stimulate consistent goals and priorities in every area of interest in the LES. It can energize, commit and evoke us to a sense of urgency that leads to the vigorous identification, development and pursuit of programs that will achieve our goals.

Let us begin a revival by forging a cogent statement of a mutual vision for the Society and our profession in Louisiana. The first paragraph of the preamble to the proposed Constitution of the LES struck a melodic chord deep in my personal, professional psyche. It is offered here as a resource for us to begin our thought processes that - if we ultimately choose to - will give us direction to pursue a valid, long range planning process that will lead us to the goals, programs and commitments necessary to make the LES and ultimately our profession what we want it to be.

The Louisiana Engineering Society, recognizing *service* to the public, to the state, and to the profession is a *fundamental obligation* of the professional engineer, does hereby dedicate itself to the promotion and protection of the profession of engineering as a social and economic influence vital to the welfare of all mankind. (*The italics are my emphasis.*)

If we are to define the depth and breadth of our collective vision as it may be different from this preamble, the thoughts of every interested individual are hereby sought. For example - one suggestion is to replace "promotion and protection" in the preamble with "development" because it is believed that the members of a well developed, healthy profession naturally promote and protect it. Obviously, our vision will only be as valid as the extent of the contributions we make to its development.

What is not said but implied in this solicitation is that the power and direction of a collective vision is a basis of effective and focused leadership. Without a vision, there is no effective leadership. We have the chance here to provide a broadly founded, collective vision to form a valid base from which our chosen leaders in the LES and other leaders in our profession can lead. Our current alternative is to be led by the vision or lack of vision of others. No formality in communication is required - just the initiative. Mail or fax your ideas to: LES - VISION, P. O. Box 2683, Baton Rouge, LA 70821 / (504) 344-4319.

Editor:

by: James S. Janssen, P.E., Member
Long Range Planning Committee

It has been brought to our attention that in the 1992 exams for licenses to qualify as Professional Engineers in Louisiana only 51% passed. The percentages by branches ran from zero to a maximum of sixty-one percent. We understand that in other states the percentage of examinees passing was not greatly different with about one-half passing. And remember that some of these were repeating their exams. The question that immediately comes to mind is why only one-half of the applicants, after four years in engineering practice, can pass the basic examination of their knowledge and ability.

There are two possible explanations: one, that the education and preparation are not adequate and two, the questions

and problems on the exam are too difficult or are inappropriate compared to the subjects taught in the college courses. This ties in with the complaints of the examinees who claim the "exams are just too difficult".

Perhaps an independent study should be made comparing the questions in the Principles and Practice (PPE) Examinations with the subjects taught to engineering students. With the expansion of the field of engineering, it might be found that the scope of engineering education has not kept up with the extent of problems that professional engineers are expected to cover and that are included in exams. Remember that for years, even for generations in the United States, engineering bachelor degrees are still awarded after four years of study. Apparently as new specialized or advanced engineering subjects have been added to the curriculum it became necessary or expedient to eliminate some fundamentals (math, sciences, communication, etc.) to keep the courses within the four year period.

Architecture went to five years some time ago. Medicine and dentistry require much more than four years for the basic degrees with specialization taking additional time. Even veterinary medicine calls for two to four years of premed before the student enters veterinary school. This leaves engineering as one of the few professions where a student can earn a bachelor's degree and start practice in four years.

There are several objections to expanding the engineering curriculum, the most common one being that students would avoid the colleges that add a year to the studies. This is quite possibly true. In fact, one or two universities tried it and had to abandon the program as enrollment declined and go back to four year programs. If it was decided that the course should be extended, all or at least most of the schools in the nation would have to agree and move at the same time.

Some employers would like to stay with the present basic four year course and employ the graduates and train them in the desired specialty while working. While this would sharpen the employees' specific knowledge, it would narrow his overall engineering ability as time and his employment continued. Similarly, other professions could take the same approach. One concept is that the four years experience in a specialized field after graduation and before the PE exam is the equivalent of a year of graduate study.

Would the proper engineering approach be to select a mixed committee of engineers, some in industry, some in private practice, some in government, some in education to make a thorough study of this matter of examination and registration? The Fundamentals Exam would also be studied. This would possibly be under the auspices (but not the control)

of the National Council of Examiners of Engineering and Surveying. Such a study would and should require a long time, perhaps years, and would look into all of the many aspects of the problem. And it is a problem, if we expect and desire our profession to retain a respected position in comparison with other learned vocations.

In brief what is suggested here is an engineering approach to a problem. Facts should be gathered and studied, opinions received and discussed, aims described and weighted and, if possible, conclusions reached and a course of action determined. **LE**

Engineer-Architect Interprofessional Relationship

At its August meeting, the **National Council of Examiners for Engineering and Surveying (NCEES)** adopted revisions to its Model Law to "more clearly define the practice of engineering as such practice relates to services as the principal design professional." The NCEES action was in direct response to a June decision by the National Council of Architectural Registration Boards (NCARB) to amend their Model Law definition of the practice of architecture to include "the coordination of any elements of technical submissions prepared by others, including, as appropriate and without limitation, consulting engineers and landscape architects."

The NCEES action comes on the heels of a NSPE Board of Directors recommendation to NCEES that their Model law be amended to respond to the NCARB action. **The revisions adopted by NCEES are consistent with those suggested by the NSPE Board.**

The NCEES resolution accompanying the Model Law change stated that the purpose of the revision was to "better identify and define the responsibility of the engineer practicing as the principal, or prime, professional on design projects." The resolution explained that "the practice of engineering involves from time to time responsibility as the principal design professional on projects for the construction of buildings, facilities, utilities, and other engineered works, and...a responsibility of the principal design professional is the coordination and embodiment into construction contract documents those technical submissions prepared by others..." The resolution continued that the revision was necessary because the "NCEES Model Law definition for the 'practice of engineering' may not clearly articulate this important function and responsibility."

As well as having recommended the Model Law amendment, the **NSPE Board of Directors also directed that the language change be sent to NSPE state societies to assist them in their ongoing interprofessional efforts.** In accordance with the Board's action, the newly-revised NCEES Model Law definition of the practice of engineering follows in its entirety.

[Note: Existing words to be deleted are ~~lined through~~, new words to be inserted are underlined.]

"Practice of Engineering - The term 'Practice of Engineering' within the intent of this Act shall mean any service or creative work, the adequate performance of which requires engineering education, training, and experience in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning, design, and design coordination of engineering works and systems, planning the use of land and water, teaching of advanced engineering subjects, performing engineering surveys and studies, and the review of construction for the purpose of ~~assuring~~ monitoring compliance with drawings and specifications; any of which embraces such services of work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects, and industrial or consumer products or equipment of a mechanical, electrical, hydraulic, pneumatic, or thermal nature, insofar as they involve safeguarding life, health, or property, and including such other professional services as may be necessary for the planning, progress, and completion of any engineering services.

Design coordination includes the review and coordination of those technical submissions prepared by others, including as appropriate and without limitation,

consulting engineers, architects, landscape architects, land surveyors, and other professionals working under the direction of the Engineer.

Engineering surveys include all survey activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, but exclude the surveying of real property for the establishment of land boundaries, rights-of-way, easements, and the dependent or independent surveys or resurveys of the public land survey system.

A person shall be construed to practice or offer to practice engineering within the meaning and intent of this Act, who practices any branch of the profession of engineering, or who, by verbal claim, sign, advertisement, letterhead, card, or in any other way represents themselves to be a professional engineer, or through the use of some other title implies that they are a professional engineer or that they are registered under this Act; or who holds themselves out as able to perform, or who does not perform any engineering service or work or any other services designated by the practitioner which is recognized as engineering."

In a closely related matter, the Presidents of NSPE, the American Consulting Engineers Council, the American Institute of Architects, NCEES and NCARB will be meeting in the near future to discuss ways to foster cooperation between the two professions and reduce conflicts over relative scopes of practice. **LE**

[Reprinted from NSPE's State Bulletin, a monthly update of state legislative and regulatory action. Editor: Bob Reeg]

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The *Louisiana Engineer* is published six times annually in February, April, June, August, October and December. Comments to the "FORUM" should be mailed to the *Louisiana Engineer*, P. O. Box 2683, Baton Rouge LA 70821, no later than the 10th of the month preceding the month of publication.

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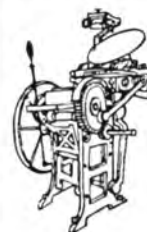
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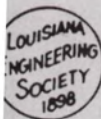
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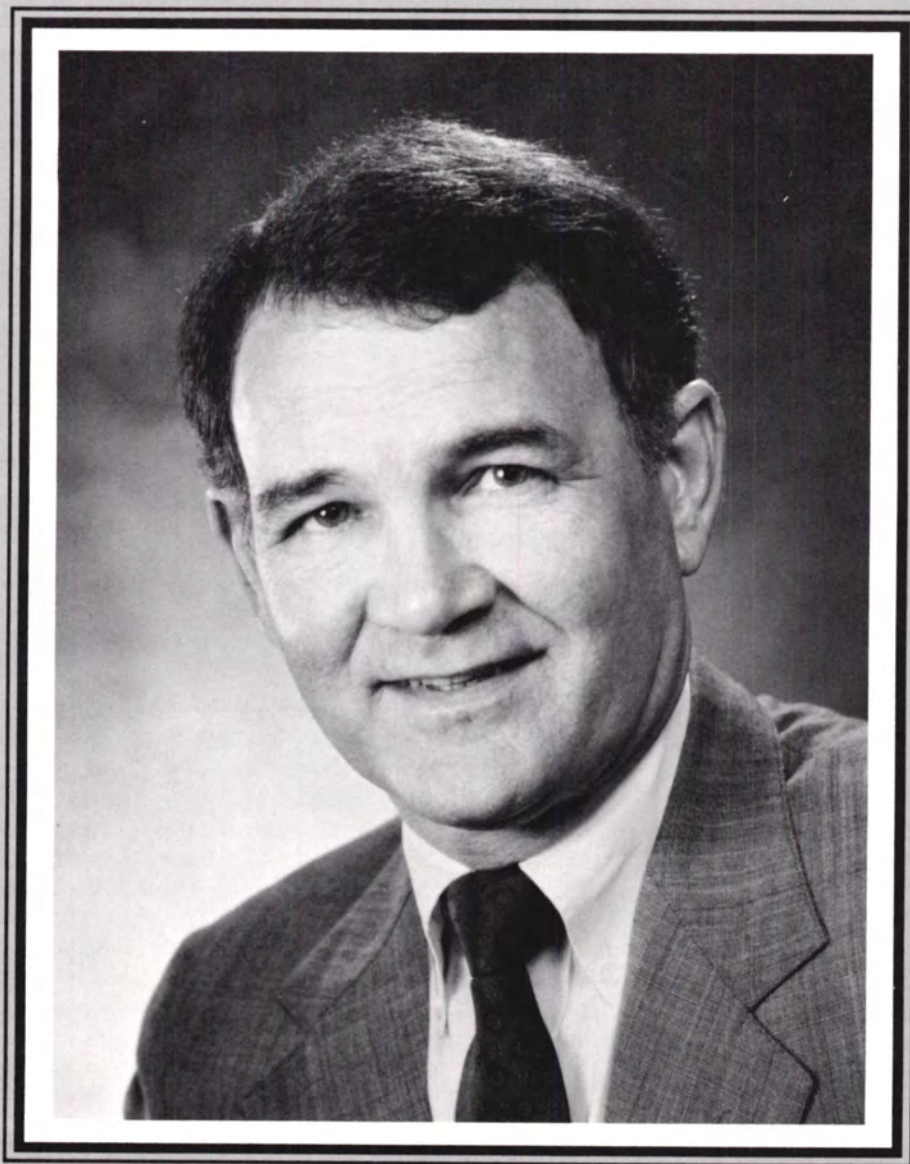
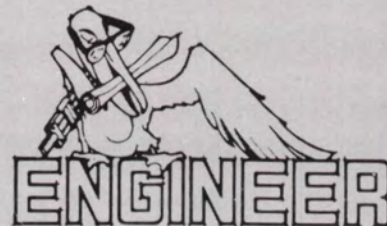
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On The Inside

Pages 18 and 19 — See Hotel Reservation Form, Meeting Registration Form, and Tentative Program for the first ever Joint Meeting of the Louisiana Engineering Society and the American Society of Civil Engineers, March 16 - 19, 1994.

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The Arizona Society of Professional Engineers will host the NSPE 1994 Winter Meeting January 9-15, 1994 at the Sheraton El Conquistador.

What better time to spend a week away from the office than in sunny Arizona. While many of you might enjoy wintry weather, the Arizona Society hopes to provide outdoor activities that satisfy most anyone's desires. You will also be tempted to spend time either before or after the meeting to travel to the wonders of the Grand Canyon or the shops of Old Mexico, visit Indian ruins on the many Indian

Reservations or visit the Desert Botanical Gardens or venture into the future with a visit to Biosphere.

The Arizona Society has put together a multitude of programs for both spouses and attendees as well, to allow you to sample the variety of the desert southwest at its finest. This setting will provide an appropriate backdrop to the many professional activities that have also been planned.

Most importantly though, the Arizona Society extends an invitation to participate in the inner workings of the National

Society of Professional Engineers. In these times, engineers are defending the profession on almost every front and we need your help. Your involvement is what makes the Society tick and we need you. We will benefit, but more importantly you will benefit also. So mark your calendars for the second week in January and visit Tucson, Arizona where we will plan our strategies for 1994.

Hotel reservations can be made by dialing (800) 325-7832. Meeting registration information can be obtained from the LES State Office. **LE**

DECEMBER, 1993



ABOUT THE COVER

Coan J. Bueche, P.E./P.L.S.
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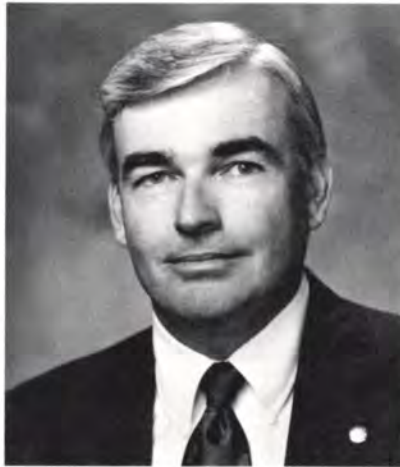
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I remember that as a child I dreamed about being an astronaut when I grew up. I pictured landing on the moon and exploring the lunar landscape. The potential of space travel was exhilarating. When these dreams were not realized I considered pursuing a career in an equally challenging science related field. I thought that a career as a research scientist in a secret government laboratory might be almost as exciting as my earlier dreams of extra-terrestrial travel. It was exciting to dream that I could make a startling discovery or invent something useful. I suppose that these fantasies could be attributed to the fact that I watched too much television and read too many Jules Verne's books during my impressionable years.

As I grew older and began to get serious about career choices, it occurred to me that there were some commonalities between the dream jobs that I wanted when I was a child. The commonalities were science, mathematics, a need to be creative, a desire for public service and a hope for a career that offered challenges and excitement.

During the summer before I enrolled in college I had my first direct exposure to engineering. I had a summer job working with a local public agency as a laborer. One day I was working near a machine shop when I observed two men inside studying blueprints. My curiosity got the best of me, so I wandered in and asked if they were engineers. They were. I asked if they would tell me what engineers did and if they found their jobs challenging. I was given an intense short course in mechanical engineering, taught how to read engineering drawings and encouraged to pursue engineering as a career if I was looking for challenges. That was the best advice I ever received.

During my first week at Tulane, I was sure that I made the right career choice.



Dale T. Hunn, P.E.
President
Louisiana Engineering Society

One of the freshman-level courses was taught by the dean of the engineering school. The course was titled "Engineering Design and Analysis" and was an introduction to creative problem solving. The dean's genuine enthusiasm about the unique opportunities in engineering and the chances that we, his students, would have to make a difference in the world was inspiring. Not only did engineering school provide a seemingly never-ending stream of challenges, it also offered all of the other elements of my childhood dreams and provided an opportunity to learn about the careers of some of the visionaries in the engineering profession. I studied about the contributions of great engineers like A. Baldwin Wood, T. Y. Lin, John Roebling, Wernher von Braun and numerous other visionaries who helped to shape our profession. I hoped that I would meet a visionary during my pro-

fessional career. My assumption was that visionaries would be relatively easy to identify because of the sheer magnitude and notoriety of their accomplishments. It was not until I entered the working world that I realized just how unique visionaries were. It became apparent very quickly that the best engineered projects/products usually require the collective skills and talents of a team of professionals.

The world is full of dreamers and they are not hard to find. But, visionaries are a special subset of dreamers. Visionaries are people who are marked by foresight and imagination and who have the ability to lead others to share their visions and bring them to reality. As I travel around the state to chapter meetings, I often refer to the visionaries who founded the LES in 1898. The question of who are today's visionaries crosses my mind. I am concerned about the seeming disappearance of visionaries from the profession. Are they closeted in their offices working on difficult problems shadowed by protective management? Are they alive and well, looking toward the future; but, concerned about the potential legal consequences of presenting untried solutions? Let's hope not. Of course, I am not only referring to technical solutions to today's ever more complex engineering problems, but I am also referring to what ails society in general. Professional engineers can hold the answers to so many of the problems of the world. Think about it!

This month's magazine features reports from the Alexandria and New Orleans chapters; the Long Range Planning and the Ethics and Professional Conduct committees.

Here's wishing a happy and safe holiday season to you and yours. **LE**

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Guest Forum

Only a few people will ever have the privilege to serve as Chairman of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors. I am sincerely grateful for the opportunity to serve as chairman, and look forward to working on issues facing our profession. The very many qualified and deserving Professional Engineers and Professional Land Surveyors whom we know and with whom we work will never have this opportunity.

Until just a short time before the Governor named me to the Board, I had never thought of myself in such a role. The odds of serving on the Board seemed on the same order of magnitude as the odds of winning the lottery or of being struck by a meteor. The irony is that the privilege comes as much by chance as by design. Having one's name included on the list from which the Governor must appoint is the real honor, for that means one has been selected by one's peers. Yet, even that is as much related to whose names may be thought of by those appointed to the committee for preparing the list as it does to anything else. And with the names shown in alphabetical order, it is possible that the Governor, or someone on his staff, mistakenly concluded that the names were listed in order of preference. Having a last name beginning with the letter "B" could place a name high on such a list and give its owner a good sense of appreciation for the ABC's.

Last year's chairman, Dr. Randall F. Barron, P.E., reminded us that the engineering profession exists in our state with what he called a slight anomaly, that being the industrial exemption. His "modest goal" for the profession was that each of you - the practicing engineers of Louisiana - might make the industrial exemption as unnecessary as the buttons on the sleeves of our suits by becoming registered. I share that modest goal, and, toward that end, have appointed an ad hoc committee charged with determining areas of concern within industry that need to be addressed. The committee consists of two Louisiana Engineering Society members, four industry members, and two members of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors. The members of that committee have taken the job seriously and it is highly likely that they will come up with something acceptable to industry and to the Board.



**Coan J. Bueche, P.E./P.L.S.
Chairman 1994
Louisiana State Board of
Registration for Professional
Engineers and Land Surveyors**

While I have the floor, there is another thing I'd like to see happen.

I urge those of you who have the power to change the provision in our registration law that limits Board members to one six-year term per lifetime to reconsider that point. Lest I create an impression that I am referring to my own term on the Board, let me state up front that one six-year term was appropriate for me. In August next year, someone will replace me and I am ready to be replaced.

One almost has to be a part of this to see that the one six-year term per lifetime effectively relegates Louisiana to a follower in national matters rather than a leader. If Louisiana wishes to be a leader state rather than a follower state in matters of registration, it must be in a position to influence the direction of the National Council of Examiners for Engineers and Surveyors (NCEES). The present term limitations on Louisiana Board members, reduces the chances of any but the most powerful of personalities to rise to the level in NCEES circles to influence its direction. Some may scoff at this notion, but I have seen that it is true.

Our very respected colleague, the late Francis C. Roy, P.E., was the last of our Board's nine-year term members. He was able to reach the office of NCEES Vice President for the Southern Zone. Francis was able to affect the NCEES direction on examination policy, and helped to

advance a Louisiana position within NCEES.

Another very respected colleague of ours, Robert D. Fenner, P.E., with his excellent leadership skills, was nearly into position where members of boards from other states were listening to what he had to say, to where he could begin to have an impact on NCEES, when his term expired. Bob will not be able to influence NCEES the way Francis did, not because he doesn't possess the talent, but because we didn't give him the time to do it.

Fortunately for Louisiana, Dr. Sam Sullivan, P.E., a past chairman of this board, who was appointed to the unexpired term of the late Robert W. Parks, P.E., has been appointed to a term of his own and has attained the office of Secretary of the Southern Zone. Dr. Sullivan has several more years to serve and will affect NCEES. But his case is unusual.

Not everyone may be aware of the fact that Louisiana has historically provided leadership to NCEES sufficient to affect its course. It is apparent to those who have had the privilege to be in the arena, that Louisiana's influence has lessened in the past few years. This is noticeably the result of Louisiana's six-year term limitation. To their credit, Alabama has worked hard and has taken the leadership role that Louisiana once provided in NCEES, especially at the Southern Zone level.

If we have a position on continued professional development, or on the pass/fail rate on the examinations, or on international comity (for lack of a better term), or whatever other issue that may be discussed at the national level, wouldn't it be better to be able to influence the position NCEES takes on such issues? We should reconsider the term for our Board members.

Enough of what I think.

In effect, it is the members of the Louisiana Engineering Society and the Louisiana Society of Professional Surveyors who select who can serve on the Board of Registration. Thanks to you for allowing me to serve. It has been a growth experience. **LE**

Design-Build . . . Yea or Nay??

The controversy among members of the design and contractor communities over the concept of design-build versus the traditional method of designing then bidding the construction continues to rank right up there with the nationwide controversy over the right to bear arms...and is about as heated on both sides.

Steven W. Polk is Deputy Executive Vice President, Business Affairs, for the American Consulting Engineers Council and is responsible for coordinating the Council's efforts relating to design-build and what ACEC is doing about it. The article appeared in the third quarter, 1993 issue of *American Consulting Engineer* magazine and is reprinted below in its entirety.

Design-Build Use Grows as Controversy Persists

by Steven W. Polk

For more than two decades, the design-build approach to construction delivery has been in and out of industry news in the United States. As a direct competitor of the conventional design-bid-build delivery system, design-build has grown steadily in popularity. It is now being used on nearly one-third of the construction volume in the U.S. and nearly half of the work done internationally, according to figures compiled by ENR (see May 24, 1993 ENR). Their research indicates that total design-build volume surpassed the \$80 billion mark in 1992 among the top 400 U.S. contractors.

What is Design-Build?

Design-build, in its simplest form, is a construction delivery system in which one entity signs a single contract accepting full responsibility for both the design and construction phases of a project. Some industry professionals contend that design-build is in fact the "traditional" system of construction delivery and that it has been in use since ancient times when the designer was considered the "master builder." Others argue that the design-build approach was first developed in the '60s and marketed aggressively in the '70s as an alternative to the "conventional" design-bid-build system, popularized after World War II. In either event, the '60s, '70s, and '80s saw increased pri-

vate-sector emphasis on this delivery system as a way to:

- control escalating costs
- achieve single source project responsibility
- reduce delivery time

Since the late '80s, the public sector has also focused on the benefits of design-build- especially shortened construction schedules- and is modifying procurement procedures to allow this delivery system for certain types of projects. A recent publication entitled "Experiences of Federal Agencies with the Design-Build Approach to Construction-Report Number 122," from the Federal Construction Council, documents and describes some of the federal agencies' experience with the use of design-build construction. Those in the design and construction industry are increasingly aware that in today's world of complicated construction and engineering contracts, many previously established norms no longer apply. This is particularly true in technologically complex engineering and construction work. The proliferation of laws and regulations, the lack of effective insurance policies, and the high potential for litigation are some of the factors that make design and construction activities especially risky for less sophisticated business owners. Clients, responding to an increasing awareness of the pitfalls associated with these issues, have sought to distance themselves from the liabilities associated with design and construction work through the use of non-traditional contracting relationships.

Where Does the Industry Stand?

Despite the fact that ACEC member firms comprise six of the top 12 and 11 of the top 50 design-build firms listed in ENR, the industry is clearly divided on the issue of design-build. While many design firms and contractors engage in the process, others feel that the system itself has some significant problems relating to quality and professional responsibility that must be addressed immediately and vigorously. The AIA and AGC memberships also are split on this issue. However, as ENR reports, the U.S. market for design-build continues to grow, even as the pros and cons of this delivery system are debated.

There now is a new trade association, launched last July 1, to address the specific needs of design-build firms. The Design/Build Institute formally began operations in Washington, DC, with several ACEC members, including Sverdrup Corporation, as founding members. According to Jeffrey Beard, the Institute's executive director, they hope to have 35 to 50 major providers of design-build services as members this fall.

What Is ACEC's Position?

ACEC's immediate past president, John Foster, convened a special Task Force in 1992 to study design-build and to identify and discuss the critical issues to be considered when entering into a design-build contract. One of the task force's significant conclusions was that the design-build construction-delivery process is best suited for projects involving standard, well-defined procedures and details. It may not be appropriate for projects involving complex or innovative design.

At ACEC's Board of Directors meeting in October, 1992, the following position statement was adopted:

"The American Consulting Engineers Council strongly believes that the use of the traditional design and separate bid-build project-delivery system is in the best interest of the owner as well as protecting the health, safety, and welfare of the general public. This traditional system provides the checks and balances necessary to give the owner and the public the greatest degree of assurance that the project is the most appropriate solution for the circumstances through use of a qualifications based selection process and direct owner representation by the design professional."

What Is ACEC Doing Now?

As a follow-up to the task force's activities, ACEC has initiated discussions with AIA and NSPE, and both organizations have expressed interest in a cooperative effort addressing the industry's needs on the design-build system. The Council also plans to solicit AGC's views.

In June of this year, John Foster made a presentation at the FIDIC conference in Munich, Germany, entitled "Design/Build: A Proposed Position."



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



There, he discussed the concept of "professional" design/build.

This is an alternative approach that allows owners to select an A/E to act on their behalf throughout the design and construction process and to prepare design/development documents that are 25-35% complete. Those plans and specs are then used to competitively select a design-build team that completes the construction documents. While this system is relatively new, it holds promise as a way to address the inherent problem of owner-designer relationship in the design-build system.

ACEC also is nearing completion of a document entitled "Risk Management Guidance for Design Firms Involved in Design/Build Construction." This document will address the business implications and risks involved in design-build construction, from a design firm perspective, including:

- owner responsibilities
- allocation of risks
- insurance requirements
- legal considerations

This document is scheduled for release late this year, possibly with AIA, NSPE, and AGC as co-authors.

Finally, the Engineers Joint Contract Documents Committee (EJCDC) is in the final review process on a series of contracts for use in design-build. These should be available for purchase in the near future.

What Remains Unanswered?

At this point, there are a number of questions yet to be resolved, including:

- Can we preserve QBS in the design-build delivery system?
- How might part impact design-build?
- Can design-build be used effectively in the public sector?
- Can small firms compete successfully in the design-build process?
- Can design-build be used effectively for complex projects?
- Are special protections needed for the public when design-build is used?
- How can we avoid a blurring of issues like liability and ethics?

No doubt, the design-build issue will stimulate debate among design and construction firms for some time to come. ACEC will continue to encourage discussion and promote an industrywide resolution to this controversy.

CEC/L Addresses Design-Build

The Board of Governors of Consulting Engineers Council of Louisiana, Inc. studied and reviewed the issues surrounding Design-Build and ultimately drafted a recommendation to the American Consulting Engineers Council. Below is the draft that was approved at the September 22, 1993 board meeting. The Hilton Head meeting referred to in the text is the 1992 ACEC Fall Conference.

October 19, 1993

TO: American Consulting Engineers Council

FROM: James M. Poché, P.E., CEC/L President

RE: Design/Build Position Statement
The CEC/L Board of Governors met recently and unanimously expressed its opposition to the concept of Design/Build and urges the American Consulting Engineers Council to oppose the concept using the first two sentences of the Position Statement that was presented at the Hilton Head meeting:

"The American Consulting Engineers Council strongly believes that the use of the traditional design and separate bid/build project delivery system is in the best interests of the owner. This traditional system provides the checks and balances that give the owners the greatest degree of assurance that the project is the most appropriate solution for the circumstances."

Consulting Engineers Council of Louisiana, Inc. further encourages the American Consulting Engineers Council to go with the above cited language as a preamble and build a case on why Design/Build is not proper and is not in the best interest of the public and the profession rather than demonstrating a show of approval of the design/build concept under extenuating circumstances. It is the hope of this Member Organization that ACEC will address this issue as quickly as possible and resolve it accordingly.

The issue of Design-Build is not dead or resolved by a long shot. It will be around for a long time to come. Your comments on the subject are welcomed.

Some Tips for Reducing Liability Risks on Design-Build Projects

by Tom Owens

The increase in the number of engineers involved with design-build is causing professional liability (PL) insurers to extend their efforts to provide the unique coverage these projects require. As insurers gain experience with design-build, they begin to identify how engineers can minimize risks and increase the chances of obtaining affordable PL coverage.

Why is design-build perceived as a higher risk by PL insurers? In a traditional relationship, the project owner maintains separate contracts with the prime design firm and with the builder. Put simply, the prime is traditionally held liable for errors and omissions in design, while the builder is liable for faulty construction.

With design-build, this distinction becomes clouded. An engineer may be held liable for the errors or omissions of the builder relating to construction quality, cost overruns, delay of project completion, and job-site safety.

DPIC Companies, a major PL carrier with headquarters in Monterey, CA., provides the following suggestions for reducing risks and increasing the chances of obtaining the best PL rates:

SCENARIO 1: The owner contracts directly with the builder for all design and construction services and the builder subcontracts with the engineer.

In this case, the engineer can reduce risk by ensuring that the contract with the builder does not create "cost/quality conflicts." These conflicts arise, for example, if the builder bases the engineer's remuneration on total profit from the job or specifies schedules, budgets, or materials that would result in insufficient quality.

SCENARIO 2: The owner contracts directly with the prime engineer for all design and construction services, and the engineer subcontracts with the builder. Here, risk can be reduced if: 1) the contract removes the engineer

Continued on page 9

A Flood Controlled

by: Julie T. Aitken
New Orleans District
U.S. Army Corps of Engineers

In the spring of 1973, Old Man River flexed his muscles and began a destructive rampage that was felt in the nation's heartland from Iowa to the Gulf of Mexico. Twenty years later, the giant's sinewy tributaries again pumped their swollen waters into an already over-full Mississippi River, flooding millions of acres and leaving thousands homeless.

This year's flood was caused by a ridge of high pressure that stalled over the Midwest dumping more than 30 inches of rain in a four month period in central Kansas and northern Missouri. The National Climatic Data Center reported that July was the wettest month ever recorded for the Dakotas, Montana and Iowa. The land was already saturated from a heavier than usual snowfall during the winter.

The overflowing Minnesota, Wisconsin, Black, Illinois and Missouri Rivers continued on their timeless course to the Mississippi River flooding everything in their path. Waters remained at flood stage from April through July. These excess flows were easily contained in the lower Mississippi where the river bed is two and a half times wider.

Protection from the floods was provided in the form of a piecemeal levee system similar to the lower valley before the Flood of 1927. That is, in the upper valley, the levees are of varying size and strength, each controlled by private, local, state or federal agencies. Among their best protection projects are levees 20-25 feet high that were built in 1952 after a severe flood and strengthened in 1965 after a worse flood. However, flood protection projects tend to be scattered, and there is no one coordinating agency responsible for them throughout the region.

By August, 41 lives were lost and over 13 million acres of the nation's richest farmland were underwater. Damages will exceed \$10 billion.

In contrast, the 1973 flood's major destruction in the lower Mississippi Valley region occurred in mostly uninhabited and agricultural portions along the Red River backwater area and in the lower Atchafalaya Basin.

And although practically all commercial operations in unprotected areas were forced to close and navigation was sorely impeded, a potential disaster that could have forced the evacuation of nearly 1.5 million Louisiana inhabitants, including the entire New Orleans metropolitan area, was averted because of the Mississippi River and Tributaries (MR&T) Project.

Congress authorized the MR&T Project, the nation's first comprehensive flood control and navigation act, as a result of the disastrous 1927 flood. The project is comprised of 2,303 miles of levees and floodways above New Orleans, and channel and tributary basin improvements that extend from Cairo, IL, to the Gulf of Mexico. Its purpose is to convey the project flood, or three million cubic feet of water per second (cfs), safely to the Gulf by way of the Mississippi and its two main diversions, the Atchafalaya Basin and the Bonnet Carré Spillway.

A strategy of the MR&T Project is for the Old River Control Complex and the Morganza Floodway above Baton Rouge to divert 1.5 million cfs, or half of the project flood, from the Mississippi through the Atchafalaya Basin to the Gulf. Bonnet Carré, located just north of New Orleans, would convey another 250,000 cfs to Lake Pontchartrain and into the Gulf, allowing 1.2 million cfs confined within the levee system that runs through the heart of New Orleans.

New Orleans District engineers considered operating the floodways in November 1972 when the Carrollton Gage on the Mississippi River at New Orleans read seven feet, four feet above the normal for this time of year. Engineers consider the river at flood stage when the Carrollton Gage reads 17 feet with no crest in sight. In late '72 they watched with growing concern as the new year brought more water. The river, already several feet above normal, began what was to be its final rise, reaching a maximum recorded elevation of 18.47 feet on April 7. The city is protected to 20 feet.

When the U.S. Weather Service predicted a reading within the week of 20.2 feet, Maj. Gen. Charles Noble, president of the Mississippi River Commission and division engineer, Lower Mississippi Valley, ordered the opening of the Bonnet Carré Spillway. The Bonnet Carré, opened for the floods of 1937, '45 and '50, is operated in conjunction with the Morganza Floodway on a preconceived plan that keeps the New Orleans Carrollton Gage reading from rising above 20.0 feet.

Eight days later, on April 16, hired labor forces began degrading the potato ridge levee built to prevent flooding in the forebay area of the Morganza Floodway. The first gate was opened the following morning. The inflow gage at the structure read 53.4. Under normal conditions, the gage reading is 37.6.

One of the most important modifications to the MR&T Project was the autho-

rization for the Old River Control Complex in 1954. The structure was built to prevent the capture of the Mississippi River by the Atchafalaya River and at the same time provide for control of flows into the Atchafalaya River and basin.

At the time of the 1973 flood, the complex consisted of a low sill control structure and an overbank control structure. While the gates of the low sill remained fully opened at all times, the overbank gates were to be opened and tested for the first time by the floodwaters coursing downstream. Together, the low sill and overbank passed almost 700,000 cfs through their gates into the Atchafalaya Floodway.

Due to the duration, volume and velocity of water passing through the low sill, a scour hole eventually formed below one of the low sill's wing walls. On April 14 the wall collapsed into the inflow channel and the integrity of the structure was put at risk.

Contractors began immediate construction of an emergency rock dike for the inflow channel bank to the edge of the wing wall to prevent further erosion by an eddy that had formed behind the remaining portion of the wing wall. Survey crews found the scour hole to be 55 feet deep, approximately 320 feet wide and extending 200 feet upstream from the base of the structure. It took 97,500 tons of rock to build the rock dike and 118,500 tons to fill the scour hole.

The water's powerful current was also taking its toll on the Mississippi River levee system. Sector commanders, who had been patrolling the levees since March, began reporting bank failures, increased erosion, seepage and sand boils along both banks of the river.

On April 26, Tom Bernard, who was commander of the Lower Coast Sector and is now the New Orleans Area Office assistant engineer, received a radio call that part of the levee at Nairn had sloughed into the river. "The levee had eroded to the middle of the crown," recalled Bernard. "We got the government vehicles off the levee and I made some phone calls."

That same day, Plaquemines Parish Heavy Equipment Unit began dumping every junk car they could find into the hole. "At first, the cars were carried away on the current, but then we busted the tires and windshields and filled the cars with sandbags," said Bernard. "We put over 500 cars in that hole before they began to break the surface."

"We were concerned about the integrity of the levee and knew we had to contain the river in case the levee broke. We decided to build a levee setback. We negotiated emergency contracts and had trucks hauling in dirt by that night. Back then, our owned hired labor crew did a lot of levee work. They came in that night and began to shape and compact the dirt. Within 24 hours, we had built the levee high enough to contain the river."

Besides Nairn, the Gypsy, Point Pleasant and Stanton levees failed and required emergency setbacks during the flood. In all, seven levees failed and were repaired with setbacks.

Meanwhile, flood flows were pouring into the Atchafalaya Floodway through the control structures at Old River and Morganza. With flood waters at an all-time high, General Noble ordered the raising of the lower Atchafalaya Basin levees and floodwalls.

Contractors worked two shifts and 20-hour days building mudboxes, filling sandbags, driving steel sheet piling and

raising levees at intermittent locations. The 62d Engineer Construction Battalion of the Fifth U.S. Army raised the floodwall in Morgan City and Berwick. They placed 14,000 feet of mudboxes atop the floodwalls and closed up 43 openings in the walls with stoplogs.

Emergency pumping was required in the Pointe Coupee Loop when 80,000 acres of mostly farmland, encircled by levees, was flooded by incessant rain. The towns of Melville and Krotz Springs are surrounded by ring levees for protection from flooding but pumping was necessary when heavy rains coupled with backwater seepage inundated the area.

Backwater flooding also caused extensive damage in the lower Red River area above the Old River Control Structure. Widespread rain and prolonged high water on the Red caused bank caving and the river threatened to breach the levee at several locations. The district constructed three levee setbacks and emergency revetment work at seven locations on the lower Red. Over 250,000 acres were flood-

ed with the most severe along the shoreline of Caddo Lake.

At the height of flood fight operations, 750 Corps employees (110 from other Corps districts), 400 military and 490 contractor personnel worked as a team to fight one of the worst floods of the century.

The success of the overall operation of the MR&T Project can be measured by comparing the estimated losses in the New Orleans District in the absence of the project—some \$8.2 billion—with actual damages—\$250 million. The project protected more than 2.4 million acres of land from overflow.

The MR&T Project has prevented over \$105 billion in damages in the New Orleans District, and \$148 billion total between St. Louis, Memphis, Vicksburg and New Orleans districts to date.

Today, of the 512 miles of levee that line the Mississippi River in the New Orleans District, only 82 miles are deficient. In the Atchafalaya, only 90 of the 449 miles of levee remain to be upgraded. **LE**

THE SPEC SHEET

Continued from page 7

from any potential construction-related liabilities and cost/quality conflicts; 2) the engineer is free to select, direct, and compensate qualified design consultants; 3) the builder is selected on a qualification basis rather than low-bid basis; and 4) the engineer is adequately protected by supplemental insurance (e.g., project bonding and the builder's general liability coverage).

SCENARIO 3: The builder and prime engineer form a joint venture or a design-build company, and the owner contracts with that entity for design and construction services. The prime engineer's risk can be reduced if: 1) services are contracted for "design" and "build" portions of the project on a separate, well-defined, traditional basis; 2) the design-build company is qualified to perform all of its contractual duties; 3) cost/quality conflicts are eliminated; and 4) there is adequate supplemental insurance (e.g., project bonding and general liability coverage).

"The professional liability insurance industry recognizes the emergence of the design-build delivery system," concludes DPIC President and CEO Peter Hawes. "We're seeing more demand for coverage particularly among environmental, mechanical, and electrical engineers. As a result, we're developing better ways to

help engineers reduce their risks and insure their design-build activities through special endorsements on practice policies

or through project insurance." (From *American Consulting Engineer*, 3rd quarter, 1993 issue) **LE**

CONSENT AGREEMENT REACHED WITH FEDERAL TRADE COMMISSION

The National Society of Professional Engineers (NSPE) has entered into a consent agreement with the Federal Trade Commission. Pursuant to this consent agreement, the Commission issued an order on August 6, 1993 that provides that NSPE may not prohibit or restrict its members from engaging in truthful, nondeceptive advertising.

As a result of the order, NSPE may not interfere if its members advertise truthfully and nondeceptively:

1. By making claims with respect to the quality of their services; and
2. Using showmanship, puffery, self-laudation, slogans, jingles, or sensational language or format.

The order does not prevent NSPE from adopting and enforcing reasonable ethical guidelines prohibiting advertising, including unsubstantiated representations, that NSPE reasonably believes would be false or deceptive within the meaning of Section 5 of the Federal Trade Commission Act.

Consistent with the order, NSPE has removed the Code of Ethics any part of Section 111.3.a. that is inconsistent with the provisions of the order. In addition, NSPE has revoked Board of Ethical Review Cases 81-5 and 84-2.

For more specific information, members should refer to the FTC order itself. NSPE will provide any member with a copy of the order and accompanying complaint upon request.

All inquiries should be directed to: Arthur E. Schwartz, NSPE General Counsel, 1420 King Street, Alexandria, VA, 22314-2794.

Engineers in Government



Louisiana Society of Professional Engineers in Civil Service

Status of DOTD Metric Conversion

By: Ronnie Carter, P.E.

DOTD Bridge Consultant Coordinating Engineer

WHERE WE ARE NOW: The Department of Transportation and Development (DOTD) has begun the process of metric conversion, with the primary efforts to date being strategic planning (generically speaking) through its Metric Committee. This process has yielded the estimated cost of conversion to the DOTD (\$8.5 million), and has achieved a consensus among the different sections of DOTD on various design parameters. Insofar as actual conversion is concerned, topographical surveys are now being done in metric, and as they are completed, plan preparation will begin in metric for those projects. Additionally, the DOTD has updated its Design Standards in metric. The Design Standards were approved by the DOTD Chief Engineer on October 8, 1993. This was an important step as it will provide a legal basis for future designs, although it is presently uncertain whether or not legislation will also be needed to validate these standards prior to project letting.

The DOTD has thus far been represented at two regional conferences, the first being the June 7-8, 1993 Federal Highway Administration (FHWA) Region 6 Conference in Arlington, Texas, and the second, the August 5-6, 1993 AASHTO Conference in Austin Texas. The following information is a summary of the FHWA Region 6 Conference which I attended:

FHWA REGION 6 CONFERENCE: This conference consisted primarily of a status update from each of the 5 states - Texas, Oklahoma, New Mexico, Arkansas and Louisiana; information from various AASHTO and other personnel who are knowledgeable in metric conversion; and a series of concurrent workshop sessions wherein representatives of each state discussed various aspects of design. The following DOTD personnel were in attendance at the conference, Mike Bankston (Location and Survey), Harman Audean (Road Design), William "Mac" Ray (Hydraulics), the undersigned (Bridge Design), and also from the FHWA Baton Rouge office, Messrs. Tony Sussman and Phil Arena. The most informative presen-

tation at the conference was that of Mr. Peter Noll, formerly of Canada's Ministry of Transportation, who spoke of the Canadian metric conversion experience. The following are notes that I took from that presentation.

THE CANADIAN EXPERIENCE: Ontario has a population of 10 million, and its Ministry of Transportation has a staff of around 10,000 people, responsible for 132,000 km (82,000 mi) of roadway. Their Ministry decided to go metric and issued a "white paper" around 1970. Their first metric project letting was around 1979. Mr. Noll commented that he didn't think the FHWA September 1996 deadline was very realistic. His definition of metric conversion is "creating and managing a paradigm shift". Four essentials to successful conversion are 1) Commitment, 2) Sustain a fast pace (this increases credibility), 3) Positive attitude, 4) Overcome the "inertia" of secondary knowledge (intuitive references) associated with the Imperial system.

Items necessary for successful conversion:

1. Keep a constant flow of information (internal & external).
2. Identify and encourage "natural" metricators within the organization.
3. Only pay for legitimate costs (e.g. a gage that reads in english - instead of paying for a new metric gage, modify the existing gage by means of a metric decal or other reasonable means).
4. Avoid dire predictions of huge costs.
5. Include "hands on" training sessions where students actually handle metric objects, with the metric measurement shown thereon, to give them a feel for metric dimensions.
6. Initiate appropriate legislation and regulations. (Regulations were a problem in Canada.)
7. Emphasize training to secretarial and clerical staff and those who interact with the public. Often times the secretaries play a valuable role in quality control because they are involved with many documents of the agency (e.g. Chief Administrative Officer).
8. Review dimensions and dimensional increments to determine formats (negotiate with suppliers of measuring devices on dimensional increments).
9. Convert early measurement-sensitive items such as software.
10. Professional and technical training - on the job training is adequate. Disseminate policy decisions internally and externally!
11. Simultaneous sign changing with decals. Don't use dual signs! Mr. Noll recommends against using "KPH", but rather KM/H, except that he further recommends against showing units at all. Canada originally added sign tabs, but is now abandoning them. The tabs compensated for the fact that existing speed limit signs did not show a unit but only a number (e.g. Speed Limit 50). Not wanting to change the size of the numbers or lettering to add the metric unit, they added a sign "tab" for this purpose. Later they determined that it served no purpose - that the people knew immediately that the different numbers were metric.
12. Another goal Canada utilized was to minimize the number of scale used. In their mapping work, they use only 1:500, 1:1000 and 1:2000 scales.

Other Notes on Metric Conversion

In an article by Mr. Dave Valentine, P.E., in the November 1993 issue of *Better Roads*, he stated "In spite of what you hear, Canada is not operating metrically. The current government made conversion voluntary, so most building supplies and a lot of hardware is still measured in inches and feet." LE



**Paul L. Landry, P.E.,
Executive Secretary**

**Louisiana State Board of Registration for
Professional Engineers and Land Surveyors**



1994 – Biennial Report

Place your order for this report by mailing the post card to be found in this issue of the LOUISIANA ENGINEER. The BIENNIAL REPORT includes the law, and rules of the Board plus a listing of registrants of the Board (individuals and firms).

Land Surveying Registration

Effective January 1, 1995, the statutes require the Board to limit new applicants for land surveying registration to be — "a graduate holding a baccalaureate degree from a curriculum of four (4) years or more who has completed at least thirty (30) semester credit hours, or equivalent approved by the Board, in courses involving land surveying, mapping, and real property approved by the Board —".

The Land Surveying Committee of the Board recently visited Nicholls State University to review surveying related courses so that the courses offered by that university could meet the requirements for registration. I'm please to advise you that the Board at its November 8, 1993 meeting approved the courses offered at Nicholls State University. Land Surveying Programs approved by the Board previously were those at T. H. Harris Voc-Tech School, Louisiana State University, Louisiana Tech University, Mississippi State University, East Tennessee State University, and the University of New Orleans. In addition to these courses, the Board also will give favorable consideration to individuals who have obtained bachelor of science degrees in surveying programs approved by the Related Accreditation Commission (RAC) of the Accreditation Board for Engineering and Technology (ABET). Individuals interested in obtaining land surveying registration

in the State of Louisiana should contact these various institutions to discuss how they could obtain the required land surveying courses needed for favorable consideration by the Board.

The Bottom Line — \$\$\$

You pay your taxes (city, state, and federal); you're a member of a technical society and you pay your dues; you're a member of a professional society and you pay those dues; and you're a registrant of the Louisiana Board and you pay your renewal fees. I don't know about your personal situation but my Louisiana Board renewal fee is much less than one percent of the taxes and dues I pay elsewhere. My point is the renewal fee you pay to qualify you legally as a professional is very, very, very small. That's about to change slightly, beginning January 1994.

Let me give you some background information.

The Board of Registration for Professional Engineers and Land Surveyors must by statute be completely, financially independent from the State of Louisiana. The Board does not receive any funds of any kind from the State. It must operate from the revenues it receives from you, the registrants of this Board and applicants.

For the past five (5) years, the Board has been operating with a negative cash flow of \$50,000 to \$25,000 per year because the law prohibited the Board from increasing its renewal fees beyond twenty-five dollars (\$25.00) per year and initial application and examination fees beyond \$100.00. I was very concerned because unless the law was changed to increase the fees the Board can charge registrants and applicants, I could see big problems ahead —like running out of reserve funds which are needed for unforeseeable contingencies. Keep in mind, the Board cannot borrow money nor can it receive money from the State for its operation.

Fortunately, that did not happen. The law was changed this year making it possible for the Board to stay in business for a long, long time without having to go back to the legislature for a change in the limits it has on fees it can charge registrants and applicants. The law now permits the Board to increase renewal fees

no more than \$15 for a three year period not to exceed \$100. It can also increase its application and examination fees by \$30 for a three year period not to exceed \$200.

Your understanding and support for the law change made this possible. I want to thank all of you for the support you gave but I want to give special thanks to the joint Committee which was formed by the Louisiana Engineering Society and the Louisiana Society of Professional Surveyors who reviewed this matter in great detail and presented it to their members. I want to thank all the members of this Committee and all the Officers of the Louisiana Engineering Society and the Louisiana Society of Professional Surveyors for the patience you had with me and members of the Board in the discussions we had and the support you gave for changing the law.

So what's the bottom line? You can see from the fee schedule herein beginning January 1, 1994 its not a fifteen dollars (\$15.00) per year increase that was limited by the law change but only a five dollar (\$5.00) increase. The Board is of the opinion that we can continue to have an efficient operation and meet the requirements of the law with this small increase in fees. The Board strives to achieve its goal of having a minimum of one half year and to no more than one year of funds for unforeseeable contingencies in reserves. We're on the low side of one half year of funds.

Firm Versus Individual Registration The Difference

I recently received a letter from a registrant of the Board requesting the registration of the **firm** in Environmental Engineering. Let's call this firm XYZ — this is my response.

Dear Mr. ZZZ:

I refer you to your letter of October 12, 1993 regarding the qualifications of the firm XYZ for providing engineering services in the State of Louisiana.

Engineering **firms** are registered by the Louisiana Board for the purpose of identifying to the public that they may offer engineering services. Firms unlike indi-

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.

1994

Jan. 24-25	July 25-26
March 21-22	Sept. 26-27
June 6-7	Nov. 7-8

vidual P.E. registrants of the Board are not registered with the Board in specific disciplines.

The supervising professional or professionals qualifying the firm for registration with the Board has the responsibility for providing competent engineering services. Section 2105 of the Board Rules addresses the issue of competency.

Section 909 of the Board Rules states in part, "within one year after the Board establishes a new branch, the Board may waive the Principles and Practice Examination in that branch for all registrants who present evidence that they are qualified by experience and education to practice in that branch".

Enclosed herewith is an application packet so that you can apply for registration as an environmental engineer. You may apply under Section 909 through July 20, 1994. Subsequent to that date, the Board will not have the prerogative of registering you or anyone else without having to take and pass the Principles and Practice of Environmental Engineering. I look forward to receiving your application so that the Board can give you favorable consideration.

Very truly yours,
Paul L. Landry, P. E.
Executive Secretary

Firms offering to practice engineering or surveying in the State of Louisiana must be registered with the Board. The professional registrant(s) of the Board qualifying the firm for registration has the ultimate responsibility that all of the work done by the firm is in compliance with the laws and rules of the Board.

August 31, 1993

Mr. Coan J. Bueche, Chairman
Louisiana State Board of Registration for Professional Engineers and Land Surveyors

1055 St. Charles St. - Suite 415

New Orleans, LA 70130-3997

RE: Act 418 of 1991

Dear Mr. Bueche:

Some engineers may be unaware of a recent act of the legislature which affects civil engineers practicing architecture in this state. This letter will briefly describe this act.

Civil engineers, properly licensed by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, are exempted from the architects licensing law, provided such engineers may not use the designation "architect" or any term derived therefrom. Nonetheless, in 1991 the legislature recognized that the protection of the public health, safety, and welfare required that the Louisiana State Board of Architectural

Examiners regulate the practice of architecture by a civil engineer. In that year the legislature passed Act 418 which prohibited a civil engineer from doing any of the following:

1. Practicing any fraud, deceit, dishonesty, gross negligence, misrepresentation, gross incompetence, or misconduct in the practice of architecture;
2. Wilfully misleading or defrauding any person employing him;
3. Violating the laws of the United States or any state;
4. Providing false testimony before the Louisiana State Board of Architectural Examiners;
5. Affixing his seal, stamp, or name to any specification, drawing or other related document which was not prepared by him or under his responsible supervision and control, or permitting his seal, stamp, or name to be affixed to any such document;
6. Failing to provide, within thirty calendar days of mailing of notice by certified mail, information requested by the executive director of the Louisiana State Board of Architectural Examiners as a result of a formal complaint alleging a violation of the architects licensing law, La. R.S. 37:141 et seq;
7. Using any advertising or solicitation which is false or misleading; and
8. Otherwise violating any provision of the architects licensing law.

Further, the Louisiana State Board of Architectural Examiners was authorized to investigate a complaint alleging the conduct described above, issue an order to any person prohibiting such conduct after

hearing, and impose a civil penalty to any person who violates its order. Alternatively, the board may present its findings to the District Attorney in whose district the violation has occurred.

Please make civil engineers aware of this legislation by including this letter in your magazine.

Very truly yours,
LOUISIANA STATE BOARD OF ARCHITECTURAL EXAMINERS
Fabian A. Patin
President

Disciplinary Action Report

The following is a summary of disciplinary actions taken by the Board between August, 1992 and August, 1993.

1. Chapter 25 of the Board rules contain the Minimum Standards for Property Boundary Surveys. During the reporting period as reflected above, the Board addressed ten (10) minimum standards complaints in which registered professional land surveyors were required to execute Cease and Desist Affidavits acknowledging a violation of the standards and certifying full knowledge and compliance with the standards. Survey plats in violation had to be corrected and at least one other plat of survey had to be submitted to the Board for compliance review. Some of the typical violations of the Minimum Standards for Property Boundary Surveys were failure to reflect the following on plats of survey: class of survey, client identification, purpose of survey, corners as found or set, origin

Louisiana State Board of Registration for Professional Engineers and Land Surveyors FEE SCHEDULE Effective January 1, 1994

Biennial Registration or Certification Renewal:

		Additional Late Fee	
		<=6 mo	> 6 mo
Professional Engineer.....	\$60.00	\$30.00	\$60.00
Professional Land Surveyor	\$60.00	\$30.00	\$60.00
Engineer in Training.....	\$30.00	\$15.00	\$30.00
Land Surveyor in Training.....	\$30.00	\$15.00	\$30.00
Professional Engineering Firm	\$60.00	\$30.00	\$60.00
Professional Land Surveying Firm.....	\$60.00	\$30.00	\$60.00

Application or Re-examination:

Pre-Application	\$30.00
Professional Engineer	\$120.00
Professional Land Surveyor	\$120.00
Engineer in Training (Students)	\$36.00
Engineer in Training (Other)	\$60.00
Land Surveyor in Training	\$60.00
Engineering Firm	\$120.00
Land Surveying Firm	\$120.00
Professional Engineer Temporary	\$120.00

- of bearing datum, encroachments, failure to contain certification that survey was performed in accordance with minimum standards, bearings around property lines missing, etc.
- The firm title of a firm not actually practicing engineering contained the word engineering and inasmuch as the presence of the word engineering in the firm title was a misrepresentation and confused the public, the firm changed its title, business cards, stationery and repainted vehicles to cover up the old firm name.
 - Formal charges were filed by the Board against a Louisiana corporation whose title contained the word "engineering". The corporation had failed to register the firm as an engineering corporation with the Board as specified in Louisiana Revised Statute 37:689. The firm had offered/practiced engineering through the corporation in excess of ten years prior to its registration with the Board in December, 1992 as an engineering corporation. In lieu of a formal hearing the corporation entered into a Consent Order settlement with the Board admitting a violation of the registration statutes and agreeing to

- payment of a fine of four hundred and fifty and no/100 dollars (\$450.00).
- The Board filed a Notice of Charges against a Louisiana registered professional engineer and land surveyor based upon the suspended revocation of his Mississippi professional land surveyor's license and a fine of two thousand (\$2000.00), with one thousand dollars (\$1000.00) of same suspended for a probationary period of five years by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors for affixing his seal and signature to work not prepared for him or under his direct supervision and by aiding or abetting another person in violating registration laws or Board rules. In lieu of a formal hearing the registrant was allowed to enter into a Consent Order settlement of these charges wherein he agreed to his Louisiana land surveyor registration being revoked and being fined five hundred dollars (\$500.00) with both actions suspended conditioned upon a five (5) year period of no violations and successful completion of the Louisiana Laws and Rules Examination. (Louisiana Revised Statute 37:698 (A) (7), LAC TITLE 46:LXI,

- 1701 (C), (D), (E)(1) to (4), F(1) to (3), 2103(C)(1) to (3) and La. R.S. 37:698(A)(12).
- Formal charges were filed by the Board against a Louisiana registered professional land surveyor who entered a plea of guilty to a felony D.U.I. in Mississippi and was judged guilty based upon his plea. The matter was heard at a formal hearing of the Board and charges against the registrant were sustained. The Board voted unanimously not to take disciplinary action against the registrant but by agreement with the registrant assessed a cost of \$280.50 to the registrant for costs of the hearing stenographer.
 - The Board filed formal charges against a Louisiana registered professional engineer for providing land surveying without registration as a professional land surveyor and against his corporation for providing land surveying services without registration with the Board as a land surveying corporation. In lieu of a formal hearing the Board allowed resolution of the charges by a Consent Order settlement wherein the registrant admitted to violating the statutes and rules and had to pay a fine of five hundred and no/100 dollars and complete the Laws and Rules Examination successfully within thirty (30) days (La. R.S. 37:681, 689 (A) (2), namely misconduct, and 37:698 (A) (6), LAC TITLE 46:LXI, 501 E and 1701 (1) and (E) (1) to (4).
 - The Board filed formal charges against a Louisiana registered professional engineer for allegedly correcting, revising, and/or adding to the work to another registrant without following the provisions found in LAC TITLE 46:LXI, Section 2103 D (2) and (3). In lieu of a formal hearing the charges were resolved by a Consent Order settlement wherein the registrant admitted he had not been aware of the restrictions of Board rules and was guilty of violating the statutes and rules. The registrant paid a fine of \$250.00. (La. R.S. 37:698 (A)(6), LAC TITLE 46:LXI, Section 2103 D(2) and (3).
 - The Board filed formal charges against a Louisiana registered professional engineer and land surveyor for sealing land surveying plans which were not prepared under his complete direction and control or by a person subject to his authority and for aiding and assisting another in violating statutes and rules requiring registration. In lieu of a formal hearing the Board allowed resolution of these charges by a Consent Order wherein the registrant admitted that he failed to keep himself aware of changes to the laws and rules and therefore was guilty of a technical

SCHEDULE OF EXAMINATION DATES

Examination	Examination Date	Application Postmark Date
Principles & Practice of Engineering (8 hr.) Civil (Including Structural & Sanitary), Chemical, Electrical & Mechanical	04/15/94 10/28/94 04/07/95	01/17/94 08/01/94 01/09/95
Agricultural, Control Systems, Environmental, Industrial, Metallurgical, Mining, Nuclear and Petroleum	10/28/94 10/27/95 10/25/96	08/01/94 07/31/95 07/29/96
Principles & Practice of Land Surveying (6 hr.)	04/15/94 10/28/94 04/07/95	10/18/93 05/02/94 10/10/94
LA Laws & Procedures of Land Surveying (2 hr.)	04/15/94 04/07/95 04/19/96	10/18/93 10/10/94 10/23/95
Fundamentals of Land Surveying (8 hr.)	04/16/94 10/29/94 04/08/95	10/18/93 05/02/94 10/10/94
Fundamentals of Engineering (8 hr.)	04/16/94 10/29/94 04/08/95	01/17/94 08/01/94 01/09/95

Application — NOT Pre-application — must be postmarked not later than the date indicated before an applicant will be considered for the respective examination. Note that the approximate interval between postmark dates and examination dates is 180 days for land surveying examinations 90 days for engineering examinations. The Board may schedule an applicant for an examination later than the examination requested by the applicant and cannot guarantee that the applicant will be scheduled for the examination initially requested.

An oral examination will be scheduled for Professional Land Surveyor applicants prior to any required written examinations.

violation of the law. The registrant was assessed a fine of five hundred and no/100 dollars (\$500.00) and had to complete the Laws and Rules Examination of the Board (La. R.S. 37:698 (A) (6), to wit LAC TITLE 46:LXI, Sections 1701 (D) and (E) (1) to (4) and 2103 (C) (2) and (3) as well as La. R.S. 37:698 (A) (12).

9. Formal charges were filed by the Board against a Louisiana corporation whose title contained the word "engineering". The corporation had failed to register the firm as an engineering corporation with the Board as specified in the registration statutes and had not been entirely responsive to the Board's request for compliance by registration or a deletion of the word "engineering" from the title. In lieu of a formal hear-

ing the corporation through its owner entered into a Consent Order settlement in which the owner changed the title of the corporation to eliminate the word "engineering" and certified that no engineering service has been or would be offered or provided by the corporation until such time as the corporation had complied with all aspects of the registration statutes regarding registration for corporations and/or individuals. Any violation of the terms and conditions of the Consent Order shall be grounds for the Board to assess a fine of up to fifteen hundred dollars (\$1500.00) against individuals and five thousand dollars (\$5000.00) against the corporation. [Louisiana Revised Statute 37:681, 37:689, and 37:700]LE

New Members

Alexandria Chapter

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Baton Rouge Chapter

A. Boyd Holmes, E.I.T.
Jorge M. Ferrer, P.E.
Donald David, P.E.
Cathrine E. Slater, E.I.T.
Brian S. Smith, P.E.
Gregory P. Wilson, P.E.
Douglas D. Wafer, E.I.T.
Erick R. Mertoetomo, E.I.T.

Bayou Chapter

Mario P. Caballero, P.E.

Lafayette Chapter

Jeffrey L. Duplantis, E.I.T.

Lake Charles Chapter

Rico L. Orsot, E.I.T.
Robin C. Thomas, E.I.T.

Monroe Chapter

Charles W. Cook, P.E.
John M. Dowdell, E.I.T.

New Orleans Chapter

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W. Harrell Freeman, P.E.
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PS Form 3526, January 1991

The Society Reports

Ethics and Professional Conduct Committee

by: Foy B. Gadberry, P.E.
Chairman

The Ethics and Professional Conduct Committee, I am glad to say has no pending matters. This committee is one in which being inactive is better than being active. If and when this committee is active it is their responsibility to consider reported instances involving a breach of the LES Code of Ethics by any member of the Society and report its findings to the Board of Direction. In addition, we are responsible for revising and improving the current Code of Ethics, help interpret the Code of Ethics and help promote the understanding of Professionalism and Ethics among our fellow engineers.

In these trying times, we as engineers should uphold our standards as professionals and not allow labels such as shyster, quacks, etc. be placed on us by the general public. As long as we perform in a way that advances human welfare and upholds the prestige of the profession we then should continue to be the most respected profession in existence. Remember, your father gave you his name to carry through your generation and give to your children. Refrain from doing anything that would blemish the reputation on which it was built.

Hopefully this committee will, for the most part, be inactive which indicates that fellow engineers are advancing the honor and dignity of the engineering profession and keeping high standards of ethical conduct.

Long Range Planning Committee

by: Carl A. Jakob, P.E.
Chairman and Second Vice President

The Long Range Planning Committee of LES is charged with recommending both short and long term goals of the Society. In addition, it must monitor the activities of the Society to ensure that activities and procedures will enable goals to be reached.

LES is the professional organization for engineers and their associates in Louisiana. As such, our goals and activities vary from those of the technical societies such as ASCE, ASME, IEEE, AICHE, etc. While the technical societies mainly deal with issues specific to one technical area, LES deals with issues common to all engineers regardless of their specialty area. Therefore typical LES long range planning issues involve the stature and role of the

engineer in society and how LES can best serve all engineers. Today the committee is working on such tasks as registration requirements, continuing education, membership benefits, and community programs.

In an effort to bring together as many engineers as possible to share and promote the engineering profession, LES Long Range Planning proposed the concept of holding joint meetings with technical societies. The first such meeting will be held March 16-19, 1994, with ASCE. Ultimately it is intended that other technical societies will join in the meetings and a large engineer's conference will develop to everyone's benefit. Similarly, Long Range Planning has proposed joint meetings with engineers in neighboring states to share regional ideas and concerns. The Mississippi Engineering Society has already been contacted.

However, Long Range Planning needs to look beyond meetings and daily activities. True planning requires a vision for the future. The committee must look at where engineers and LES have been, where they are now, and where they will be in the future. Registration of professional engineers was a fundamental founding principle of the Society. It remains a goal today and into the future. Other professions require full licensure and consequently have obtained an elevated stature in society. Likewise some other professions require advanced training. Today many individuals claiming to be engineers are not registered, and advanced degrees and continuing education are not required. Where will we be in the future? The committee is working on this dilemma.

To tap the wisdom of our past, the committee has recommended the formation of a past presidents committee. In addition to the five practice divisions, a chapter presidents committee has been encouraged to highlight immediate and future concerns of engineers. The sharing of ideas is vital to the setting and reaching of goals.

In the benefits department, Long Range Planning constantly monitors LES activities and suggests ideas for improvement and expansion. This includes the functions of the state office, state meeting agendas and formats, the *Louisiana Engineer* magazine, membership services, chapter activities and community programs such as MATHCOUNTS. The advancement of the engineering profession and service to our members is

paramount throughout the monitoring and goal setting process.

The Long Range Planning Committee meetings are open for all to attend. The next meeting will be held in conjunction with the LES/ASCE joint meeting.

New Orleans Chapter

by: Charles E. Prewitt, P.E.
New Orleans Chapter President

The New Orleans Chapter's theme for this year is "Infrastructure-Rebuilding Our City and State." Our emphasis is on quality meetings with programs that address this general theme. Each practice division chairman is responsible for the speaker for one general meeting during the year. We are also pursuing joint meetings with other societies so we can interact and address common needs and challenges.

In September, the first meeting was a joint meeting with ASME. Over one hundred twenty (120) members and guests were treated to a tour of Laitram Corporation's state-of-the-art manufacturing facilities. Laitram develops and manufactures a number of high tech, innovative products and employs approximately 800 engineers and manufacturing personnel. Included on the tour were the internationally famous shrimp peeler, the innovative Lapeyre alternating tread stair, a highly accurate digital compass for offshore positioning systems and Interlox, the all-plastic modular conveyor belting and gears.

In October, Jim Brown of LP&L/NOPSI explained why many major companies choose not to locate in Louisiana. He also shared an innovative compact disc-based information library that is used on corporate visits by the LP&L economic development team. The prospect can pick the interested communities and see it through pictures and text. The next best thing is a trip there in a plane.

In November, State Representative Quentin Dastugue discussed the status of the Highway Trust Fund and the TIMED program. He also shared some of his observations concerning state government and his suggestions for improving several problem areas.

Coming up, a joint meeting with ASCE and IEEE in December will celebrate the holidays and bring in the new year. Lt. Governor Melinda Schwegmann will be the guest speaker at the beautiful Plimsoll Club overlooking the Mississippi River Crescent.

Other projects include MATHCOUNTS, under the able direction of Sonny Launey, P.E., and his committee. Approximately

250 schools have received their packets and we are actively soliciting their registration. The New Orleans Regional Competition is currently planned for February 26 at the University of New Orleans School of Engineering. The membership drive has resulted in approximately 50 new members recruited for the chapter.

We look forward to a productive 1994 for LES and wish all our fellow engineers a Merry Christmas and a Happy New Year.

Alexandria Chapter

by: James N. Moore, P.E.

Alexandria Chapter President

Is this the worst of times or the best of times? Every highway going into, out, and through Alexandria is under construction, or so it seems. New comers as well as locals are finding it hard to get around. Construction hampers flow in every direction. What does it mean for the present and future of central Louisiana? Through the efforts of many people and the designs of engineers, it seems a nightmare has developed. However, I believe the difficult times of the present will enhance the future. Alexandria is developing into a hub of Louisiana with its interstate highway and Red River port. It has taken the vision of many people to plan for the future. Engineers were an essential part of planning and developing that vision. Many engineers work in the background and are never recognized. We as a society of engineers should have a goal to publicize these accomplishments. Engineering has played a major role in establishing the standard of living and conveniences of today.

While assisting in contacting hotels for the June 1994 LES Annual Meeting, I was surprised at the number of conventions that are being held in Alexandria. Convention hotels had been booked solid for the last three weeks. The convention bookings are increasing and will be helping the economy for central Louisiana. More construction of convention space is planned in the near future. This is one of the many positive developments in CENLA.

As I observe the results of engineering efforts, it concerns me that so few of these engineers are members of the Louisiana Engineering Society (LES). LES is a net-

work of the engineering profession. The committees on the state level are working very hard for all of us. Many engineers feel they do not have the time to be active in the Society. Our chapter has one monthly meeting that consumes about two hours. These meetings are rotated between noon and evening meetings. Chapter committee chairs do require more time to attend the biannual state meetings and participate in state committee functions.

I challenge all engineers to become members of the Louisiana Engineering Society. Every engineer should be active in his chapter and express his opinions. Chapter elected officers are your representatives on the LES Executive Committee. LES is a growing and changing Society. We need input from all disciplines and practice divisions. I encourage

you to be a part of the input on the many issues facing our profession and society. **LE**

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Calendar of Events

We invite all technical and professional organizations to submit their meeting dates for publication in the *Louisiana Engineer* to: Editor, P. O. Box 2683, Baton Rouge, LA 70821.

January 8-15, 1994

NSPE Winter Meeting
Sheraton El Conquistador
Tucson, AZ

January 14, 1994

Professional Land Surveyor
Oral Exam

January 24-25, 1994

State Board of Registration Meeting
New Orleans, LA

January 28, 1994

LES Board of Direction Meeting
Lake Charles, LA

February 5-26, 1994

Window/Chapter MATHCOUNTS
Competitions

February 20-26, 1994

National Engineers Week

March 5, 1994

State MATHCOUNTS Competition
CEBA Building, LSU
Baton Rouge, LA

March 11, 1994

Professional Land Surveyor
Oral Exam

March 16-19, 1994

Joint LES/ASCE Meeting
Holiday Inn South
Baton Rouge, LA

March 21-22, 1994

State Board of Registration Meeting
New Orleans, LA

March 25, 1994

LES Board of Direction Meeting
New Orleans, LA

June 15-18, 1994

LES Annual Meeting
Alexandria, LA

In Memoriam

A donation to the

LOUISIANA ENGINEERING FOUNDATION

is a fine way to remember and honor a departed friend. A call, a fax or a letter to the Secretary of the LEF is all that is necessary to make your donation. The family of the deceased will be promptly notified, and the friend's name will be recorded on the Foundation's Memorial plaque.

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1/Registration Fees are required for anyone attending the conference seminars on Thursday and Friday.

2/Prepaid discount applies only if registration and payment are received by March 11th.

3/Santa Maria Golf Course - Open to everyone

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Please indicate which of the concurrent sessions you will most likely attend.

(This will not preclude your attending any of the individual presentations.) Circle one from each group: 1A or 1B 2A or 2B 3A or 3B

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TENTATIVE PROGRAM

Wednesday, March 16, 1994

12:30 p.m. - 5:00 p.m.

Golf Tournament¹

Thursday, March 17, 1994

9:00 a.m. - 5:00 p.m.

12:00 Noon - 5:00 p.m.

1:00 p.m. - 2:30 p.m.

2:45 p.m. - 4:15 p.m.

Registration

Exhibits

LES Practice Division Meetings

Plenary Session (Joint Session)

State Board of Registration,

Engineering Practice Rule Changes

ASCE Board of Directors Meeting

Icebreaker Party²

4:30 p.m. - 6:30 p.m.

7:00 p.m. - 10:00 p.m.

Friday, March 18, 1994

8:00 a.m. - 11:30 a.m.

8:00 a.m. - 5:00 p.m.

8:00 a.m. - 10:00 a.m.

8:00 a.m. - 9:30 a.m.

Registration

Exhibits

Morning Snacks (Exhibit Area)

ASCE Technical Session - 1A

"TQM - Is It Good For You?"

ASCE TECHNICAL SESSION - 1B

"EPA Regulations/Wetlands"

LES Public Relations Committee

LES Inter-Society Relations Committee

LES Long Range Planning Committee

Exhibit Workshop/Break

ASCE Technical Session - 2A

"PC Update/Latest Hardware Technology"

ASCE Technical Session - 2B

"LDOTD Projects/I-310"

LES Engineering Education

LES Legislative Committee

LES Executive Committee/Liaison

w/State Board of Registration

Exhibit Workshop/Break

Luncheon w/Keynote Speaker

Exhibit Workshop/Break

ASCE Technical Session - 3A

"Trenchless Construction/Horizontal Drilling"

ASCE Technical Session - 3B

"Remote Sensing Image Processing/GIS"

LES Membership Committee

LES Young Engineers

Louisiana Engineering Foundation

Exhibit Workshop/Break

ASCE Student Papers

LES Student Papers

ASCE General Membership Meeting

LES General Membership Meeting

Cocktails

ASCE/LES Awards Banquet

11:15 a.m. - 11:30 a.m.

11:30 a.m. - 1:15 p.m.

1:15 p.m. - 1:30 p.m.

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

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

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

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

3:00 p.m. - 3:15 p.m.

3:15 p.m. - 4:45 p.m.

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

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

6:00 p.m. - 7:00 p.m.³

7:00 p.m.

Saturday, March 19, 1994

8:00 a.m.

10:00 a.m.

LES Board of Direction Meeting

ASCE Student Regional Conferences

1/Santa Maria Golf Course - Tee Time, 12:30 p.m.; Shotgun Start; Hot Hors d'oeuvres; Soft Drinks

2/White Oak Plantation

3/A Photography Session for award winners will be held during the cocktail hour.

A fully detailed program; LES committee meeting agendas; and, practice division meeting agendas will be published in the February 1994 issue of the *Louisiana Engineer*.

NEW REGISTRANTS

Continued from page 17

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Norcross, GA
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Jackson, MS
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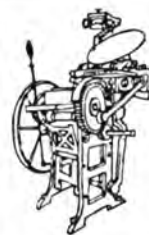
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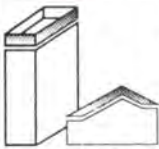
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