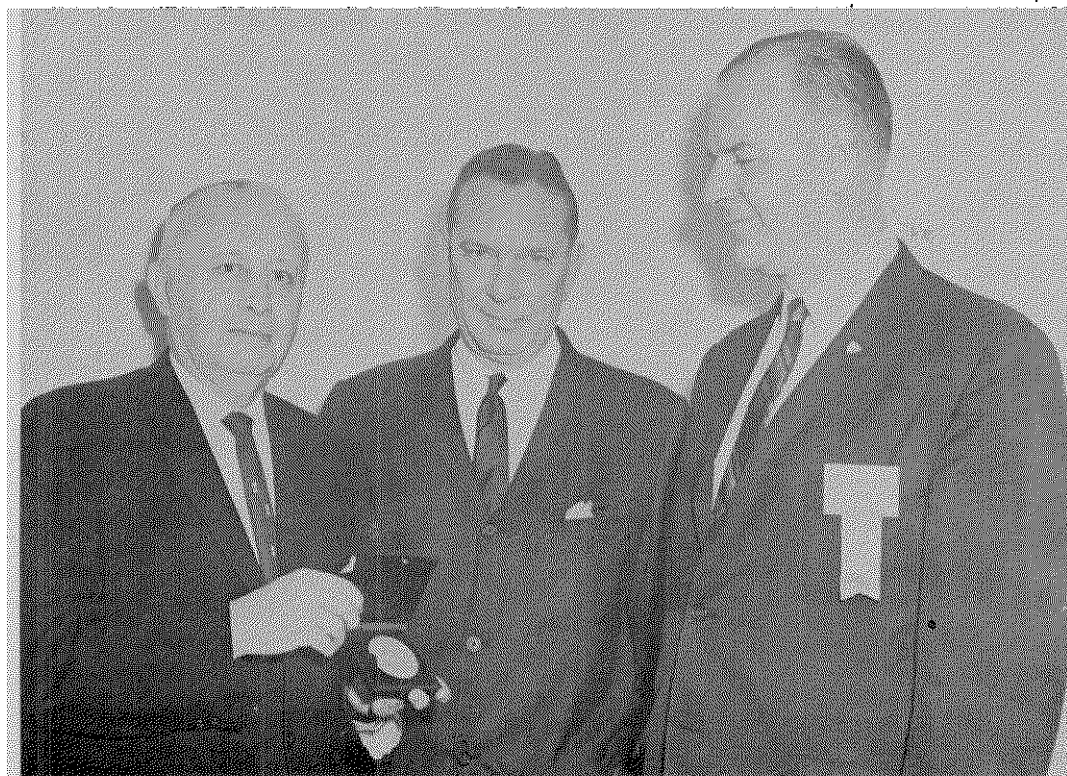
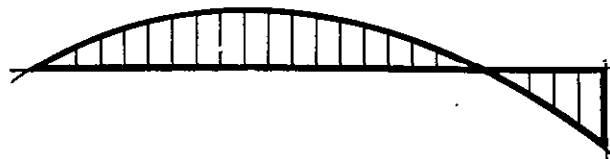


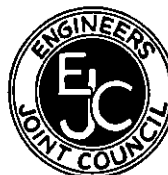
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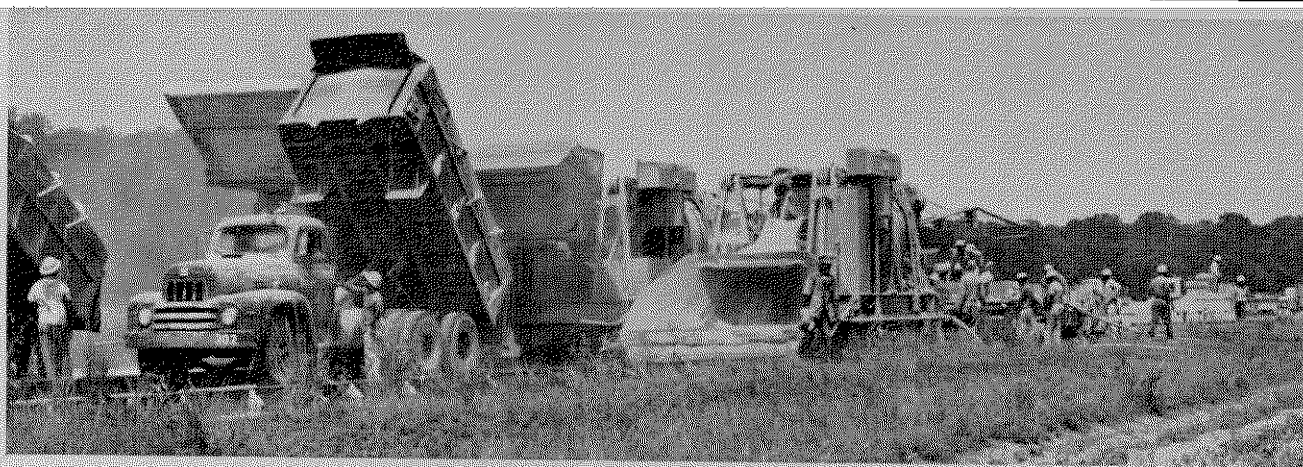
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ENGINEER

Vol. 51 No. 1
February, 1965





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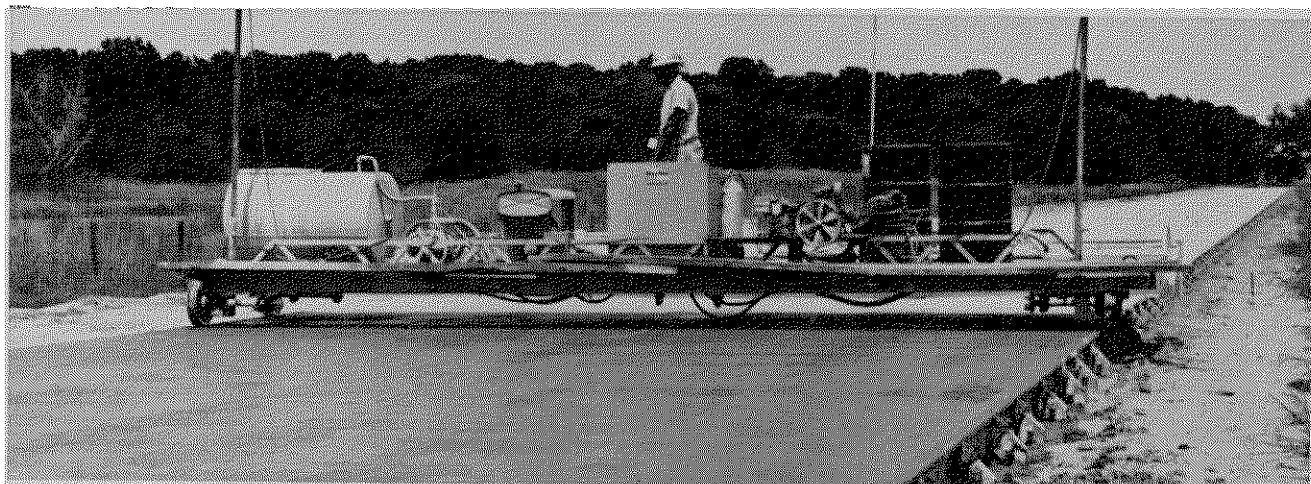
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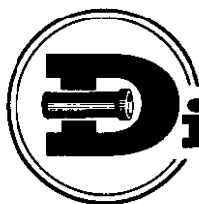
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Nothing is more natural than turning on a faucet for a cool, refreshing glass of water. But nothing in our normal daily lives is in greater danger of extinction. Unfortunately, the supply of clean water is shrinking constantly . . . at an alarming rate.

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Shell to Build \$20 Million Plant at Geismar, La.

Shell Chemical Co. will build a \$20,000,000 plant at Geismar in Ascension Parish, La., according to a recent announcement by Gov. John McKeithen.

McKeithen said he was authorized to make the announcement of the new plant by R. M. Hart, general manager of Shell, in New York City.

The location of the new facility will be a 700-acre tract, just south of the existing Wyandotte chemical plant at Geismar.

The Shell firm had earlier announced ethylene facilities with a capacity of 500,000,000 pounds a year would be built at the Shell Oil Refinery at Norco, La.

THE LOUISIANA ENGINEER

Vol. 51

FEBRUARY, 1965

No. 1

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Signed,

Oct. 31,
1963

W. K. Bankston,
Editor

OUR COVER—First recipient of A. B. Paterson "Engineer in Management" award of Louisiana Engineering Society was John Russell Gaugler (left), Lafayette, retired vice president of Central Louisiana Electric Co. Making presentation was Clayton L. Nairne, center, president of New Orleans Public Service Inc. and a past society president. Looking on is B. H. Backlund, Omaha, Neb., president, National Society of Professional Engineers. Award was presented during NSPE Winter Meeting at Jung Hotel Jan. 19-23, 1965.

Warren K. BankstonEditor
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Minutes Of The Board, LES

LOUISIANA ENGINEERING SOCIETY

Minutes of Meeting of the Board of Direction
Held at Oak Manor Motel, Baton Rouge, on
Tuesday, December 8, 1964

The meeting was called to order by President Knight with Messrs. Affolter, Duclos, Ewing, Roy Johnson, McNamara, Nelson, Odom, Stokes, Walk and Fernandez present. Also in attendance were Messrs. Gerald R. Dyson and Allen M. Johnson. The order of business was dispensed with so that a resolution concerning the establishment of a Functional Section for Professional Engineers in State Government could be presented by Mr. Dyson. Some board members questioned the restriction imposed by the wording State Government, since the desired Functional Section for Engineers in Government should include Federal, State, Parish and Municipal engineers. Mr. Dyson assured the board that the petition did include the latter three categories and that the proposed functional section would concentrate its efforts to improve the status and welfare of state, parish and municipally employed engineers. Mr. Duclos moved that the resolution establishing this functional section be adopted. Motion seconded by Mr. Nelson and carried.

The secretary reported a correction in the minutes of the board meeting held on November 16 to include the name of Board Member J. Bres Eustis among those in attendance. Mr. Walk moved that the reading of minutes of the November meeting be dispensed with and that the minutes be accepted as corrected. Motion seconded by Mr. McNamara and carried.

President Knight announced that the most important business on the agenda was to establish guide lines for the newly reorganized state organization of LES, and that the two major problems were Finances and Finding the Desired Personality for the position of Executive Secretary. A lengthy discussion followed on the qualifications that an Executive Secretary should possess, and it was the opinion of those present that the individual should have capabilities that would enable him to accomplish the following:

- (1) Develop a good Public Relations Program.
- (2) Maintain a good working relationship with the Louisiana State Legislature.
- (3) Develop an effective Membership Campaign.
- (4) Actively combat Unionization among Engineers.
- (5) Promote closer unity within the State Chapters.
- (6) Further the Inter-professional Relations Program, particularly with Architects, Attorneys and M. D.'s.

Additionally, he should have no conflict of interest with the basic principles of the Louisiana Engineering Society, i.e., the welfare of the Professional Engineer, particularly in his educational, ethical, social, legal and economic problems.

It was stated also that the Executive Secretary preferably should be a Professional Engineer.

Mr. Nelson moved that the LES seek to employ an Executive Secretary, he to be an engineer or a person with a broad knowledge of the engineering profession with executive ability and a knowledge of legislative procedures, to be alert, aggressive, personable and widely acquainted throughout the state. The motion was seconded by Mr. Duclos and carried, after which President Knight appointed a committee consisting of Messrs. C. W. Stokes, Chairman, Louis Duclos and Frank Walk to obtain the qualifications of possible applicants.

Since the discussion included financial matters, President Knight appointed Messrs. Waldemar Nelson, Chairman, Edward J. McNamara and John P. Fernandez to prepare a budget to include the Executive Secretary's salary and expenditures, office facilities with the necessary assistants, and the additional cost of development programs. Mr. Frank Walk requested that the present publication and public relations program not be altered.

President Knight reported on the legislative investigation made by Senator Jackson B. Davis into the methods of letting bids. The president also urged all those present to attend the NSPE Winter Meeting to be held in New Orleans January 19-23, 1965. He outlined the work of the LES committee handling arrangements for the meeting.

It was moved by Mr. Nelson, seconded by Mr. Stokes, that Mr. John R. Gaugler of Lafayette be the first recipient of the A. B. Paterson Engineer-in-Management Award. The motion carried unanimously.

Letters from Mrs. James M. Robert, Mrs. T. Edward Ernst, Tennessee Society of Professional Engineers, and Tulane University were read. Mr. Anthony Pastor, a Senior student in Mechanical Engineering, is the recipient of the LES scholarship at Tulane for 1964-65.

Upon motion by Mr. Ewing, seconded by Mr. McNamara, the following members were dropped from the rolls in accordance with their requests:

Salvador V. Distefano, California (Member)
Jack DiLorenzo, New Orleans (Junior)

It was moved by Mr. Duclos, seconded by Mr. McNamara and carried, that no action be taken on the request of Mr. C. R. Haulman for transfer to a higher grade of membership.

Mr. McNamara moved that the following members be transferred to Life Member grade, but that their certificates not be presented until the Society's Annual Meeting to be held in July 1965:

A. R. Brousseau	Daniel Hallaron, Jr.
Albert J. Fransen	W. Stone Leake
J. Harry Gillum	Henri J. Molaison
Oscar Higginbotham	Walter S. Rainville, Jr.
Arthur M. Hill	

The motion was seconded by Mr. Roy Johnson and carried.

In accordance with Article II, Section 3 of the society's constitution, Mr. Odom moved that the following Junior Members who have passed the age limit for Junior grade be transferred to Affiliate grade, effective January 1, 1965. The motion was seconded by Mr. Affolter and carried:

Judson V. Booth, Baton Rouge
Darwayne W. Coburn, New Orleans
Ronald P. Cressy, New Orleans
Billy C. Daniels, Boyce
A. A. DeFraithe, Jr., New Orleans
Richard A. Dupuis, Lafayette
A. W. Endris, Jr., Lafayette
Raymond J. Franz, Metairie
Robert Glen Graves, Monroe
Mark H. Kite, Ft. Worth, Tex.
Robt. R. McBride, Jr., Mobile, Ala.
Chas. B. McCarthy, New Orleans
John L. Niklaus, New Orleans
Regis G. Trumps, Metairie

The secretary read a memorial resolution honoring the late Honorary Member and Past President, Hermann L. Lehmann. A moment of silence was observed in memory of the deceased.

An application for the NSPE-ARMCO scholarship was presented and Mr. Ewing requested an extension of time to permit the Alexandria Chapter to submit a candidate. It was decided that President Knight would select the LES state candidate, whose name and qualifications must be submitted to national headquarters prior to January 15, 1965.

The Board commended State Senator Danny Roy Moore and Representative Morley A. Hudson for their fine work in the interest of the engineering profession.

It was decided that the next meeting of the board would be held on January 22 during the NSPE Winter Meeting in New Orleans.

President Knight thanked board members for a very cooperative and successful session, after which the meeting adjourned.

JOHN P. FERNANDEZ,
Secretary-Treasurer

LOUISIANA ENGINEERING SOCIETY
Minutes of Meeting of the Board of Direction
Held at the Jung Hotel, New Orleans on
Friday, January 22, 1965

The meeting was called to order by President Knight with Messrs. Duclos, Eustis, Ewing, Roy Johnson, McNamara, Nelson, Odom, Stokes, Walk and Fernandez present. Mr. Allen Johnson, Public Relations Counsel, also was in attendance. The secretary reported a correction in the minutes of the preceding meeting, after which Mr. Ewing moved that the reading of minutes be dispensed with, seconded by Mr. McNamara and carried. Mr. McNamara then moved that the minutes be accepted as corrected, seconded by Mr. Johnson and carried.

President Knight gave a progress report on the work of the Committee on Engineering Education Goals. He announced that the Louisiana candidates for the NSPE engineering scholarships had been selected and that the Board would be informed of their names at its next meeting.

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President Knight reported briefly on the first NSPE Southwestern Regional Conference held in Tulsa December 11 and 12, and stated that a formal report on highlights of the meeting would be furnished to all board members in writing. The President also stated that he would try to determine the requirements for nominating a Louisiana engineer for the National Academy of Engineering.

The Secretary reported that 416 membership ballots had been received and that all applicants had been elected to their respective grades. A copy of the ballot is attached to these minutes and a tabulation by grade a chapter of the new members elected follows:

Members Elected:	N.O.	B.R.	Sport	Monroe	Laf.	Non-Res.	Total
Member	2	2	1	1	2	—	8
Affiliate	3	—	—	—	—	—	3
Junior	1	2	1	—	1	1	6
Transfer from Junior to Member	3	—	—	—	1	—	—

The Secretary read his annual Membership Report, in which he reported 95 new members elected, 10 deceased, 46 resigned and 70 dropped for non-payment of dues, resulting in a net loss of 32 members over last year. The total membership of LES on January 1, 1965 was 1,985.

The Secretary presented the annual Financial Report which showed liquid assets January 1, 1965 of \$25,388.79, an increase of \$4,007.85 over last year. However, he pointed out that this surplus is misleading, since bills for the Annual Meeting and for the December issue of The Louisiana Engineer had not yet been received when the books were closed.

Messrs. Stokes and Walk reported on interviews held with executive secretaries of various NSPE state organizations. Mr. Bob Alligood, Executive Director of the Florida society addressed the Board, outlining his experience with that organization. Mr. Alligood stated that the Florida Society operates on an annual budget of \$107,000 in spite of the fact that its net income from dues is about the same as that of LES. However, the Florida society receives a net income from its Annual Meeting, publication, functional sections, etc., whereas the LES subsidizes these activities.

Mr. Nelson presented a proposed annual budget for the Louisiana Engineering Society providing for a full-time executive secretary, staff and rental headquarters.

Mr. Walk moved and Mr. McNamara seconded the following changes in status of members:

- (1) Herbert B. Day, Alexandria, reinstated to Member—NSPE.
- (2)—Raymond J. Franz, New Orleans, transferred from Affiliate to Member—NSPE.
- (3)—John H. Huffman, Lafayette, transferred from Affiliate to Member—NSPE.
- (4)—George L. Heller, Monroe, transferred from Affiliate to Member—NSPE.
- (5)—Resignations:
Richard Arnaud, Jr., Crowley (Jr.)

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Mr. George Arnett, Lafayette (Member-NSPE).
Edwin R. Cousins, Virginia (Member).
Raymond E. Dufrechou, New Orleans (Member).
H. S. Finke, New Orleans (Affiliate).
Harvey A. Hall, Baton Rouge (Member).
Henry G. Howard, Mississippi (Member-NSPE).
Oscar R. Menton, Baton Rouge (Member).
Drury K. Mitchell, New Orleans (Member-NSPE).
Joseph S. Lodato, New Orleans (Member-NSPE).
Raymond G. Neigel, New Orleans (Affiliate).
George P. Peagler, Florida (Member).
Jack Pickell, Jr., Baton Rouge (Member-NSPE).
William R. Seay, New Orleans (Member-NSPE).
Johnny B. Sellers, Texas (Member).
William G. Smith, New Orleans (Affiliate).
Prosper J. Toups, Houma (Junior).
Chas. A. Wilscam, New Orleans (NSPE-Member).

- (6) Dropped:
F. W. Merrill, Lake Charles (Member-NSPE).
Lawrence E. Walker, New Orleans (Member-NSPE).
- (7) Election void, in accordance with Article VII, Section 1 of constitution:

Sham L. Gupta, Baton Rouge (Member-NSPE).

The motion carried without opposition.

The secretary reported the deaths of the following members:

Roy Geoghegan, New Orleans (Member).
E. E. Guillot, Jr., Lafayette (Member).
William H. Henkel, New Orleans (Member).
W. C. Ricker, New Orleans (Life Member).
L. Voorhies, Baton Rouge (Member).

Due to the limitation of time no further business was transacted. However, President Knight announced that he would appoint a committee to handle the society's 1965 Annual Meeting. It was suggested that the annual meeting be of two days' duration, be held in New Orleans on or about July 9-10, and that the Fontainebleau Motor Hotel be given consideration as a meeting place.

The meeting adjourned.

JOHN P. FERNANDEZ
Secretary-Treasurer

STATEMENT OF INCOME AND EXPENSE For the Year 1964

INCOME:—

Advertising	\$12,698.32	
Awards Contribution	1,500.00	
Annual Outing	975.00	
Dividends & Interest	382.50	
Dues	25,007.00	
Miscellaneous	172.25	
State Board Contribution	6,000.00	\$46,735.07

EXPENDITURES:—

Annual Meeting	\$ 326.89	
Annual Outing	1,258.82	
Awards & Scholarships	2,183.79	
Dues & Rebates	11,473.07	
Miscellaneous	817.85	
Monthly Meetings	547.77	
Public Relations & Publication	15,882.52	
Salaries	6,600.00	
Statewide Programs	1,143.31	
Stationery & Printing	2,649.29	42,883.31

Increase in Cash Assets	\$ 3,851.76
-------------------------------	-------------

RECONCILIATION:—

Bank Balance December 31, per Dec. Financial Report	\$11,870.54
Bank Balance January 1, per Jan. Financial Report	8,018.78
Increase in Bank Balance	\$ 3,851.76
Increase in Book Value of Assets	192.39
Decrease in Value of Emblems on Hand	— 36.30
Increase in Liquid Assets	\$ 4,007.85

STATEMENT OF LIQUID ASSETS
December 31, 1964

Cash in Bank	\$11,870.54
U. S. Savings Bond, Series J, March 1955	921.00
U. S. Savings Bond, Series J, April 1955	921.00
Columbia Homestead Association	2,000.00
Commonwealth Savings & Loan Association	2,000.00
Greater N. O. Homestead Association	3,087.55
Security Building & Loan Association	1,500.00
State Savings & Loan Association	1,500.00
Union Savings & Loan Association	1,500.00
Lapel Emblmes, Value of	88.70
Total Liquid Assets, December 31	\$25,388.79
Total Liquid Assets, January 1	21,380.94
Net Increase	\$ 4,007.85

MEMBERSHIP REPORT
December 31, 1964

GAINS:

Elected:	Members	66	
	Affiliates	12	
	Juniors	17	95

LOSSES:

Deceased:	Honorary	3	
	Life	1	
	Members	5	
	Affiliate	1	10
Resigned:	Members	22	
	Affiliates	7	
	Juniors	8	
	Students	10	47
Dropped:	Members	27	
	Affiliates	13	
	Juniors	30	70
			127
NET LOSS			32

TRANSFERS:

Member to Life Member	10
Junior to Member	7
Junior to Affiliate	15
Student to Junior	15

SUMMARY:

Honorary Members	10
Life Members	102
Members	1,295
Affiliate Members	229
Junior Members	279
Student Members	70
Total	1,985

'Engineering For Human Needs' Theme Of Engineers' Week

"Engineering for Human Needs" will be the theme of Engineers' Week, Feb. 21-27. The annual observance is sponsored in Louisiana by NSPE and LES.

Allen W. Betz, chairman of the week in New Orleans, said that events will begin Sunday Feb. 21, with "a prayer to Almighty God by the Churches of New Orleans for His Divine Guidance and Blessing that the work of the professional engineers be well directed toward the betterment of mankind."

Also on Sunday Mayor Victor H. Schiro of New Orleans and the Hon. Thomas F. Donelon, Jefferson Parish President, will issue proclamations designating Feb. 21-27 as "Engineers' Week."

Monday at 6:30 P.M. a dinner will be held at the Engineers' Club. Following the dinner at 8:00 P.M. will be a joint meeting between the New Orleans Chapter of LES and the National Association of Corrosion Engineers.

D. A. Tefankjian of Texas-Eastern Transmission Corp., Shreveport, La. will address the meeting. He will speak on "Cathodic Protection Rectifier Data Processing with Electronic Computers."

WWL-TV will conduct an interview with leading engineers on the "Info" show at 7:00 a.m. Tuesday. Topic of the interview will be "Engineering . . . For Human Needs."

On Thursday a joint luncheon-meeting will be held
(Continued on Page 25)

Engineering For Human Needs Good P. R. Theme For Future

The theme for Engineer's Week (Feb. 21-27), "Engineering for Human Needs," gives us a springboard from which we, as professional engineers, can follow through every day of the year, said Frank H. Walk, Chairman of the LES Public Relations Committee.

Walk said that "each of us should carry through the theme during the coming year in order to impress on the public the importance of the engineering profession's contributions to society."

"The work of the engineer is evident in all phases of our modern life, and we owe it to ourselves and to our profession to educate the public to the importance of the engineer to our modern world."

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LES CONTINUES SEARCH FOR EXECUTIVE SECRETARY

A Selection Committee is still receiving and screening applications for the newly created post of executive secretary of LES. The committee stated that those interested should submit their applications by March 16.

The Executive Secretary should be responsible for developing programs that would:

Provide good public relations.

Maintain a good working relationship with the State Legislature.

Promote membership.

Combat unionization.

Give a closer unity among LES state chapters.

Further interprofessional ties.

It is also required that the executive secretary should have no conflict of interest with the basic principles of LES, particularly affecting the welfare of the professional engineer in the educational, ethics, social and economic fields.

The Board of Direction is seeking to employ an executive secretary, to be an engineer or a person with a broad knowledge of the engineering profession, with executive ability and a knowledge of legislative proceedings, to be alert, aggressive, personable and widely acquainted throughout the state.

LES President John T. Knight, Jr. appointed a selection committee composed of C. W. Stokes, chairman; Louis Duclos and F. H. Walk to accept and screen applications and recommend selection to the Board. Anyone interested in being considered for this position, please see the notice on this page.

NSPE PUBLIC RELATIONS REPORT

A multitude of press interviews with NSPE directors at the recent winter meeting of the NSPE Board of Directors at the Jung Hotel, New Orleans, Jan. 19-23, gave the public a rare insight into the makeup of a distinguished professional engineering body.

The following is an itemized list of interviews arranged by LES public relations counsel in conjunction with the NSPE public relations director:

Advanced publicity carried by THE LOUISIANA ENGINEER and The Times-Picayune.

Announcement of the meeting carried in the first section of The Times-Picayune and a feature on women's activities in the Society/Women's Page of the Times-Picayune (242,000 circulation).

An interview with Paul Robbins by the States-Item before the opening of the meeting. The interview dealt with national legislation of interest to NSPE prior to the opening of Congress on Jan. 20, 1965 (circulation 150,000).

NSPE President B. H. Backlund interviewed on the interstate highway system in the States-Item.

H. E. Bovay, Jr. interviewed on spacecraft by the States-Item and on "Relation of the Engineer to the Community" on WWL-TV (Channel 4) (five minutes).

The tape was made available to Bovay for use in Houston during Engineers Week. Mention of the Humble Oil and Refining Company's Houston project prompted a call to Carl Herrington, New Orleans, senior vice-president for Humble operations in the Gulf Coast to advise him of the time of showing.

Waldemar S. Nelson, NSPE Director for Louisiana, had a 15-minute interview over WWL Radio on the meaning of the NSPE and its relation to local professional engineers and the public.

B. H. Backlund was interviewed on international engineering by the Times-Picayune.

Keith McDaniel, vice-president, Boeing Co., interviewed by the States-Item on government economy in the space program.

J. Neils Thompson, professor of engineering at the University of Texas and director of Balcones Research Center, Austin, Tex. was interviewed on the value of youth as Louisiana's number one resource.

Joseph Gillman, chairman of public relations of NSPE and past chairman of Water Pollution and Walter Gordon, Tacoma, Wash. consulting engineer were interviewed as a two-man panel on WDSU Radio's "Conversation Carte Blanche." They discussed water and air pollution.

John Russell Gaugler was awarded the "Engineer in Management Award" presented by LES at a luncheon at the Jung. An advance story was carried in the Times-Picayune, plus television coverage and a special story to the Lafayette Advertiser and wire service coverage.

William L. Crowder, chairman, REI functional section

Executive Secretary

The Louisiana Engineering Society, established 1898, having just completed re-organization plans, desires to employ a full-time Executive Secretary.

Under the direction of the elected officers, this man will handle business affairs, public relations programs, membership development, inter-professional relations and legislative affairs for the Society.

Individuals interested in being considered for this position, submit written application accompanied by detailed resumé of experience and qualifications to anyone of the following named members of the Selection Committee:

C. W. Stokes, 1311 Eleventh St., Lake Charles, Louisiana.

Louis Duclos, 4328 Hyacinth Ave., Baton Rouge, Louisiana.

F. H. Walk, 833 Howard Ave., New Orleans, Louisiana 70113.

and Waldemar S. Nelson were jointly interviewed by the Times-Picayune on professional engineers and the union.

T. M. Linville, manager of research applications, General Electric Co., Schenectady, N. Y. was interviewed on WWL-Radio on fuel cells, automation, plastics and products of the future in relation to engineering.

Mrs. B. H. Backlund, Mrs. J. Neils Thompson and members of the Women's Auxiliary of LES were interviewed on WVUE-TV (channel 6).

R. P. Westerhoff, national director of NSPE, New Jersey, spoke on the construction of tall buildings and the role of professional engineers on WWL Radio.

An editorial appeared in the States-Item concerning Keith McDaniel and economy in the space program.

Three photos of delegates and ladies appeared in a wrap-up on WVUE-TV (Channel 12) news. The script was prepared by Allen Johnson.

PRESTRESSED CONCRETE TESTED AT TULANE

NEW ORLEANS—Prestressed concrete is playing a major role in today's world of fast-rising mammoth bridges and towering skyscrapers.

And it will play an even greater part in tomorrow's innovations—monorails, heliports and deep sea oil rigs.

A research project being conducted by Dr. Robert N. Bruce, Jr., LES, associate professor of civil engineering at Tulane University, may give added impetus to pre-

stressed concrete's position in the construction world.

Dr. Bruce's study involves: (1) developing a method of giving prestressed concrete greater strength at less cost; (2) finding a way to predict at what point a prestressed concrete beam may fail; and (3) making it possible to forecast whether failure will be shear (vertical) or flexural (longitudinal).

Three types of concrete are used in construction today: (1) plain concrete; (2) concrete with reinforcing rods; and (3) concrete containing horizontally-laid reinforcing rods which are prestressed before the concrete is poured.

Reinforced steel rods add greater strength to plain concrete. Prestressing these rods gives it even more strength.

Many contractors, in addition to prestressing the horizontal rods, place reinforcing steel in a vertical position to provide greater strength to the beams. But these are not prestressed, primarily for two reasons: (1) the added cost in labor; and (2) the increased cost of high-strength steel used in prestressing.

But Dr. Bruce's research may pave the way for two-way prestressing in the future. In prestressing stirrup-formed steel rods vertically in concrete beams, Dr. Bruce hopes to increase the strength of a concrete beam by 40 per cent without the addition of extra steel or concrete.

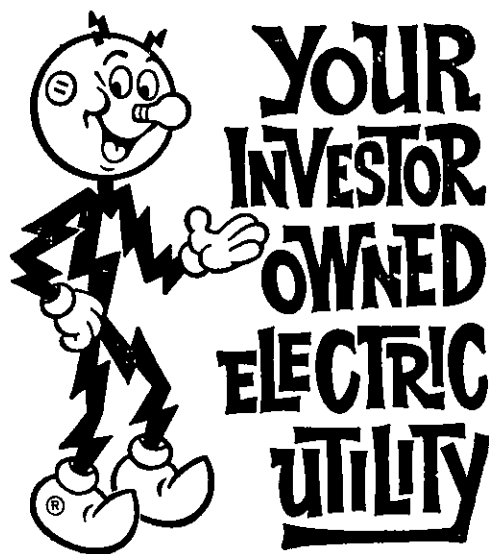
The result: smaller beams could be used to support larger loads.

With the dual prestressing, Dr. Bruce hopes to control both flexural failure, which occurs in a vertical plane, and shear failure, which takes place in an inclined (45-degree) plane.

Shear failure is much more dangerous because there is no advance warning. When the beam gives way, chunks of concrete may be hurled into space, Dr. Bruce notes. But flexural failure is a gradual process characterized by the bending of the beam.

Engineers would like to know how much load a given beam can take before it collapses, Dr. Bruce points out. Then, it would be possible to construct a beam to meet the specific carrying load requirements of a certain bridge. Thus, a certain safety factor capacity could be maintained economically.

Prestressing concrete is performed by stretching the steel reinforcement, then pouring concrete around it, allowing the concrete to harden and then releasing the steel. The hardened concrete prevents the steel from



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contracting, thus inducing stress in the concrete, Dr. Bruce explains.

It is this prestressed concrete—in prototype 50-foot-beam size—which will be used in the Tulane experiment. This will be the first time a major research project is being conducted with the regular beams instead of the small, experimental-size ones, the Tulane civil engineer points out.

During a six-hour test, hydraulic jacks will be used to force a shear failure in the prestressed beam. Strain gauges placed on the concrete and the longitudinal and vertical reinforcement will trace the start, progress and final failure of the beam.

A microphone on the concrete will pick up the first sound of a crack—and students with microscopes will search for the first visible signs of impending failure.

"During the entire test we will be able to tell how much of the shear is being carried by the concrete and how much by the stirrups," Dr. Bruce reports. "As we change the amount of prestress in the stirrups, we will be able to see how these quantities vary."

This phase of the study is designed to predict the performance of prestressed concrete beams, resulting in more economical construction.

In bridge construction, significant savings might result by prestressing vertical stirrups, Dr. Bruce notes.

"Suppose one concrete beam could have been eliminated from the deck of each of the twin 5½-mile-long bridges between New Orleans and Slidell," Professor Bruce suggests. "This would have meant saving the cost of 290,400 feet of concrete beam per bridge at an estimated \$10 a foot—or \$580,800."

If prestressed concrete can be constructed economically and mass produced, it could be used for apartments and for homes on competitive basis, Dr. Bruce believes. Advantages include low cost and low maintenance, better insulation, longer life and greater strength.

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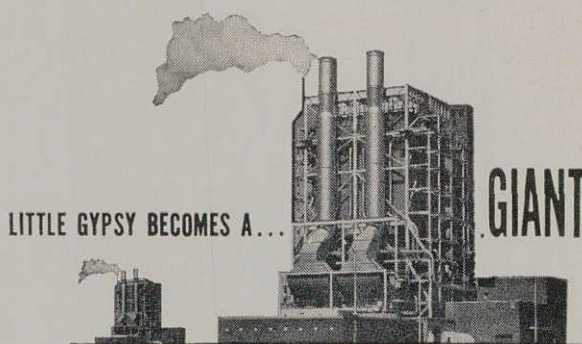
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annual costs are lower, *including maintenance*. They are water-and-frost-resistant, and do not lose strength during the critical spring thaw period. Too, Asphalt surfaces are not harmed by de-icing salts and there are no summer-time pavement "blow-ups," no thump . . . thump . . . thump. Stage-construction is another advantage offered by modern Asphalt pavements . . . you build the roads you need or improve the roads you have, as needed.

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*Asphalt surface on Asphalt base



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NEW ORLEANS PLAYS HOSTS



Approximately 250 leading engineers throughout the country participated in the NSPE Winter Meeting held in New Orleans Jan. 19 through 23. One of the participants was K. K. McDaniel, Seattle (Fifth from left in white shirt), an aeronautical engineer with Boeing Co. McDaniel told interviewers of the government's hopes of getting more out of the tax dollars by finding new uses for obsolete missiles.



Professional meetings ranging from committee reports on public relations to young engineers occupied NSPE members during the five day Winter Meeting in New Orleans.

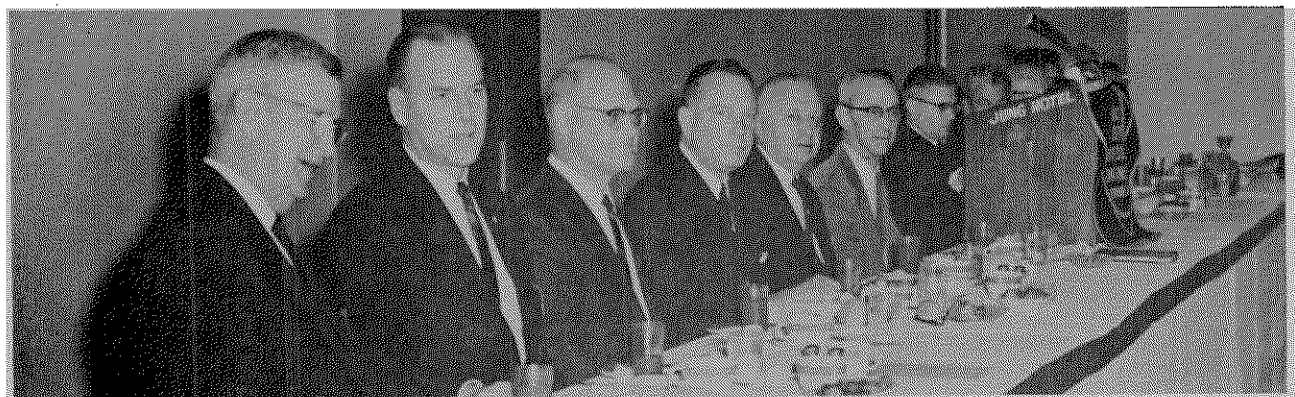


(From left) Waldemar S. Nelson, NSPE director for LES; Col. John T. Knight, Jr., LES President and Brandon H. Backlund, Omaha, NSPE President compare notes at a luncheon during the winter meeting.

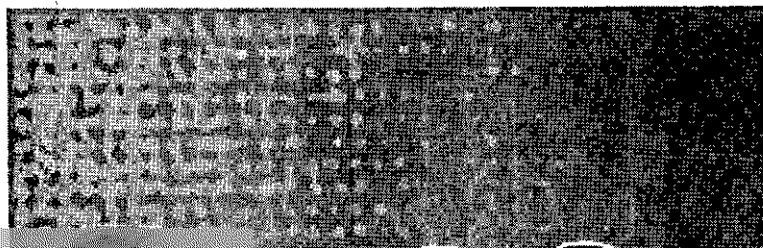


Charles "Chuck" Keller, Jr., LES New Orleans, immediate past president of Associated General Contractors, Inc., delivered the keynote address at the NSPE winter meeting luncheon. Keller told the group that "almost without exception" all principal construction firms now are headed by engineers.

TO NSPE WINTER MEETING



(From left) Col. John T. Knight, Jr., President, LES; Brandon H. Backlund, Omaha, President, NSPE; James S. Janssen, Clayton L. Nairne, John Russel Gaugler and Charles "Chuck" Keller, Jr. attended the NSPE winter meeting luncheon. Gaugler, Lafayette, was presented the first A. B. Paterson "Engineer in Management" award at the luncheon. The award, a two and one-half inch bronze medallion designed by New Orleans sculptress Angela Gregory, was presented by Nairne.



Participating in the past presidents' panel were (from left) Clark A. Dunn, Harold Mosher, B. H. Backlund (president) and Harvey Pierce.



A highlight of the NSPE Winter Meeting in New Orleans was The State of The Society Dinner held in the Presidential Salon of the Jung Hotel in New Orleans.

HIGHLIGHTS OF NSPE WINTER



Out-of-town engineers and their wives took time out from the round of meetings to tour New Orleans famed Garden District.



The ladies program included a walking tour of the Vieux Carré. Enjoying a stroll down New Orleans' world famous Royal Street are (from left) Mrs. Frank A. Birdsong, New Orleans; Mrs. J. Neils Thompson, Austin, Tex., and Mrs. J. T. Knight, New Orleans.



Enjoying the view of Brennan's Patio are Mrs. Waldemar S. Nelson and Mrs. G. M. Baccich, both of New Orleans, and Mrs. B. H. Backlund of Omaha, Neb.



Relaxing after a hectic day of sight seeing are (from left) Mrs. Kenneth Parsons, Bangor, Me.; Mrs. Barry Feldman, Belmont, Mass.; Mrs. Roger Loveless, Columbus, O.; and Mrs. Paul Furney, Columbus, O.

MEETING IN NEW ORLEANS



(From right) Mrs. Roy Johnson and Mrs. O. E. Barron, Jr., both of New Orleans, welcome Mrs. Clifton Kent of Harrisburg, Pa. to the Crescent City and the Winter Meeting of NSPE.



Mrs. A. W. Thompson, Mrs. E. McNamara and Mrs. Bernard Louviere, all of New Orleans, take over the chores at the registration desk.



An ante-bellum home in New Orleans' Garden District is visited during the NSPE Winter Meeting.

NSPE WINTER MEETING IN REVIEW

Approximately 250 leaders in all phases of engineering from throughout the country attended the LES hosted NSPE winter professional meeting in New Orleans Jan. 19-23.

One of the highlights of the five day meeting was the presentation of the first A. B. Paterson "Engineer in Management" award to John Russell Gaugler of Central Louisiana Electric Co., Inc., Lafayette, La.

The award, the first of its kind to be given, is a two-and-one-half inch bronze medalion designed by New Orleans sculptress Angela Gregory.

It was presented to Gaugler in appreciation of his more than 40 years' work in various phases of public utilities management. He retired as a vice-president of the Central Louisiana Electric Co. last February.

Clayton L. Nairne, president, New Orleans Public Service, Inc., made the presentation. He was introduced by James S. Janssen, chairman of the honors and awards committee of LES and a past president.

A luncheon address was delivered by Charles (Chuck) Keller, Jr., New Orleans, immediate past national president, Associated General Contractors, Inc., and president of Keller Construction Corp.

Keller told the group that almost all principal construction firms today are headed by engineers.

"The day when a carpenter, electrician, etc., could head a construction firm and make a success through his own native ability is fast coming to an end," Keller said.

He said that this has been brought about by the increasing complexity of construction work in the bidding stage (as opposed to the execution stage) when exact specifications are needed.

"To bid successfully a contractor must know the technical specifications. Only an engineer would have the training and knowledge necessary to judge these specifications accurately," he said.

Brandon H. Backlund, Omaha, Neb., president of NSPE, in an interview described the engineering profession as "the backbone" of help for underprivileged countries in the Caribbean and Latin and South America.

Backlund said that the activities of the Engineering profession constitute the basis for almost all projects in connection with such programs as the Alliance For Progress.

He explained that these programs arise from the countries' basic needs, agriculture which involves raising food for the countries' people as well as for marketing, and development of commerce and natural resources—all of which require basic engineering.

"With such programs in progress," Backlund said, "consulting engineering firms are seeking to be of assistance beyond the continental boundaries of the United States."

John F. Shivler, chairman of PEPP, charged the federal government is openly competing with private engineering firms in many cases.

He said his group will ask Congress in the current session for modifications in the Federal Highway Act, making it clear that state highway departments can re-

tain private consulting engineers at their discretion.

Shivler said the General Accounting Office has interpreted the highway act to mean state highway departments should utilize large engineering crews of their own on Interstate Highway work.

PEPP disagrees with this, he said.

"We believe private consultants could and should be used to a greater extent in the U. S. highway program," Shivler said.

K. K. McDaniel of Seattle, an aeronautical engineer with the Boeing Co., said that the federal government, in an economy measure, has launched a program to convert obsolete liquid-fuel missiles into target systems for their successors.

Tests are being made with the A-model BOMARC ground-to-air defense missile to see if it can be changed into a "clay pigeon" for the latest missiles.

McDaniel said the government hopes to get more out of tax dollars by finding new uses for obsolete missiles which were developed at tremendous cost.

Harry E. Bovay, Jr., civil engineer from Houston, whose firm has been employed in the nation's space work, sees no radical change soon in the bell-shaped design of the astronauts' spacecraft. He said researchers with his firm have found a way for space capsules to survive greater sound vibrations caused by reentry, and this may bring about minor modifications in design.

J. Neils Thompson, professor of civil engineering and director of the Balcones Research Center at the University of Texas, said Louisiana should treat its youth as its principal resource. He is NSPE president elect.

He said the state had a great opportunity to move its research and development programs but can only do so by providing top educations for the state's youth.

Paul H. Robbins, NSPE executive director, said that engineers will have a key role in legislation on air and water pollution to be considered during the current session of Congress.

"Undoubtedly, we have to clean up our air and get water as potable as possible," he said.

"We can't continue to expect the vehicle of water to carry the wastes of industry and humanity."

WANTED: BOOKS

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Memorials

T. EDWARD ERNST

On October 19, 1964 our Heavenly Father the giver of life in His infinite wisdom called to His eternal reward our fellow member, T. Edward Ernst. Surviving are his wife, the former Irene Karst, a daughter, Mrs. Donald I. Mackenroth, and two sons, Thomas and Gerald.

Mr. Ernst attended the University of Alabama receiving a Bachelor of Science in Civil Engineering in 1931. After his graduation he served as engineer with the Louisiana Department of Highways, as Utility Engineer for the City of New Orleans, and as Assistant Engineer-in-Charge of the Union Passenger Terminal Project of the City of New Orleans.

In 1940 Mr. Ernst entered the service of the Corps of Engineers serving successively as Principal Engineer in the War Department, Chief of Materials and Equipment Branch, Chief of Electrical Equipment Branch and Chief of Lumber Branch of the Conservation Division. At the time of his release from the service he held the rank of Lieutenant Colonel.

In 1947 on his return to New Orleans, Mr. Ernst began private practice as a Consulting Engineer. Typical of the projects he handled under prime contracts were the North Claiborne Avenue and South Jefferson Davis Parkway Overpasses for the New Orleans Railroad Terminal Board, water filtration plants for St. Bernard Par-

ish, Marrero and East Jefferson Parish and many water distribution systems, sewer collection systems and drainage facilities in the Greater New Orleans area.

He was a member of the Gulf Institute of Consulting Engineers, Consulting Engineers Council, American Society of Civil Engineers, Society of American Military Engineers, American Public Works Association, and the Engineers Club of New Orleans of which he was the Immediate Past President.

To Ed's many friends he was a kindly, understanding and personable individual. His innumerable accomplishments have always been characterized by unselfish spirit, untiring zeal and energy. His exemplary life has proven him to be one of the city's outstanding engineers and leading citizens.

The Louisiana Engineering Society mourns the passing of our fellow member—T. Edward Ernst—whose loss will ever be felt in our Society and our community, and we do hereby offer our sincere condolence and deep sympathy to his family in the knowledge that his good deeds have earned him peaceful rest in the Great Beyond.

B. M. DORNBLATT

RUSSELL A. HALL

FRANK W. MACDONALD

HENRY F. OWSLEY, JR.

EJC Notes

A new schedule of sessions of the EJC-Battelle Memorial Institute training course in abstracting and indexing technical literature has been establishing to cover the first half of 1965.

These courses, each five days long, are conducted by Batelle according to specification established by EJC. The program of instruction and drill in coordinate indexing with links and roles will equip course registrants to properly utilize articles which have been source indexed by EJC methods, and to apply the same techniques to their own information systems.

The dates and locations of sessions for the first half of 1965 are:

Location	Week
Washington, D. C.	March 1-5
New York	March 15-19
Columbus	March 29-April 2
Albuquerque	April 26-30
Chicago	May 10-14
New Orleans	May 24-28
San Francisco	June 7-11
Washington, D. C.	June 14-18
San Diego	June 14-18
Kansas City	June 28-July 2

Further information and registration blanks may be obtained from J. C. Costello, Jr., Group Director, Information Systems Research, Battelle Memorial Institute, 505 King Avenue, Columbus, Ohio, 43201.

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Appointment **Field Notes** By Allen Johnson

NEW ORLEANS: Appointment of Dr. Lee H. Johnson, LES, dean of the Tulane University College of Engineering, as consultant to the city utilities department was announced by Mayor Victor H. Schiro recently.

The mayor at a press conference asserted that Dr. Johnson's acceptance of the duties of consultant to the department represented an example of cooperation between private citizens and the city government.

Schiro said that the terms under which Dr. Johnson's services will be retained by the city administration will be announced in the near future.

City Chief Administrative Officer Thomas J. Heier, Jr., remarked at the press conference that one of Dr. Johnson's first tasks to be performed for the utilities department will be an evaluation of reports by utilities companies such as NOPSI and Southern Bell Telephone and Telegraph Co. containing their recommendations with regard to the feasibility and cost of laying utility lines and other facilities underground rather than over head. A report has been received from the telephone company and the council was advised that one would be received from NOPSI in 120 days.

James S. Janssen, Chairman, Honors and Awards Committee, announced that he wished to receive nominations for awards to be made at LES' 1965 Annual Meeting to be held in New Orleans in July.

"While it is not imperative that these nominations be made or sponsored by a local chapter," Janssen said, "The chapter's support of a nomination is highly desirable from several points of view.

"Nominations from your chapter should be in your hands by April 1 for consideration and recommendation by you and your officers. These seemingly early deadlines are necessary to allow for dispatching to the members of the committee in various parts of the state, discussions (perhaps by mail), voting, and finally engraving before the July Annual Meeting," he said

The four awards available are: 1) The Civic Activities Medal—Andrew M. Lockett Award, 2) The Technological Accomplishment Medal, 3) The Charles M. Kerr Public Relations Award, 4) Honorary Membership.

Previous references to these awards were in THE LOUISIANA ENGINEER for April, 1964 (P. 22), June, 1964 (P. 28), August, 1964 (P. 20) and in a letter sent you by LES Secretary-Treasurer, John Fernandez on June 20, 1964.

NEW ORLEANS, La.—The first major flight component for the Saturn V-moon rocket booster departed the National Aeronautics and Space Administration's Michoud Operations by barge recently enroute to NASA's Marshall Space Flight Center at Huntsville, Ala.

The 33-foot diameter thrust structure, built by The Boeing Company's Launch Systems Branch, will be assembled at Marshall into the first Saturn V flight booster (S-1C-1). The 60,000-pound corrugated tail section, which will support the booster's five, 1.5-million-pound-thrust engines, is one of five major structural units comprising the 138-foot-tall first stage.



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NSPE Meeting

Auxiliary Notes By Mrs. Edward J. Welsch

A local officer of LES brought his garden to the Jung Hotel for the NSPE Winter Meeting, reports Mrs. Otha E. Barron, Jr., president of the Women's Auxiliary.

"A group of some 50 wives accompanied their husbands to the five-day parley in this flower-laden Deep South City, and the auxiliary went all-out to sell New Orleans and Louisiana to them," she added.

"Walter J. Verlander, finance chairman for the national parley, had a hundred camellia bushes abloom in his garden. Well, he didn't transport the bushes to the Jung, but he plucked the gorgeous blossoms and had them dewy-fresh at the auxiliary's registration desk for the visitors," Mrs. Barron relates.

The visitors and their camellias toured the flower-filled Garden District and the Vieux Carre during their stay here, and they got acquainted with Louisiana's products.

After breakfast at Brennan's they were taken on a guided tour of the French Quarter. They later toured the Garden District where they got to see interiors and gardens of some of the ante-bellum homes.

The visitors also gathered at a meeting at the Jung Hotel to exchange ideas and report on their program of helping engineering students by fellowships, scholarship funds and student loan funds.



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"We're right-hand helpers to the Louisiana Engineering Society in all its undertakings," Mrs. Barron said.

The auxiliary also gave away Louisiana products by the bags full—bags tied with Mardi Gras ribbons and containing Creole recipes.

The climax of their visit to the Sunny South was a buffet luncheon at Al Hirt's Club on Bourbon St. right in the heart of the Vieux Carre.

Cement As Stabilizer Used In Experiment

NEW ORLEANS—Can anything be done to prevent sewer pipes from sinking in the soft soil of the marsh lands along the Louisiana and Mississippi Gulf Coast?

What about the aggravating and costly problem of cracked sidewalks, settling foundations and splitting concrete?

A team of Tulane University research engineers is attempting to find a solution to what has been an expensive headache for sewer and construction contractors in this coastal area.

Importance of the research is emphasized by a Tulane engineering report showing an estimated \$25 million was spent on sewer construction along the southern coast of Louisiana and Mississippi during the last year.

Trouble develops from the soft, sandy soil, mixed with peat and clay which is not capable of holding heavy weights for long periods of time.

This means Big Trouble to sewer pipes after several months or years in this type of soil—particularly where high water tables drop during prolonged periods of scorching temperatures:

Underground pipes and surface manholes begin to rise and fall with the seasons. Joints break. First sand, then water enters the sewer lines. Pipes clog. Seepage occurs. And during rainy seasons, pumps are strained to capacity in removing the surplus water.

All of this adds up to extremely high maintenance and replacement costs.

And all of this is of profound concern to John K. Mayer, LES, and Dr. Frank W. Macdonald, LES. Tulane University professors of civil engineering, who are coordinating a research project designed to find the right blend of bedding material to rest sewer pipes in order to increase the bearing capacity and reduce settlement to a tolerable degree.

Research has begun in the laboratory of the Civil Engineering Department at Tulane—and in various sections along the Louisiana Gulf Coast where sewer systems are being installed.

In the Tulane laboratory, a large steel framework has been constructed for support of a steel tank, 23 feet long with dimensions of four feet, nine inches in height and width.

Soft clay, peat or organic soil material is being placed in the tank, then covered with different types of stabilizing material, such as shell and river sand. Then Portland cement and/or lime is being added.

The use of cement as a stabilizer base is a new experi-

ment—and may be the key to the success of the project, Professor Mayer points out.

After the base has been laid in the tank, pipes in size of eight of 15 inches are placed in four sections of the tank, and then covered with soil. Hydraulic jacks connected to pumps are used to create stress on the pipes—and gauges check each movement.

Infiltration studies will be made by bringing the water level up in the pipes. Researchers will narrow the width of the trenches containing the sewer pipes to see what effect the additional stress will have on them.

Through these experiments, the Tulane engineers hope to be able to find out what happens to the bedding material under various conditions and environments—and whether the pipes move laterally or vertically. Their purpose is to determine the best type of bedding material and optimum thickness of bedding layer for various sizes of pipe.

However, the reliability of the material can only be measured after it has been used in the field and given the proper test of time, Professor Mayer emphasizes.

If the project is successful, huge savings in time and money could result through greatly decreased maintenance and replacement of pipes. In addition, the Tulane engineers believe the research may yield or produce useful information on bedding in shallow foundations for other types of construction, such as sidewalks and residences.

Statute of Limitations

The following article originally appeared in the December, 1964, issue of THE NEWS LETTER published by the California Council of Civil Engineers and Land Surveyors. We thought it of sufficient interest to reprint in THE LOUISIANA ENGINEER.—Ed.

Mr. John Maloney of the San Francisco law firm of Weinstock, Anderson, Maloney & Chase wrote on the statute of limitations proposal to the Assembly Interim Committee on Judiciary at the request of the California Council and the Consulting Engineers Association.

Mr. Maloney's 3,000-word letter plus enclosures reviewed and reinforced many of the arguments that were advanced at the October 20 hearing on the subject by the Interim Committee. Excerpts from the letter are reproduced here. In his letter Mr. Maloney also brought out some of the reasoning which appeared in the Consulting Engineer (February 1964) article "Why Statutes of Limi-

tations?" by Milton F. Lunch, Legislative Counsel, NSPE, and in the Insurance Law Journal (August 1964) article "Adjusting and Defending Claims Under Architects' and Engineers' Professional Liability Policies" by Norbert A. Drake.

"... In the words of the United States Supreme Court, 'Statutes of limitation are vital to the welfare of society and are favored in the law. They are found and approved in all systems of enlightened jurisprudence. They promote repose by giving security and stability to human affairs. An important public policy lies at their foundation. . . . While time is constantly destroying the evidence of rights, they supply its place by a presumption which renders proof unnecessary' [Wood v. Carpenter, 101 U.S. 135; 25 L.Ed. 807]

"Statutes of limitations are enacted as a matter of public policy to promote justice by preventing the assertion of claims after the lapse of long periods of time, to the surprise of parties or their representatives after evidence has been lost, memories have faded, and witnesses have disappeared or died, making it impossible or extremely difficult to prove the actual facts or make a fair presentation of the case. [31 Cal. Jur.2d p. 428 and case authorities cited]

"Statutes of limitations are favored in the law, as tending to promote desired social ends—that is, as affording repose from fraudulent and stale claims to defendants who may have lost the means of procuring evidence, thus giving security and stability to human affairs. [31 Cal. Jur.2d, pp. 429, 430; 53 C.J.S. pp. 902, 903]

"Although differing somewhat in wording and detail, the two legislative proposals presently under consideration by your Committee and to which this communication is directed, would establish an absolute maximum period of six years from the allegedly negligent conduct or omission (in the case of the AIA proposal, six years from the date of "substantial completion," as defined) within which an action to recover damages arising out of the allegedly defective or unsafe condition or design of an improvement to real property may be brought against persons who plan, perform, design or supervise the construction of such an improvement or who have performed or furnished surveys, maps, location studies, designs, specifications, plans or drawings therefor.

"We submit that the object, purposes and effect of the basic principle common to both of these legislative proposals is not only wholly consistent with but also in fur-

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therance of the public policy inherent in limitation of actions statutes as enunciated by the courts and in the authorities hereinabove cited.

"As was and is pointed out in the testimony and other material submitted to the Committee at the San Francisco meeting of October 20, 1964, and the supplemental material subsequently filed with it by others, under existing law there is no point in time when the exposure of an architect, civil or mechanical engineer or land surveyor to a suit and judgment for damages allegedly resulting from negligence in the performance of his professional services terminates with finality.

"This is because the periods of time specified in existing statutes of limitation within which law suits must be brought start to run from the date of the 'accrual' of the cause of action, and, in the case of damages to person or property arising out of alleged negligence, the cause of action arises or accrues, not from the time of the negligent act or omission, but from the time that the injury or damages occur to the claimant.

"This means that the potential liability of an architect, engineer or land surveyor to law suit and judgment for damages allegedly arising out of any professional assignment performed by him or his employees at any time throughout his entire career continues during his entire lifetime and, in the case of causes of action that survive the death of the tortfeasor, even beyond his lifetime and so as to be a charge against his estate.

"The existence of such condition of the law is certainly the antithesis to the promotion of repose and the giving of security and stability to human affairs and casts serious doubts on the extent to which any system of jurisprudence that permits this can be said to be enlightened.

* * *

"The state of Connecticut has gone so far as to fix an over-all limitation period for personal injury actions *against any and all persons*, that commences to run from the date of the allegedly negligent act or omission. Section 52-584 of Connecticut General Statutes today provides that actions for personal injuries caused by negligence shall be barred after "one year from the date when the injury is first sustained or discovered or in the exercise of reasonable care should have been discovered . . . *except that no such action may be brought more than three years from the date of the act or omission . . .*" [Emphasis added]

"While the number of states that have recognized this problem and enacted legislation to relieve architects, engineers and land surveyors from lifetime exposure to actionable liability for alleged negligence in the performance of their professional assignments is not large, we submit that the actions by these states exemplify enlightenment in their systems of jurisprudence such as furthers the public policy underlying statutes of limitation, viz., to promote repose by giving security and stability to human affairs.

* * *

"While a maximum six-year statute of limitations would outlaw any cause of action which an 'innocent' third party otherwise might have been able to assert against an architect or engineer, it would in no way adversely affect his cause of action against the owner of property whose dangerous and defective condition is the proximate cause of injuries or damage to him. The 'innocent' third party,

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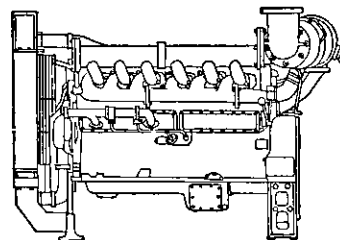
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then, would not be without his remedy against a financially responsible party upon whom, we submit, liability should rest after a fixed number of years use of the property by him (or by his predecessor in title) from acceptance of the construction work.

* * *

"Like any other statute of limitations, the proposed legislation is procedural; it would affect the remedy only, and not the substantive right or obligation. [*Chase Sec. Corp. v. Donaldson*, 325 U.S. 304] The substantive cause of action would not be extinguished by the proposed legislation any more so than in the case of other statutes of limitation and unless the procedural bar of the statute were raised as an affirmative defense it would be deemed waived. [See 63 Harv. L. Rev. 1198]

"To the suggestion made by a member of the Committee at its San Francisco meeting that there may be no need for legislation of the type under consideration since architects, engineers and land surveyors have no liability to others except where they are at fault, we wish to point out to the Committee that the merits of any cause of action, i.e., fault or nonfault on the part of a defendant, are never involved when the statute of limitations is raised in bar of the claim. The question to be considered by the Committee is not whether the prosecution of some causes of action that are valid on their merits will be barred by the proposed legislation; rather, it is whether the repose and the security and stability in human affairs that is so vital to the welfare of society and that will be enhanced by the proposed legislation outweighs its adverse effect upon the enforcement by some individuals of otherwise meritorious causes of action. This question and its

resolution are inherent in all statutes of limitations.

"We respectfully call to the attention of your Committee the fact that the legislative proposal made by the two organizations represented by the undersigned expressly provides that the limitation stated therein 'shall not be a defense to any suit brought against any person in actual possession and control, as owner, tenant, or otherwise, of the improvement.' This provision is in keeping with the intent to preserve the right of any claimant to enforce his rights against the property owner or occupant without interposition of the bar of the limitations period proposed." . . .

(Continued from Page 9)

between LES and the Members Council of the Chamber of Commerce of the Greater New Orleans Area in the Grand Ballroom of the Roosevelt Hotel.

U.S. Rep. George P. Miller (D.Calif.), chairman of the House Science and Astronautics Committee, will address the meeting.

At 6:30 p.m. Thursday LES will meet with the New Orleans Section of ASME in the Carnival Room of the Fontainebleau Motor Hotel. The meeting will open with a social hour at 6:30 followed by dinner at 7:30.

At 8:30 p.m. George J. Huedner, Jr., Director of Research for the Chrysler Corporation, will address the meeting. Huedner, who designed the turbine engine and who is often referred to as the "Father of the Turbine Car" will speak on the "Chrysler Corporation Turbine Car."

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with the eighth race dedicated to the engineering profession. A trophy will be presented by Hoyt Brown, chairman of Engineers' Week for Louisiana.

President Lyndon B. Johnson in a letter to the NSPE proclaiming Engineer's Week said in part:

"In the past, the American engineer has contributed much to the preservation of national well-being and security. New horizons beckon to us beneath the sea, in space, and in the interior of the earth. The greatest of the challenges presented will be related to improving the life of man. Better housing, modernization of transportation, freedom from the hazards of air and water pollution, greater control over the destructive forces of nature, and the establishment of a new and attractive urban environment must all be realized as we advance toward the Great Society."

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Application Engineers to Southern Industry

From Secretary To Engineer

From secretary in an insurance firm to secretary of the National Society of Women Engineers is the career chronology of Miss Lydia Pickup.

Miss Pickup, electrical engineer at Boeing Company's Saturn Booster branch of the National Space Administration, Michoud, explains: "I actually got my foot into the door of the space world when I enlisted in the WAVES during World War II.

"After the war, under the G.I. bill, I went to the University of Wisconsin and majored in electrical engineering.

"Then came the Korean conflict and my recall to active duty. After that I got my first job as an engineer with Boeing in Seattle, Wash., building mobile trainers for the U. S. Air Force.

"If I weren't pigheaded, I would have taken the advice of a certain college professor who preached that women didn't belong in the engineering world. There's one in every high school and college faculty.

"Student counselors at high school as well as college level are neglecting to recommend engineering as a career for girls who show mathematical aptitude."

Miss Pickup explains that the 800 members of the Society of Women Engineers, organized in 1952, can do much towards encouraging women with suitable aptitudes and interests to study engineering.

"This is one of the objectives of the Society," she points out.

"We also are making available such information as is not otherwise readily obtainable, so that the full capabilities of women engineers may be used for the advancement of engineering and science.

"A scholarship fund is being supported by our members and friends to aid young women interested in obtaining an engineering education."

Largest Construction Program In Cleco's History Planned

The Central Louisiana Electric Co., an electric-gas utility serving some 130 communities in 31 Louisiana parishes, has budgeted approximately \$26,648,000 for construction during 1965.

This is the largest 1-year construction program in the history of the company, according to P. E. Randol, vice president of engineering.

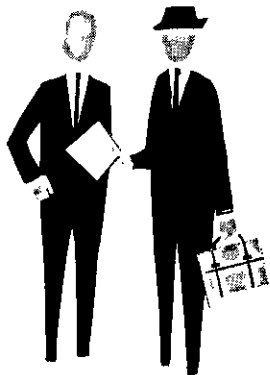
Major projects during 1965 include a \$15-million, generating unit at Coughlin power station in St. Landry Parish to double present capacity.

Appropriations for gas projects through the company's subsidiaries Louisiana Intra-state Gas Corp. and South Louisiana Production Co. total more than \$3,500,000 for 1965.

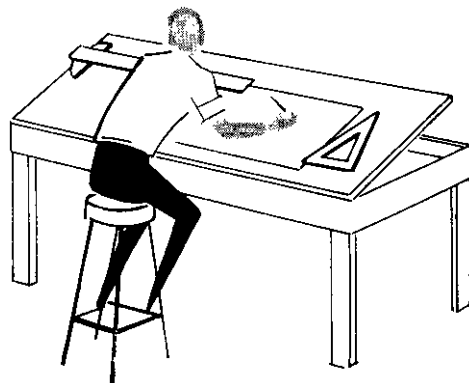
Gas construction projects will include 30 miles of new 16" gas pipelines, and construction of a third gas processing plant, details of which are to be announced later this year.

The announcement also stated that the firm's projected budget for construction through 1969 is an estimated \$94,000,000.

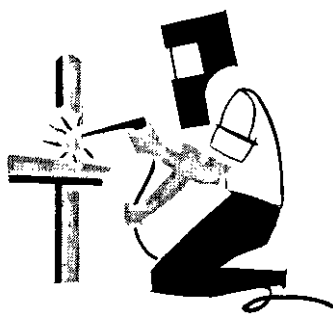
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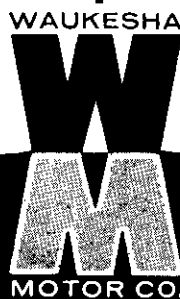
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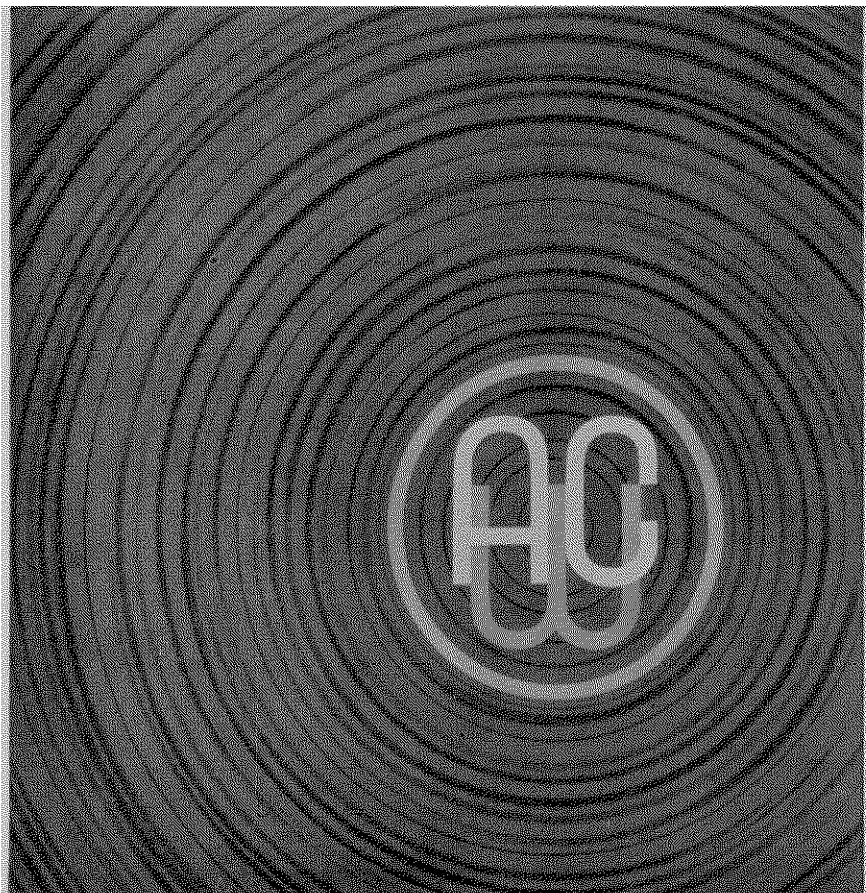
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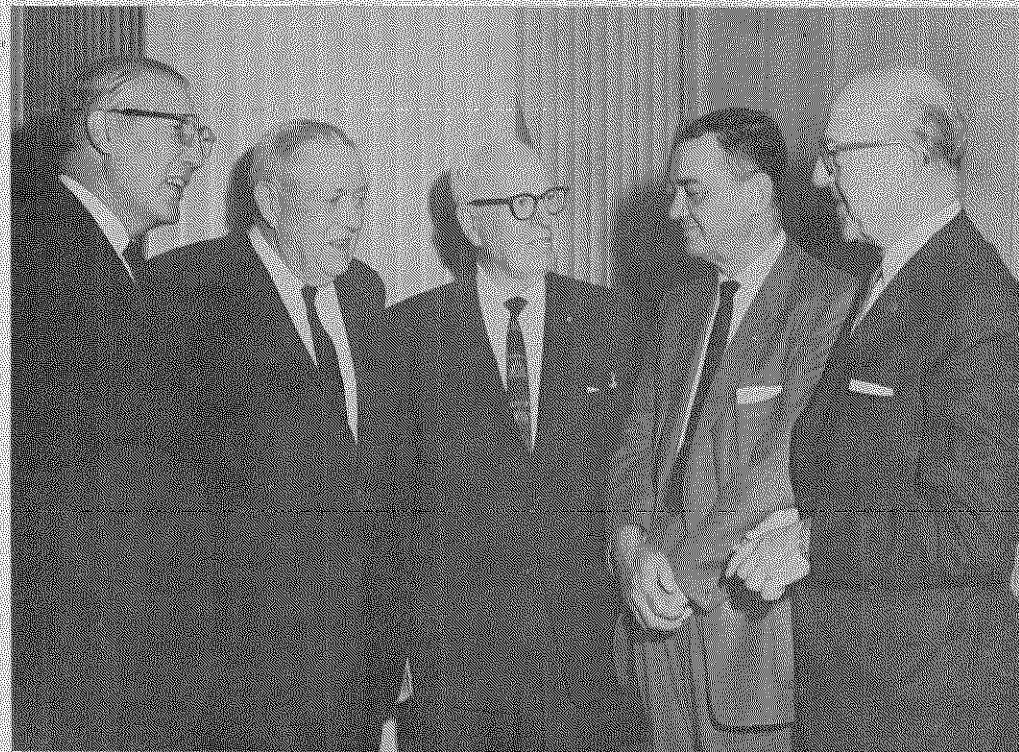
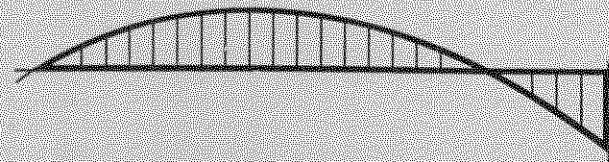
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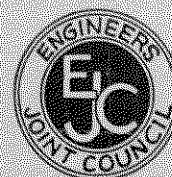
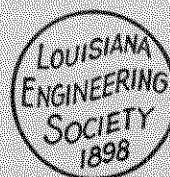
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April, 1965





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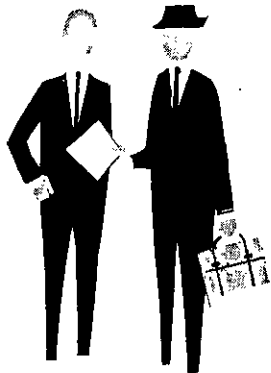
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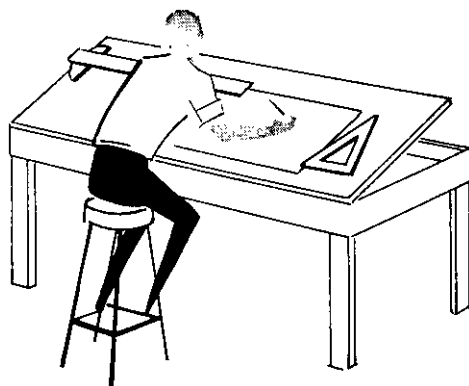
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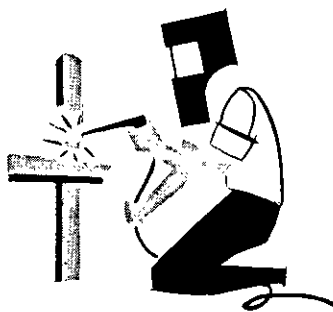
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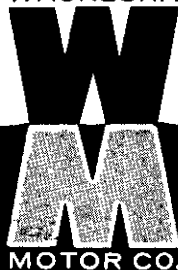


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Engineers Reveal Plans for World Exhibition Guide

Montreal—Professional engineers in Canada will finance their own exhibit at the 1967 World Exhibition in Montreal.

The engineers plan to erect models and dynamic illustrations of outstanding Canadian engineering achievements in an open plaza between pavilions on the EXPO 67 site.

Also planned is a film depicting the work of the engineer.

There are about 45,000 professional engineers in Canada.

The exhibit cost is estimated at between \$75,000 and \$150,000, plus the cost of the models and exhibit materials.

THE LOUISIANA ENGINEER

Vol. 51

APRIL, 1965

No. 2

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Signed,

Oct. 31,
1963

W. K. Bankston,
Editor

OUR COVER—(From left) H. D. Lowrey, President, Chrysler Corporation Space Division; Tom M. Cobb, Manager, Mason-Rust; U. S. Rep. George P. Miller (D. Calif.), House Science and Astronautics Committee; Dr. G. N. Constan, Manager, NASA-Michoud Operations; Mr. Milton A. Forester, Manager, Engineering Administration, Chrysler Corporation Space Division.

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Minutes Of The Board, LES

LOUISIANA ENGINEERING SOCIETY

Minutes of Meeting of the Board of Direction

Held at Oak Manor Motel, Baton Rouge
on February 8, 1965

The meeting was called to order by President Knight with Messrs. Duclos, Ewing, McNamara, Nelson, Odom, Sellers, Walk and Fernandez present. Messrs. Louis Capozzoli, Allen Johnson and S. J. Richard also were in attendance. It was announced that Mr. Sellers' name had been omitted from the attendance roll of the last board meeting and that the initials of deceased member Ricker had been incorrectly stated as W. C. instead of G. W. Mr. Nelson moved that the minutes be accepted with these corrections, seconded by Mr. Sellers and carried.

President Knight reported that the Committee on Engineering Education Goals had not been completed; that Mr. Jack Groh had accepted the chairmanship of the 1965 Annual Meeting. The president complimented the NSPE 1965 Winter Meeting Committee for its fine work and advised that the committee's reports would be submitted at a future board meeting. The secretary stated that Mr. Verlander, the Finance Committee Chairman, had indicated that the final accounting would show surplus funds after all meeting costs had been paid. Mr. Nelson, National Director, reported on the NSPE Board of Directors' meeting of January 20-23 and discussed the many points that could be useful in the development of LES's program for the year. Copies of Mr. Nelson's report were distributed to all those present and a copy is attached to the official minutes of the society.

President Knight announced the receipt of a great amount of correspondence—letters of appreciation, on ethics, legislation, etc. A communication from the Hawaii Society of Professional Engineers inquired about the matter of selecting a cut-off date for the Statute of Limitations. Mr. Nelson moved that the secretary refer this inquiry to the Legislative Committee, seconded by Mr. Walk and carried.

Mr. Walk moved that the President acknowledge the NSPE officials' letters of appreciation, informing them that their letters had been read to the LES Board of Direction and included in the minutes. Motion seconded by Mr. McNamara and carried.

President Knight congratulated Messrs. Walk and Allen Johnson for their contributions to the publicity received by the 1965 NSPE Winter Meeting.

Discussion followed on the National Academy of Engineering. Since it is intended to gradually build the academy to 300 members, it was agreed that LES should try to have several Louisiana engineers named to the academy.

The order of business was dispensed with in order to interview Mr. Earl Martin, an applicant for the Executive Secretary's position.

Discussion followed on the service potential of the society's past presidents and it was agreed that an all-out effort should be made to obtain the assistance of this source of valuable manpower. Mr. Nelson moved that a Council of Past Presidents be established to formulate long-range planning in all matters beneficial to the society. Motion seconded by Mr. Walk and carried.

President Knight announced that Governor McKeithen would make a proclamation for Engineers' Week.

A letter from the IX Region Science Fair requesting a donation was read. It was agreed that this and all similar letters would be referred to the appropriate Chapter.

Discussion followed on delinquent NSPE members and Mr. Nelson moved that no further action on members with dues in arrears be taken by the board, but that such matters be brought to the attention of the presidents of the local chapters involved. Motion seconded by Mr. Odom and carried.

The appointment of NSPE committee personnel for 1964-65 was tabled.

Mr. Walk reported that seven applicants for the position of Executive Secretary were under consideration. It was decided that there was no necessity at this time to establish a committee for the physical arrangements of the society's headquarters.

Discussion followed on the annual meeting and Mr. McNamara moved that a 2 1/2 day meeting be held in 1965. Motion seconded by Mr. Nelson and carried. It was decided that the chapters should submit plans for the State Planning Conference and the Officers' Induction Conference.

On the advice of the board of Direction, President Knight appointed Messrs. Calvin T. Watts, Chairman, Ben T. Bogard and James S. Janssen to act as a Nominating Committee to select a slate of officer candidates for the year 1965-66.

Extended discussion followed on a Telephone Listing for professional engineers. Mr. Sellers moved that the Functional Section for Engineers in Private Practice recommend that, should a new listing of "Engineering Profession" be offered, all names listed be in the same type and size as those of Attorneys, Physicians and Surgeons. Motion seconded by Mr. McNamara and carried.

It was decided that the next meeting would be held at 4:00 p. m. March 15 at Lafayette. The meeting then adjourned.

JOHN P. FERNANDEZ
Secretary-Treasurer

LOUISIANA ENGINEERING SOCIETY

Minutes of Meeting of the Board of Direction

Held at Poor Boys' Riverside Inn, Lafayette
Monday, March 15, 1965

The meeting was called to order by President Knight with board members Ewing, Roy Johnson, Nelson, Odom, Sellers, Walk, Watts and Fernandez present. Messrs. Allen Johnson and Lawrence Hunsinger also were present by invitation. Mr. Nelson moved that the minutes of the February 8 meeting be accepted as distributed to board members by mail, seconded by Mr. Odom and carried.

President Knight informed the board of the contents of minutes of a meeting of the State Board of Registration for Professional Engineers and Land Surveyors held on February 16-17, wherein Mr. Odom was elected Chairman for the year 1965. Mr. Odom advised that the State Board had established new headquarters at 4747 Earhart Boulevard, New Orleans, that their expenditures had increased substantially and that, although the State Board had made its usual contribution for the Professional Engineers Public Relations Program, it may have to decide whether to curtail future contributions to LES or to increase the registration renewal fees of professional engineers.

The President announced that the State Board of Registration had asked to have an LES committee meet with Mr. W. W. McDougall, Director of Personnel for the Louisiana Civil Service Commission, to discuss job descriptions for Engineering Aide positions I, II, III and IV. The State Board has found that position descriptions for Aides who perform civil engineering work appear to be adequate but that those for Aides in other branches of engineering require modifications. President Knight advised that he had contacted Mr. McDougall, who stated he was not aware of any Engineering Aide positions other than those in Civil Engineering. The President will pursue this matter further.

Discussion followed on the attempted unionization of Engineers in Government, particularly in the State Highway Department, and Mr. Walk offered the following resolution:

WHEREAS the National Society of Professional Engineers has taken the position that Unionism is incompatible with Professionalism,

BE IT RESOLVED that the Louisiana Engineering Society arrange for a representative of NSPE to address a formative meeting of the Functional Section for Professional Engineers in State Government; that the address be on the subject "How to Combat Unionization Among Professional Engineers" and that the meeting be widely publicized and everyone interested be invited to attend.

BE IT FURTHER RESOLVED that any expenses incident thereto shall be borne by the LES state organization.

The motion was seconded by Mr. Odom and carried. Mr. Nelson then moved that a supply of NSPE literature for combating unionism among professional engineers be obtained immediately and that said literature be distributed to Professional Engineers in State Government and in Industry. Motion seconded by Mr. Walk and carried.

Mr. Nelson read an unofficial report on a meeting held by the American Federation of Technical Engineers (AFTE-CIO) to discuss the establishment of an Engineers' and Technicians' Union among employees of the Boeing Company at the NASA Michoud plant. After a discussion of unionism in industry Mr. Nelson moved that the Functional Section for Professional Engineers in Industry be organized as soon as possible. Motion seconded by Mr. Walk and carried.

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carried. It was the consensus of opinion among those present that a new committee should be appointed at once.

President Knight reported on plans for the forthcoming Annual Meeting of L.E.S. to be held in New Orleans on July 8-10 and emphasized that the success of this meeting and all future meetings depends on attendance, especially in view of our expectation that such meetings can be financed by the sale of exhibit space. Local chapters were urged to help build up attendance by planning for bus transportation and giving the meeting plenty of publicity in their respective areas.

Mr. Walk reported for the Selection Committee considering the employment of a full-time Executive Director, stating that 84 applications have been received by the committee and that a two-page letter describing the duties and guidelines for the position had been mailed to applicants with an additional questionnaire. Thirteen replies have come in to date, of which six applicants appear to be well qualified for the position.

President Knight reported on the Legislative Construction Probe Committee. The Louisiana Architectural Association's recommendation for the establishment of a review agency for the awarding of architectural and engineering contracts for estate construction was read. The recommendations of L.E.S.'s special committee concerning this investigation also were read. President Knight informed the board that Senator Adrian Duplantier would be advised of the Louisiana Engineering Society's recommendations.

Mr. Dwing moved that Mr. Alex Theriot be reinstated to the grade of Junior Member and that the resignations of the following be accepted with regret:

Amon L. Colley, New Orleans (NSPE).

Ferd L. Goodman, Baton Rouge (Mbr.)

R. W. Gregory, Monroe (NSPE).

Nathan W. Pittman, Jr., Bogalusa (Mbr.)

The motion was seconded by Mr. Odom and carried.

Mr. Nelson moved that the Legislative Committee be alerted and requested to submit their plans for the 1965 Legislative Session. Motion seconded by Mr. Odom and carried.

It was decided to hold the next meeting of the Board of Direction in New Orleans on Monday, April 12 at 4 o'clock p. m. The meeting then adjourned.

JOHN P. FERNANDEZ
Secretary-Treasurer

REPORT TO LOUISIANA ENGINEERING SOCIETY BOARD OF DIRECTION ON WINTER MEETING OF NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS JANUARY 20-23, 1965 IN NEW ORLEANS, LOUISIANA

The Board of Directors of the National Society of Professional Engineers met in New Orleans January 20-23, 1965 and received reports from the various committees of the Society. Discussion of the reports brought out many points that should be of interest to the Louisiana Engineering Society and may be useful in the development of our program for the year.

1. The statement was made that "nothing is more past than a past president" meaning that the good efforts of the presidents of state societies are lost to the group as soon as they have completed their terms. To remedy this some state societies have organized a council of past presi-

dents to undertake special tasks in relation to the society's activities. It is suggested that the L.E.S. Board may wish to consider formation of a Council of Past Presidents to deal with opportunities presented by the current reorganization of our Society.

2. Attention was called to the "Senior Package Program" under which a package of information concerning the advantages of promptly applying for registration and joining the National Society of Professional Engineers is delivered to every senior graduating in the engineering curriculum of any ECPD accredited school. The appropriate committee of the L.E.S. should check the engineering schools in Louisiana to insure that they are receiving the senior packages and that these are being distributed to the members of the graduating classes.
3. The benefits of students chapters in the engineering schools were pointed out. These can have a marked effect in orienting a student toward a professional viewpoint and in guiding them into registration and membership in the National Society of Professional Engineers. It is recommended that the proper committee of the Louisiana Engineering Society investigate the establishment of student chapters in all Louisiana engineering colleges.
4. With membership exceeding 500, Louisiana is entitled to have a second National Director. It is recommended that such a director be elected at the next annual election of the Louisiana Engineering Society.
5. The N.S.P.E. is making substantial gains in membership on a national basis. In Louisiana our total L.E.S. membership represents a fraction of the potential membership represented by the number of engineers registered in the State. It would appear that a membership development program should be actively pushed with special effort made to enroll.
 - a. engineering members of the faculties of the State colleges, (students)
 - b. newly registered engineers and recent graduates,
 - c. engineers in government, and
 - d. engineers in industry, particularly the new industries locating in the State.
6. The most noteworthy action taken at the N.S.P.E. meeting was adoption of a resolution authorizing the presentation to state societies, chapters, and membership of a proposal for holding a **constitutional convention** and directing the officers of the society to proceed with preliminary planning for such a convention. In taking this action the Board endorsed 8 objectives for the engineering profession prepared by the Board for engineering cooperation composed of representatives of the N.S.P.E., A.S.C.E., A.S.M.E., I.E.E.E., A.I.Ch.E., and other members of the founder societies. These objectives are stated as follows:
 1. To project the image of the profession of engineering and its contribution to the welfare

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of mankind, and to develop dignified recognition for professional achievement by engineers, thereby to attract to the profession, well qualified and properly motivated young people.

2. To establish criteria for the best possible undergraduate engineering education whereby technical content, humanities and professionalism are suitably proportioned to the end that engineering competence will be developed within a framework of highest integrity and dedication to the public good.
3. To advocate the concept of conscious self-improvement, motivate the practicing engineer to upgrade and expand his competence by continuing study both formal and informal, and to seek legal status through registration at the earliest possible point in his career.
4. To encourage the development of highly qualified engineering technicians, recognizing their importance as key members of the engineering team, and to stimulate the legitimate concern of the engineer for adequate technician support within the proper environment.
5. To provide the forum for the effective exchange and extension of knowledge in the engineering disciplines by coordinating committees, publishing technical papers and other means of communication.
6. To encourage the individual engineer to participate in appropriate civic activities and assume greater leadership in helping to solve the broad general problems facing society.
7. To interpret to government bodies at all levels and to the general public the effect of technology on matters of national policy and well being.
8. To develop for the entire profession, a single set of canons of ethics and provide within the profession, a mechanism for encouraging compliance.

It is anticipated that the constitutional convention in considering these objectives will develop matters of major interest to the engineering profession at large and publications on this subject should be followed with great interest.

7. Matters to be considered at the constitutional convention would include:

- a. Uniformity and expansion of membership.
- b. General organization revision.
- c. National collection of dues.
- d. Transferability of membership.

If such a convention is called it would be expected to adopt a new constitution and by-laws for formal submission to the membership for ratification. The convention would probably be scheduled at the time of the 1966 Annual Meeting in Minneapolis.

8. It is proposed that state societies shall have delegates to the constitutional convention equal to the number of votes to which the state society is entitled by the N.S.P.E. constitution. These

delegates shall consist of regularly elected National Directors plus additional delegates to meet this requirement. In addition each State Society President shall have a vote at the meeting. Only those present can vote their own vote. Thus a state society will have only as many votes as authorized delegates present. For this reason it is important that the Directors and President who will be in office in July 1966 be advised well in advance of their responsibilities with respect to the constitutional convention.

Respectfully submitted,
WALDEMAR S. NELSON,
 National Director

Publication of a new brochure—containing information on the prestressed and precast concrete industry previously unavailable from any single source—has been announced by the Gulf South Prestressed Concrete Association.

Bertram J. Levy of Mandeville, La., president of the association, said the brochure was designed as a service to architects, engineers, and the construction industry and will be distributed to those professional groups by the association.

For the first time, Levy said, a complete compilation has been made of the concrete products manufactured by each of the major prestressed-precast concrete firms in the states of Louisiana, Alabama, and Mississippi and this information incorporated into a brochure. This will save time and expense for potential users of these concrete products by assisting them in locating specific products in specific areas.



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PROFESSIONALISM VS. UNIONISM

This is the first of a series of articles dealing with the theme of "professionalism vs. unionism." The purpose of this series is to clarify the difference between the professional and the union employee, and to stress the all-important role that "professionalism" plays in the field of Engineering. The articles are particularly recommended to The State Highway Department and other civil service employees.—Ed. Note.

The following descriptions of a professional employee is extracted from Public Law 101, 80th Congress, 1st Session, 1947 (Taft-Hartley Act):

Section 2 (12)—Definition of Professional Employees.

"The term 'professional employee' means—

"(a) any employee engaged in work (i) predominantly intellectual and varied in character as opposed to routine mental, mechanical, or physical work; (ii) involving the consistent exercise of discretion and judgment in its performance; (iii) of such a character that the output produced or the result accomplished cannot be standardized in relation to a given period of time; (iv) requiring knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction and study in an institution of higher learning or a hospital, as distinguished from a general academic education or from an apprenticeship or from training in the performance of routine mental, manual, or physical processes; or

"(b) any employee, who (i) has completed the courses of specialized intellectual instruction and study described in clause (iv) of paragraph (a), and (ii) is performing related work under the supervision of a professional person to qualify himself to become a professional employee as defined in paragraph (a)."

The Act further states that "The Board shall decide in each case whether, in order to assure to employees the fullest freedom in exercising the rights guaranteed by this Act, the unit appropriate for the purposes of collective bargaining shall be the employer unit, craft unit, plant unit, or subdivision thereof:

Provided, That the board shall not (1) decide that any unit is appropriate for such purposes if such unit includes both professional employees and employees who are not professional employees unless a majority of such professional employees vote for inclusion in such unit . . ."

The Taft-Hartley Act thus distinguishes between the professional and the non-professional employee, allowing the professional the right to make the final decision regarding his own status.

All engineers should read and re-read this description carefully and should completely familiarize themselves with it in the event that should they ever be employed through civil service or under a similar organization they would be able to take immediate steps to discover whether or not their job classification falls under the heading of "professional." Engineers should analyze all potential jobs in light of this definition, and it is suggested that this be clipped out and carried at all times.

It is significant to note that since 1952—over 10 years—

no major group of engineers has indicated that they want to surrender their professional classification for union representation.

The reason for this is obvious—Unions simply do not offer the engineer more than he can achieve through a professional approach to his relations with industrial management.

In a profession comprised of some half a million registered and nonregistered engineers, less than ten per cent—under 50,000—are currently represented by collective bargaining units.

Two major factors seem to play an important role in the engineer's choice to avoid unionization: Professional pride and individual freedom.

Engineering unions simply do not offer the individual engineer enough in the way of benefits to make them worth his while. From a professional standpoint, the engineering union is in direct opposition to the individual's interests. From an economic standpoint, there seems to be no reasonable indication that union membership improves the position of the individual engineer. The unions tend to work directly against the interests of the individual engineer in terms of prestige, harmony in working relationships and intracompany communications.

Harold A. Mosher, P.E., past president of NSPE, stated that "The engineer in industry wants an opportunity to share in and be a part of the company, to know what the

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company is doing, how they are working toward their goals, and what his responsibilities and prospects are in that plan. In short, the engineer in industry wants to be a part of the team, not an outsider looking in. For this purpose, the engineer in industry wants the opportunity to earn the confidence and respect of his employer, and to deserve a place on the team, not to be a part of an opposing group which wants to lick the team of which he is a member."

In the final analysis, professionalism and unionism are incompatible. There can be little question that one of the basic mistakes that has been made by unions in the past is their failure to realize that they are dealing with people who are a notch above the production worker in terms of education, professional concepts and general sophistication. What happens when the professional surrenders his status in favor of unionism is exemplified in the words of Jack Barbash, presently a labor economist with the University of Wisconsin and formerly with the AFL-CIO:

"Once the white collar worker gets over the initial trauma of being in a union, he behaves like a bricklayer."

And certainly a strong case could be made for the fact that unions have never really put forth an organized and concerted National effort to create strong engineering unions. As an AFL-CIO official points out "There are other white collar areas which we consider more important, and more immediately profitable."

Over half of the steel foundries participating in a special Steel Founders' Society of America survey expect an increase of 8 percent or more in steel casting shipments during the first half of 1965, as compared to totals for the last six months of 1964.

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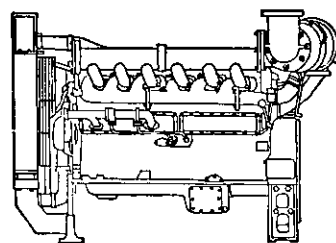
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ANNUAL MEETING SLATED FOR NEW ORLEANS

NEW ORLEANS . . . New Orleans this year will play host to the first summer annual meeting of the Louisiana Engineering Society slated for the Fontainebleau Motor Hotel (Tulane and Carrollton Avenues) July 8-9-10.

One of the highlights of this year's meeting will be the construction of exhibition booths at the motel, marking the first time in several years that the exhibits will be incorporated as part of the annual event.

Engineers throughout the state are urged to participate by preparing a booth for the meeting. The booths cost \$75.00 each with special booths at \$25.00 for consulting engineers. They will give Louisiana Engineers an opportunity to graphically present their contributions to the Engineering Profession.

The Gulf South Research Institute will be the theme of this year's meeting, said G. J. Groh, who will serve as general chairman of the three-day event. Serving with Groh will be:

E. H. Pavia, vice-chairman; LES President J. T. Knight, Jr., advisory committee chairman; E. J. McNamara, New Orleans Chapter President; John Fernandez, LES Secretary-Treasurer; John F. Vogt, Jr., and Walde-mar S. Nelson, Board members, and Allen Johnson, Public Relations Counsel, all on the advisory committee.



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Also serving are: Hoyt W. Brown, Jr., Exhibits Committee; Whit Musgrave, Finance Committee; Ray Maddox, Banquet Committee; Don F. Farrelly, Registration Committee; Karl Geoca, Publicity Committee; Malcolm A. Guillot, Plant Trips; M. J. Cade, Technical Papers; Roy E. Johnson, Reception; E. L. Lancaster, Program; T. A. Fromherz, Ladies Committee; Allen W. Betz, Social Activities; G. H. Kellerman, Hotel Committee; Edward A. McLellan, Past Presidents Committee and R. G. Trumps, Program Al Adoue.

The meeting will officially open at 10:00 a. m. Thursday, July 8 with registration and the opening of the exhibits at the Fontainebleau.

Included in the general program of the Annual Meeting will be the presentation of technical papers by prominent engineers from Louisiana and elsewhere, the annual banquet and dance, cocktail parties sponsored by various groups, seafood dinners, an outing at Pontchartrain Beach, a tour of The National Aeronautics and Space Flight Administration's George C. Marshall Space Flight Center at Michoud, the installation of new officers, the presentation of the LES Civic Activities Medal, Andrew M. Lockett Award, Life Memberships and other awards, technical society luncheons, a golf tournament and other activities.

An opening day luncheon will feature a prominent speaker from the Gulf South Research Institute. Other highlights will be a cocktail party in the exhibit area, a general reception at the new Engineers Club of New Orleans at 920 Gravier St. and a Woman's Auxiliary luncheon at Al Hirt's French Quarter Club.

In order to help defray the expenses incurred by added activities a registration fee will be collected from all who are participating in the meeting.

Registration will be \$5.00, except for those attending the banquet only.

A package price of \$25.00 is offered, covering the registration, opening day \$4.00 lunch, the NASA plant tour and the annual banquet (\$20 for two). This represents a savings of \$4.00.

This year's Annual Meeting is designed to be a family affair. The gracious Fontainebleau Motor Hotel, a completely self-contained convention center, includes swimming and wading pools that will delight every member of the family.

Located on Tulane Avenue (a continuation of U.S. Hwy. 51, 61, 65), The Fontainebleau is virtually in the center of New Orleans. It is easily accessible to parks (up Carrollton to Audubon Park Zoo, down Carrollton to City Park and the rides), Pontchartrain Beach (out the Expressway to the lake front), the Central Business District and the Vieux Carre.

All major routes entering New Orleans meet at the Fontainebleau, where free parking facilities for 700 cars add to the convenience. Bus and railroad terminals are within walking distance and limousine service to Moisant International Airport is available.

(Continued on Page 26)

New Engineers' Club To Open In May

The Engineers' Club of New Orleans has recently announced through President DeWitt Morris the leasing of a new, larger and finer club location with greatly improved facilities.

The new quarters are located at 920 Gravier St. with private elevator service over Morrison's Cafeteria.

The new club measures 35 x 110 feet and provides 1,000 more square feet of space than the old location. The new club consists of a beautiful, spacious lounge with plenty of comfortable seating, a large dining room area with a private dining or meeting room and facilities for sectioning off other dining or meeting areas for private lunches or meetings, a completely equipped kitchen, a private telephone area, an office and a very large and beautiful bar.

Morris said that a five-year lease had been signed and that several committees are hard at work to help promote the move which is anticipated for about May 15.

Renovating and Redecorating is under President Morris with Allen Jensen, Ed Pavia, Paul Andry, E. J. McNamara, H. J. Roussel, M. J. "Mike" Cade, Waldemar S. Nelson and Tom Stokes.

Program and Membership is headed by A. Villarrubia with Frank Kinsley, Stan Asbury, Ben Louviere, Pete Stafford, Roy Johnson, Mallard Seago, Joseph Riorda, Tom Boylan, Bill Lecorgne, John Kazanowski, Gene Di-

boll and Paul Andry.

Finance is headed by Walter Cooke, Landry Murphy, Mike Abrams, Ed Pavia, Paul Merritt and Mallard Seago.

The House Committee is headed by Allen Jensen, General Chairman, with John Elstrott, Dave Fried, Ed Pavia and John Kazanowski.

The Bar Committee is headed by G. J. Groh with James S. Janssen and Harvey Kellerman.

"Mike" Cade is Chairman of the Food Committee. Serving with him are R. P. Lockett, Warren Bankston, Sidney Ellis and John Vogt.

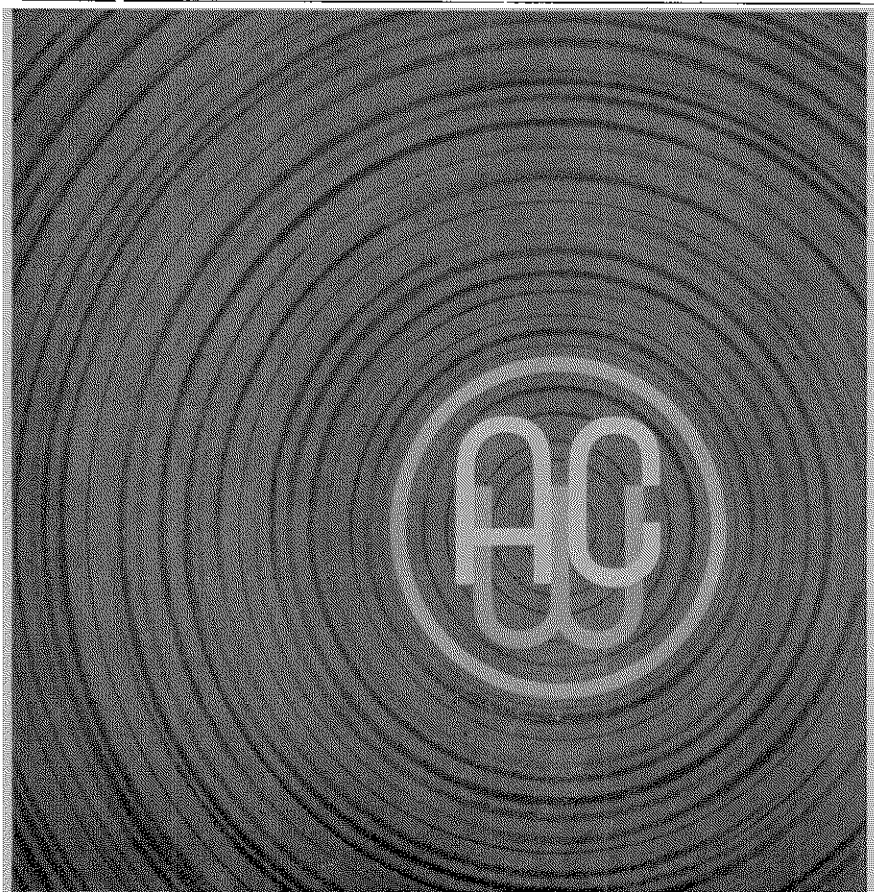
Odom Elected Chairman Of State Board

Leo M. Odom, Baton Rouge, of the consulting engineering firm of Pyburn and Odom, has recently been elected chairman of the State Board of Registration for Professional Engineers and Land Surveyors. He is a member of the L.E.S. Board of Direction. Also elected were Dr. Jesse Coates, vice chairman, and A. D. Jackson, secretary.

Odom is a graduate of Louisiana Polytechnic Institute and Louisiana State University where he received a B.E. in Civil Engineering in 1927.

From 1927 to 1929 he was with structural design, the bridge department of the Louisiana Highway Commission. From 1929 to 1941 he served with the U.S. Corps of Engineers as a civil engineer with the chief engineering

(Continues on Page 21)



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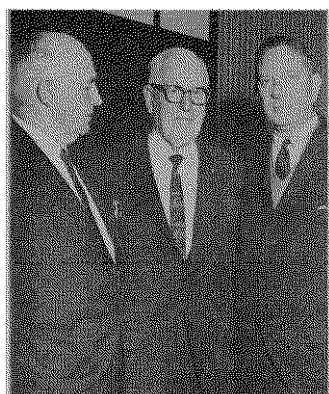
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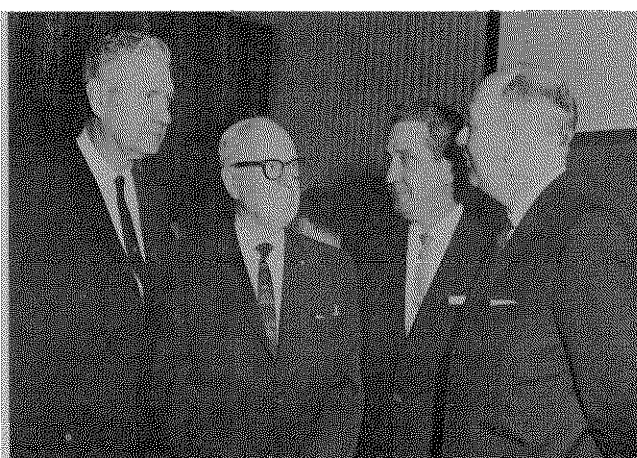
U.S. Rep. George P. Miller (D. Cal.), Chairman of the House Science and Astronautics Committee (center) discusses engineering in the space age with (from left) Hoyt Brown, State Chairman, Engineers' Week; Col. T. J. Bowen, District Engineer, U.S. Corps of Engineers, New Orleans; Col. J. T. Knight, Jr. (Ret.), President, LES; and W. S. Nelson, NSPE National Director.



(From left) Walter Scales, LES; Rep. Miller, Fr. Harrison Martin, St. Francis Xavier Church, Metairie, and Edward McNamara, President, New Orleans Chapter of LES pause for a chat following a joint luncheon meeting given by LES and the Members Council of the Chamber of Commerce of the Greater New Orleans Area.



Meeting during the joint luncheon given by LES and the New Orleans Chamber of Commerce are (from left) Joseph Simon, Executive Vice-President of the Chamber; Rep. Miller and Clayton L. Nairn, Chamber President.



(From left) S. L. "Buck" Wright, Past President of the New Orleans Chamber of Commerce; Rep. Miller, Ray Putfark, Executive Secretary of the Construction Industries Association (CIA) and William O'Regan of Southern Bell Telephone and Telegraph Co. compare notes at the LES and Chamber of Commerce sponsored luncheon meeting.

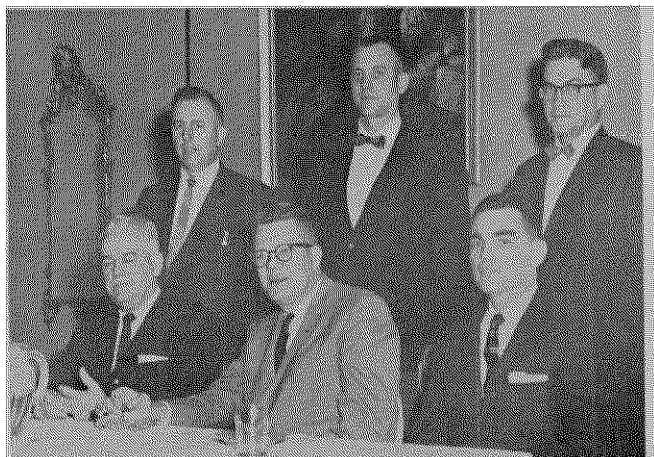


Robert Reeves (left), Slidell, Director of the Slidell NASA Computer Center presents Rep. Miller with a box of strawberries "preserved whole from Old New Orleans."

At right is shown a joint meeting of the New Orleans Chapter of LES and the New Orleans Section of ASME held as part of Engineers' Week activities.



RS' WEEK ACTIVITIES



Attending the joint dinner-meeting of the New Orleans Chapter of LES and the New Orleans Section of ASME were (from left, standing): Forney Fuller, President, New Orleans Section of ASME; Whit Musgrave, Secretary, ASME and E. T. Ehlers, President, Chairman, Instrument Society of America (ISA). Seated are Allen Betz, New Orleans Engineers' Week Chairman; Vaino Vehko, Chief Engineer, Boeing Co. and R. F. "Dick" Muller, Treasurer, ASME.



The New Orleans Chapter of LES and the New Orleans Section of ASME heard a talk by George J. Huedner, Jr., Director of Research for the Chrysler Corporation, during a joint meeting during Engineers' Week.



Members of the Chrysler Corporation were guests of the New Orleans Chapter of LES and the New Orleans Chamber of Commerce at a joint luncheon given during Engineers' Week.



Karl Geoca (standing) demonstrates the Chrysler Corporation's turbine car to members of the New Orleans Section of ASME following the joint LES-ASME meeting during Engineers' Week.



ENGINEERS' WEEK OBSERVED THROUGHOUT LA.

Engineers throughout Louisiana combined to observe Engineers' Week (Feb. 21-27) with each local chapter sponsoring special events and ceremonies to commemorate the engineering profession. Each chapter followed through on the national theme, "Engineering for Human Needs."

In New Orleans the week-long observance began on Feb. 21 with "a prayer to Almighty God by the Churches of New Orleans for His Divine Guidance and Blessing that the work of the professional engineers be well directed toward the betterment of mankind," according to Allen W. Betz, New Orleans chairman.

New Orleans Mayor Victor H. Schiro and Jefferson Parish President Thomas F. Donelon issued proclamations designating Feb. 21-27 as "Engineers Week."

D. A. Tefankjian, assistant measurement superintendent, gas division, Texas-Eastern Transmission Corp., Shreveport, addressed a joint dinner-meeting of the New Orleans Chapter and the National Association of Corrosion Engineers at the Engineers Club.

New Orleans television station WWL conducted an interview with leading engineers on "What the Engineer Has Done for Human Needs."

U. S. Rep. George P. Miller (D., Cal.), Chairman of the House Science and Astronautics Committee, addressed a joint luncheon-meeting of the New Orleans Chapter and the Members' Council of the Chamber of

Commerce of the Greater New Orleans Area.

Later during the week the New Orleans Chapter of LES met with the New Orleans Section of ASME. The meeting was addressed by George J. Huedner, Jr., director of research for the Chrysler Corporation. Huedner, who designed the turbine engine, is often referred to as the "Father of the Turbine Car."

Friday of Engineers' Week was designated "Engineers' Day" at the New Orleans Fair Grounds. A trophy was presented by Hoyt Brown, chairman of Engineers' Week for Louisiana.

In Shreveport Engineers' Week coincided with a convention of the Southern District Division of Production of the American Petroleum Institute. The Lou-Ark Section of the Society of Petroleum Engineers of AIME scheduled three prominent speakers for a technical session held at the Petroleum Club.

Addressing the session was Dr. Marvin B. Edwards of Texas Eastman Co., Longview, Tex., who traced "The Development of the Petrochemical Industry in Louisiana and Texas." He was followed by a talk on "Corrosion Prevention for Consumers' Underground Piping" by John J. Wise, senior corrosion engineer of Arkansas-Louisiana Gas Co., Shreveport.

"Engineering for Human Needs" was discussed by John T. Knight, Jr., New Orleans, President of LES.

A. C. Wimpee of Dallas, Tex., who is with the HLH Products Division of the H. L. Hunt Oil Co. of Dallas, addressed the Engineers' Week banquet which climaxed the week-long observance in Shreveport.

Ralph Segall was general chairman of Engineers' Week in Shreveport. He was assisted by Bill Kyger, who represented the National Association of Corrosion Engineers, and Farrell Adams, who served as secretary to the Planning Committee.

Lafayette Mayor J. Rayburn Bertrand proclaimed Engineers' Week in Lafayette and paid tribute in the proclamation to the contributions made to the country by the engineering profession.

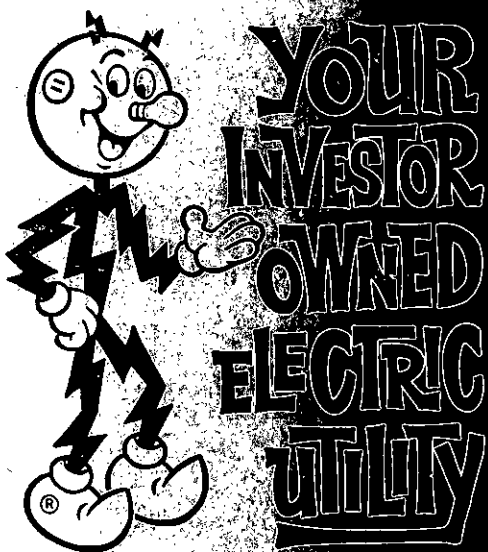
Approximately 200 engineers participated in the observance of Engineers' Week at a meeting at the Petroleum Club of Lafayette, according to John Huffman, P.E., program chairman.

Members of five chapters of LES representing nine Louisiana parishes attended the meeting and heard an address by William A. Parker, head of the Apollo Procurement Function of the NASA Manned Spacecraft Center, Houston, Tex.

Parker told the group that "What we have learned and the benefits to our industry from experiments conducted in trying to get to the moon will be just as valuable as the trip itself."

Eugene M. Sellers, president of the Lafayette Chapter, remarked that "Our home base is Lafayette, but we cover the parishes of Assumption, Iberia, Lafayette, Lafourche, St. Martin, St. Mary, Terrebonne and Vermilion. In effect, this actually makes up the Third Congressional District."

In Alexandria more than 90 members of the Alexandria Chapter and their wives met at a dinner meeting held at



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The ground work for National Engineers' Week in Shreveport was laid by (from left) Bill Kyger, representing the National Association of Corrosion Engineers, Ralph Segall, General Chairman of the Engineers' Week Committee in Shreveport and Farrell Adams, Secretary to the Planning Committee.

the Rapides Golf and Country Club to commemorate Engineers' Week.

Featured speaker at the dinner meeting was Joe D. Smith, Jr., publisher of the Alexandria Daily Town Talk and past president of the Public Affairs Research Council (PAR) and a board member of the Council for a Better Louisiana (CABL).

Smith reviewed the history of the Red River Valley and beseeched his audience to "never forget the wonderful heritage of this culture-filled, history-laden valley of ours.

Marshall B. Ewing, president of the Alexandria Chapter, introduced Smith and spoke briefly on the LES search for an executive secretary.

Engineers' Week came late in Baton Rouge, being kicked off at the Annual Meeting of the Baton Rouge Council of Engineering and Scientific Societies on March 10.

On March 22, Dr. John J. Seip, chairman of Engineers' Week in Baton Rouge, Louisiana State University Dean of Engineering Bernard S. Pressburg and Frank Johnson of the ESSO Laboratory appeared on the Noon-Day Show (Channel 9) for a panel discussion.

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La. Soil Can Support All Industry ... Eustis

NEW ORLEANS—J. Bres Eustis, LES, Jefferson Parish engineer and soil and foundation consultant, recently told a joint luncheon meeting of the Louisiana Department of Commerce and Industry and the Louisiana Industrial Development Engineers Association (LIDEA) that soil conditions throughout all of Louisiana are capable of supporting heavy industry.

"Though soil conditions vary greatly throughout the state we can build anything on any type of soil if it is properly analyzed first," Eustis told the combined meeting.

Present soil conditions developed as much as 40 million years ago in some northern parts of Louisiana, Eustis said, while in the southern part of the state the development is as "recent as 30,000 years ago."

The gradual break-up of the last ice age and the meandering of the Mississippi River has done much to form the present soil conditions throughout the state, he said.

Eustis said that improved construction and soil analyzing methods have done much to make heavy construction possible throughout the entire state over the past 20 to 25 years.

Using slides to illustrate his talk, Eustis pointed out the varying soil conditions to be found in different parts of Louisiana.

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the state, Eustis noted, from rocky and hard packed clay in the northern section to the marshlands in the southern section.

Eustis also pointed out that aside from good soil conditions other inducements to industry to move to Louisiana are our more-than-adequate water supply and excellent river bank stabilization.

Eustis is the president of the Eustis Engineering Co., Metairie, La. and has had more than 18 years experience in his field.

He was introduced by A. J. "Dusty" Rhodes, president of LIDEA.

Also present at the meeting were J. Pat Beaird, chairman of the board of the Louisiana Department of Commerce and Industry; William Hackett, a director of the department and Jack Burke, a board member, all from Baton Rouge.

Sinking Sewer Lines Studied By Tulane Research Engineers

A practical method of preventing sewer lines from sinking in the soft soil of the Gulf Coast area is the objective of a two-year research program now under way at Tulane University.

The problem of sinking sewer lines is being studied because this settling action results in broken joints—which in turn start a chain reaction of other troublesome and costly consequences.

When joints break, sand and water enter the sewer lines. Pipes clog and seepage occurs. In rainy seasons, pumps must be operated at capacity to remove surplus water. Service is impaired and maintained and replacement costs climb upward.

The sinking of sewer lines in the Gulf Coast region is due to the type of soil common to this area. The soil is a mixture consisting of soft sandy soil, peat and clay. This combination is not capable of bearing heavy loads for long periods of time, especially where high water tables drop during prolonged periods of torrid temperatures.

The University and the sponsors of the project hope to overcome the soil problem by developing a blend of soil and other materials which will have a greater bearing capacity than natural soil and will reduce settling to tolerable limits.

Experimental work toward this end is now under way



Professors John Mayer (left) and Frank W. Macdonald (right) of the Tulane University civil engineering faculty examine a sample of Louisiana soil to be used in a series of experiments that may point the way to a "bedding" mixture which will prevent sanitary sewer pipes in the Gulf Coast area from sinking into the soft, unstable soil peculiar to the region.

The two men stand at the far end of a partially-filled, 23-foot long, tank-like, steel structure which will be filled to a depth of several feet with different mixtures of soil and other materials. Various sizes of clap pipe will be embedded in these mixtures to help research teams find out what happens to the soil and the pipes under different conditions.

under the direction of John K. Mayer and Dr. Frank W. Macdonald, both of LES, professors of civil engineering at Tulane. Their work is sponsored jointly by the W. S. Dickey Clay Mfg. Co., the Sewerage and Water Board of New Orleans and the U.S. Public Health Service. The Dickey Company is contributing \$15,000 and is furnishing all the pipe and joints needed for the project.

Professors Mayer and Macdonald are conducting their experiments in both the civil engineering laboratory at the University and in the field at job-sites along the Louisiana Gulf Coast where sewerage systems are being laid.

The laboratory experiments are being conducted in a steel tank which measures 23 feet in length and 4 feet 9 inches in width and height. Actual environmental conditions are simulated by covering the floor of the tank with a layer of soft clay, peat, or organic soil. On top of this goes a layer of stabilizing material such as shell and river sand. Finally, Portland cement and/or lime is added.

(Use of cement, Professor Mayer explains, is a new idea and may have an important bearing on the outcome of the project.)

Once the base is laid, pipes ranging in size from 8 to 15 inches are laid in four sections of the tank and covered with soil. Hydraulic jacks actuated by pumps create stress on the pipes. Each movement is checked by gauges.

Various trench widths will be tried to determine what effect this has in the way of additional stress on the

(Continued on Page 26)

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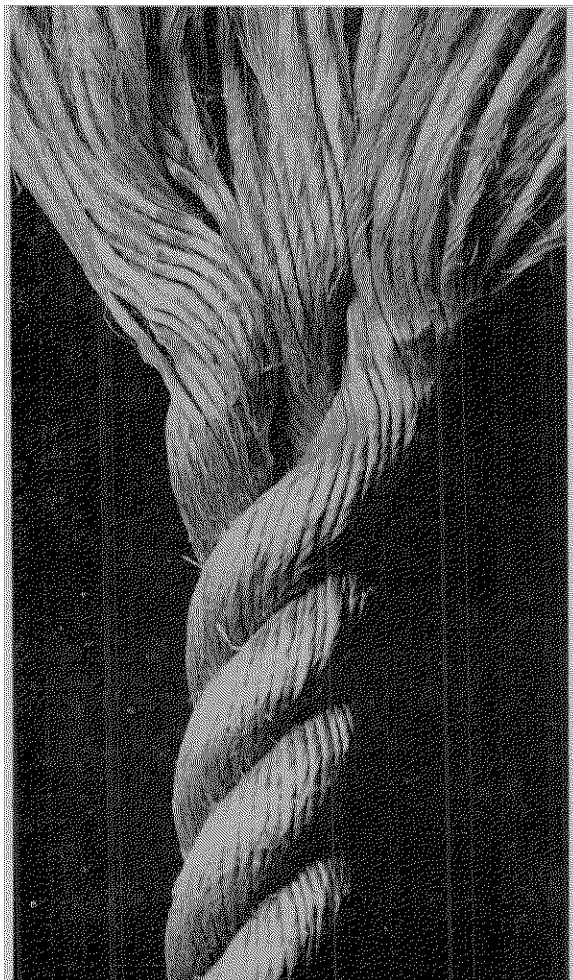
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Memorials

C. W. RICKER

The Louisiana Engineering Society mourns the passing on January 19, 1965, of an old member and loyal supporter, C. W. Ricker.

Professor Ricker, as he was known to most of us, was a native of Illinois and had resided in Kansas and California before attending the Massachusetts Institute of Technology, where he received a bachelor of science in engineering degree in 1914 and a master of science degree in 1915. In 1916 he joined the MIT faculty, and in 1926 moved to North Carolina State, where he became a full professor of electrical engineering. In 1928 he came to Tulane as professor in charge of electrical engineering, and was named head of the electrical engineering department when electrical and mechanical engineering became separate departments in 1937. He was retired in 1956 after 28 years of service.

Professor Ricker was co-author of a laboratory textbook that became a standard in the field, and author of many technical articles. He served as chairman of the Committee on Evaluation of Engineering Education of the American Society for Engineering Education. He was a member and fellow of the American Institute of Electrical Engineers, and served as chairman of the New Orleans Section in 1936 and National Vice President representing the Southern Region from 1943 to 1945. He was a long-time loyal member of the Louisiana Engineering Society. He served the Society in many capacities, including membership on the Board of Direction in 1934, '35 and '36, and was made a life member of the Society in 1959.

Most of us remember Professor Ricker as a man of great personal dignity, a rare sense of humor and the highest standards of integrity and scholarship. He was a quiet, loyal friend, and a wise counselor.

Professor Ricker is survived by his son Paul, a Tulane graduate in civil engineering.

The New Orleans Chapter of the Louisiana Engineering Society extends to the family of Professor Ricker its sincere expression of sympathy.

MARIO G. ZERVIGON, Chairman

JOHN VOGT

ALBERT BRODTMAN

WILLIAM HATTON HENKEL

The Louisiana Engineering Society, and the field of professional engineering suffered a great loss in the death of William Hatton Henkel, Sr., at the age of 71, on October 31, 1964.

Born on September 5, 1893, educated in Hammond, La., he graduated from the Hammond High School in 1912. He attended the Bliss Electrical School in Washington, D. C., and was given a degree of electrical engineer from that institution. He further studied electrical engineering through The International Correspondence School of Scranton, Pennsylvania, and in 1942 took a course in safety engineering at Tulane University.

Starting in his chosen field as Superintendent of Distribution of The Central Light and Power Co., Amite, La., he was responsible for construction, maintenance,

and operation of approximately 100 miles of transmission line between Ponchatoula, Louisiana, and Osyka, Mississippi.

Serving as consulting electrical engineer from 1925 to 1933, rendering professional services to industry in the electrification of industrial plants, Mr. Henkel worked in design and supervision capacities on various projects under the old Works Progress Administration in Louisiana for the Federal Government.

From 1938 to 1942, he served as District Engineer for the National Youth Administration in the 6th Congressional District of Louisiana, developing all engineering problems, layouts, and plans for wood and metal working shops. In 1941 he was made state officer in charge of the safety program for the entire State of Louisiana.

He served with the U. S. Naval Air Station and Delta Shipbuilding Co. as design, specification and supervisory engineer during the Second World War years, and was technical adviser during the liquidation of the Delta Shipbuilding Plant.

From 1946 through 1949 he designed plant layouts, pipe lines, machinery foundations and apparatus connections for Solvay Process Co., Baton Rouge, and the Celotex Co. at Marrero, under Rust Engineering Co., Pittsburgh, Pa., being retained as mechanical engineer of the Marrero Plant of The Celotex Co. from 1948 to 1950.

Working with J. P. Ewin, Inc., Mobile, Alabama, and James M. Todd and Associates, New Orleans, Louisiana, he handled design plans and specifications in connection with work on the facilities of Alabama State docks, the Fourth Jefferson Drainage District pumping plants, and various Federal Housing Projects in the New Orleans area.

His death marked the end of a busy and constructive life.

Mr. Henkel was a member of the Methodist Church.

W. T. HOGG

A. W. THOMPSON

JAMES M. TODD, Chairman

ROY A. GEOGHEGAN

On August 25, 1964, Almighty God removed from our midst our esteemed friend and fellow-member, Roy A. Geoghegan. He joined the Louisiana Engineering Society as a full member in 1948.

Roy was a native of Fayette, Miss., and a graduate Civil Engineer of Mississippi State College in 1929. During his college years he was a star football player, a ranking all-S.E.C. lineman, whose number was retired. He had

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always been a devoted football enthusiast, particularly for all the Mississippi teams.

His early professional career included assignments with the United Fruit Co., Illinois Central Railroad and the Mississippi State Highway Department. He was a construction Engineer with the Pan-American Petroleum Corp. (now American Oil Co.) from 1935 to 1942, when he left to join the armed forces as a Sea Bee. He saw action in the South Pacific island invasions, and was discharged as a Lieutenant, Civil Engineer Corps, U.S.N. He was awarded a purple heart.

For a short time thereafter he was again associated with the Pan American Petroleum Corp. He left this company to become a manager for the Plibrico Co. in Memphis, Tenn., and later in New Orleans, La. He continued his representation of this company to the time of his death. He built up this refractory business in a highly commendable manner.

Roy was also a politician. He was a member of the Board of Aldermen of Harahan, La., serving two terms, part of the time as Mayor Pro Tem. He was noted for his keen interest in his constituents, at times involving personal outlays when the town's finances or regulations did not permit the services requested.

He was a member of the Masonic fraternity, Rotary Club of Harahan, Colonial Country Club and the St. George Episcopal Church, Harahan. Roy will long be remembered for his love of his fellowmen, his associates and his employees. He was always ready and willing to lend a helping hand.

He is survived by his widow, the former Dorothy Pepper of Birmingham, Ala.; one daughter, Mrs. Patricia Williams; one son, Pepper, and three grandchildren.

BE IT RESOLVED that the membership of the Louisiana Engineering Society express its sincere sympathy to the bereaved family, a sense of loss to the community and the profession, and be it further resolved that this obituary be read at a meeting of the Society, entered into the minutes, and that a copy be sent to Mrs. Roy Geoghegan.

LEON DE SALIGNAC
CARL SCHNEIDER

(Continued from Page 13)

division in the Jamaica District, Kingston, Jamaica, British West Indies, where he was engaged in river, harbor and flood control.

In 1941 he returned to Louisiana where he worked as chief engineer with the Louisiana Department of Public Works engaged in flood control, drainage and miscellaneous construction.

From May, 1948 to the present he has been a partner in the Pyburn and Odom Company.

Odom is a specialist in site selection, water supply, waste disposal for industry and stream crossings for large cross country pipelines. He has worked on many river and canal improvement projects including the Baton Rouge Barge Canal, the Port Allen Lock, the Indian Village cut-off of the Gulf Intracoastal Waterway, and has designed underwater crossings of the Mississippi, Arkansas, Atchafalaya and Red Rivers.

Odom is a member of LES, ASCE, Tau Beta Pi, SPE, AGU, the National Council of State Boards of Engineering Examiners. He is a former president (1947) of the

Louisiana Section of ASCE and Director of the Southern Zone of the National Council of State Boards of Engineering (1956-58).

NSPE Notes

The first of three reports by the College Placement Council on starting salaries of 1965 bachelor's degree candidates indicates that on the basis of offers made to all students in technical fields by December 15, salaries show an increase of 3.1 per cent over the same period last year. While the number of offers to non-technical candidates increased at a greater rate than those to technical students, starting salary offers to non-technical students increased by only 1.6 per cent.

EJC Notes

Carl Frey has been elected Secretary of Engineers Joint Council. He is now EJC's chief staff officer. He assumed the position on January 1, 1965 succeeding L. K. Wheelock who resigned to enter private industry.

Frey was elected at an autumn meeting of the Board of Directors. It was at this same meeting that the Board accepted, with regret, the resignation of Wheelock who has been Secretary of EJC since 1960.

Frey has been Executive Secretary of the Engineering Manpower Commission of EJC since 1960.

He is married to the former Aimee Sorrell and has three children: Leo James, Aimee Marie, and Harold Louis Sorrell.

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Promotions

Field Notes By Allen Johnson

New Orleans, La.—The election of two assistant vice-presidents was announced recently by Waldemar S. Nelson and Company, Inc., consulting engineers and architects of New Orleans. The newly elected officers are Robert L. Atkinson, a civil engineer and Burton L. Thomas, whose field is chemical engineering.

Waldemar S. Nelson, President of the firm, stated that the election of these officers, both veteran engineers with long and varied experience in their respective fields, would enable the firm to render more efficient service to its clients.

Atkinson, a 1920 graduate of Tulane, joined the firm in 1961. Among positions he held previously were chief engineer for New Orleans East, Inc., and director of engineering for Higgins Aircraft Company. He is a member of LES and ASCE.

Thomas received his degree from the University of Texas in 1948. He has had extensive experience in the design of facilities for the petroleum, petro-chemical and ore processing industries.

Betz Engineering Sales Company, 7979 Earhart Boulevard, New Orleans, Louisiana, has been appointed the Atlas Valve Company sales representative for the entire state of Louisiana and the following sections of Mississippi, Alabama, and Florida:

All of Mississippi except those counties north of a line of demarcation from Washington to Lowndes county; all of Alabama except those counties north of a line of demarcation from Choctaw to Lee county; and the northwestern section of Florida west of the Appalachian river.

Atlas Valve Company of Newark, New Jersey, is a leading manufacturer of automatic pressure, temperature and level controls for industrial and marine applications. The announcement was made by G. H. Blanchard, president of Atlas.

For the last 14 years, Betz Engineering has been specializing in marine and industrial accounts including sugar mills and refineries, chemical plants, oil refineries, and paper mills.

Atlas Valve Company will be represented in the field by Allen W. Betz and John K. Monlezun.

Betz, founder of the company, was formerly with the Freeport Sulphur Company and Gulf Engineering Company. A graduate of Tulane University, with a degree in chemical engineering, he is a registered professional engineer in Louisiana.

John K. Monlezun is a graduate of Tulane University with a degree in mechanical engineering. After serving two years in Japan with the Navy, he worked as a mechanical engineer for the New Orleans Sewerage and Water Board. In February 1962 he became a sales engineer for Betz Engineering. He is a registered professional engineer in Louisiana, a member of LES and ASME.

Teas, Meetings

Auxiliary Notes By Mrs. Edward J. Welsch

The Woman's Auxiliary to the Louisiana Engineering Society held its March meeting on Tuesday, March 16, 1965 at the Delgado Museum of Art. The business meeting was followed by a lecture, a tour of the museum and a tea.

Receiving with the President, Mrs. Otha E. Barron, Jr., were Mesdames Thomas A. Fromherz, Mrs. E. Landry Murphy, Mrs. Joseph R. Pezold, Mrs. Daniel H. Vliet and Mrs. Forney Fuller. Alternating in pouring were Mesdames S. G. Davis, G. J. Groh, Miles B. Hutson, Ronald P. Cressy, George Schroeder, W. P. Musgrave, Raymond K. Goode, Mario G. Zervigon, Roy E. Johnson and Roy G. Cappel.

The tea table was decorated with flowers carrying out a St. Patrick's Day theme.

NEW ORLEANS . . . The Woman's Auxiliary to the Louisiana Engineering Society were hostesses at a Founder's Day tea April 20 at Christ Church Cathedral honoring charter members and past presidents.

Those being so honored were Mesdames James M. Robert, James M. Todd, Daniel S. Elliott, Frank G. Frost, Archie Lee Dunlap, Alvin M. Fromherz, John A. McNiven, Ernest L. Mire, Arthur J. Naquin, John L. Porter, Frederick H. Fox, Sargent F. Jones, George A. Heft, John K.

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THE BATON ROUGE CHAPTER of The Woman's Auxiliary to the Louisiana Engineering Society recently presented Dean of Engineering Bernard S. Pressburg its annual \$350 scholarship to be used by graduate students to attend workshops and seminars out of town and out of state. Pictured from left to right are: Mrs. Elvin J. Dantin, scholarship co-chairman; Mrs. Calvin T. Watts, scholarship chairman; Dean Pressburg and Mrs. J. H. Jenkins, president.

Mayer, Mario G. Zervigon, Frank W. Macdonald, Walter E. Blessey.

Charles J. Moseley, Albert J. Fransen, Lee H. Johnson, Frank C. Fromherz, Waidemar S. Nelson, Roy G. Cappel, Wade Barnett, Ben H. Bell, C. N. Bott, Ralph Earl, J. McCormick Gondran, George R. Hammett, Paul F. Hoots, Harold A. Levey, John H. O'Neill, Walter H. Scales, David W. Stewart and A. B. Patterson.

Receiving with the president, Mrs. Otha E. Barron, Jr., were Mmes. C. N. Bott, J. McCormick Gondran, G. R. Hammett, John H. O'Neill, A. B. Patterson, Walter H. Scales, Ben H. Bell and Wade Barnett.

At the coffee, sherry and punch tables the pouring was done by Mmes. Thomas A. Fromherz, John A. Haase III, E. Landry Murphy, Joseph R. Pezold, Daniel H. Vliet and Forney Fuller.

The reception rooms and tables were decorated in a April yellow theme with fresh flowers and ivy being used.

WELCOME TO PROFESSIONAL STATUS

Listed below are the engineers who were granted registration March 16, 1965 by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors:

Lowell E. Ackmann, Mt. Prospect, Ill.
Jack R. Anthony, New Orleans, La.
Charles D. Ayers, Navy #943, FPO, San Francisco, Cal.
Robert C. Bass, New Orleans, La.
Elie J. Boudreaux III, Dayton, Ohio.
David M. Caskey, Shreveport, La.

Benjamin L. Cather, Metairie, La.
Wilfred H. Charbonnet, New Orleans, La.
Harold D. Cox, Metairie, La.
Paul O. Emerick, Abbeville, La.
Bennett H. Farrier, Jr., Lake Charles, La.
Ronnie L. Frusha, DeRidder, La.
Harold J. Gibson, Shreveport, La.
Otis Dean Gouty, New Orleans, La.
Arthur L. Guy, Jr., Metairie, La.
Lionel J. Hebert, Larose, La.
Paul L. Heineman, Leawood, Kansas.
John T. Henderson, Jackson, Mich.
Kenneth V. Hill, Ruston, La.
James J. Hindman, Thibodaux, La.
Charles M. Hix, Jr., Tyler, Tex.
William D. Howse, Irving, Tex.
Herminio O. Irizarry, Miami, Fla.
Joseph H. Jerrell, Metairie, La.
Emmett L. King, Sr., Jackson, Miss.
Dale M. Klein, Bossier City, La.
James T. Landrum, Columbus, Miss.
James W. Lipscomb, New Orleans, La.
Arthur C. Lynch, Metairie, La.
James W. McCaskill, Baton Rouge, La.
Thomas R. McMurry, New Orleans, La.
Edwin P. Moure, Coral Gables, Fla.
Dan K. Pappas, New Orleans, La.
Frank Polinsky, Springfield, Pa.
Donald F. Presley, Monroe, La.
Robert L. Reid, Houston, Tex.
Charles F. Schimke, Pittsburgh, Pa.
Frank W. Sharp, Jr., New Orleans, La.
Donovan Paul Show, New Orleans.
Josef Sorkin, Kansas.
James G. Stinson, Overland, Pk., Kansas.
Hugh W. Temple, Jr., Houston, Tex.
Arie C. Ter Poorten, Houston, Tex.
Jack H. Thornton, Baton Rouge, La.
Delbert R. Ward, Houston, Tex.
Roy James West, Beaumont, Tex.
William Whatley, Atlanta, Ga.
Perry D. Wiggins, Baton Rouge, La.
Jewell T. Wood, Tulsa, Oklahoma.
Sydney L. Zeid, Baton Rouge, La.

WELCOME TO PROFESSIONAL STATUS

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crete technology, newest construction methods and research and development. A typical day may find field men helping a ready-mixed concrete producer design a high-strength mix for a special project—or consulting with highway engineers on pavement designs for a modern expressway.

Later, they might be discussing applications of prestressed concrete with the architects for a new office building—or attending a citizens' meeting about a proposed new sewage plant.

Backing these field men are

engineers and specialists at PCA's engineering headquarters and its \$10 million Research and Development Laboratories. Extending this service program, too, are more than 500 publications and 85 films covering every modern use of concrete.

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(Continued from Page 23)

Board of Registration for Professional Engineers and Land Surveyors:

Adams, Leonard C., 12123 N. Lakeview Dr., Baton Rouge, La.

Allen, James B., 523 Park Blvd., Baton Rouge, La.

Beale, Lawrence C., Jr., 332 Wilton Dr., Baton Rouge, La.

Boyd, Spencer W., 2690 Habersham Rd. NW, Atlanta, Ga.

Brown, Vernon M., 236 Frazer St., Lake Charles, La.

Cahill, Harold P., Jr., R.D. #7 Rustic Hills Dr., Medina, Ohio.

Carlson, Leon B., 3205 Norton, Independence, Missouri.

Cloud, James W., 2648 Manchester, Oklahoma City, Ohio.

Corley, Wallace W., 1408 Holloway Dr., Pineville, La.

Dannenbaum, James D., 5642 Wickersham, Houston, Texas.

Ellefson, George E., Jr., 2624 N. Fillmore, Little Rock, Ark.

Engel, Peter A., 725 N. Starrett Rd., Metairie, La.

Foster, Richard E., 5342 Sycamore, Baton Rouge, La.

Gottula, Elden C., 6638 Thrush, Houston, Texas.

Hamilton, Willard E., 1850 Funston Ave., San Francisco, Cal.

Hurlbert, David G., 1905 Kan. Ave. S. E., Charleston, W. Va.

Herkes, Alfred J., 1907 Calhoun St., New Orleans, La.

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LAFAYETTE—Board of Direction returns to Lafayette for first meeting since 1964 Annual Meeting. From left, W. S. Nelson, Leo M. Odom, J. P. Fernandez, Roy Johnson, Col. J. T. Knight, Jr., M. B. Ewing, Calvin T. Watts. Not shown are Eugene Sellers and Larry Hunsinger, hosts.

Johnson, K. Gordon, Rt. 4, Palestine, Texas.

Justice, Felix C., Jr., Apt. 113-K, Hedsuppact, New Orleans, La.

Knight, Robert C., 800 Naff Ave., Bastrop, La.

Marcin, Benjamin G., 1638 West 2 St., Brooklyn, N. Y.

McLeod, Charles W., Rt. 2, Box 199 JE, Belle Chasse, La.

Neff, Robert A., Jr., 1002 Maplewood Ln., Nashville, Tenn.

Pearson, Joseph J., 7614 Shady Villa, Houston, Texas.

Piker, John F., Box 221, Clinton, Louisiana.

Rau, Robert J., 10555 Sher Moor Dr., Baton Rouge, La.

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(Continued from Page 18)

sewer pipes. Infiltration will be studied by bringing up the water level in the pipes.

By these experiments the research team hopes to learn not only what happens to the "bedding" material beneath the pipes under various conditions and different environments but also whether the pipes move laterally or vertically.

These findings will suggest the best type of "bedding"

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material and the optimum thickness for "bedding" layers for various sizes of pipes. As Professor Mayer emphasizes, these findings, of course, will be preliminary in nature and cannot be fully evaluated until they have stood the test of time in actual service.

If the project is successful, much is to be gained—because much is involved. Last year alone, for example, an estimated \$25,000,000 went into sewer construction along the coasts of Louisiana and Mississippi. Even more will be gained if the data obtained is also applicable to "bedding" materials beneath house foundations and sidewalks.

(Continued from Page 12)

Aside from the planned activities, LES members, their wives and their families will find much in New Orleans to entertain them during their free time. Sightseeing tours of the French Quarter, the lake front and the Garden District are always a "must" when visiting the famed Crescent City, as are walking tours along Royal Street, an evening of entertainment on Bourbon Street and a visit to such internationally known entertainment and educational meccas as Preservation Hall, the *Musee Conti*, the Steamer President and others.

A special program is being planned for teenagers, and a baby sitter service will be available to take care of the real young set.

The 1965 Annual Meeting promises to be one of the most rewarding ever sponsored by the Society, and every Engineer in the state, whether or not a member of LES, is urged to make a special effort to attend.

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Water never wears out

WATER USED IN ANCIENT GREECE IS STILL IN USE TODAY. WATER DRAWN FOR OUR BATH MAY HAVE BEEN USED PREVIOUSLY BY EARLY AMERICAN INDIANS....OR IT RECENTLY MAY HAVE BEEN DISCHARGED DOWN OUR NEIGHBOR'S DRAIN. NOT A VERY PLEASANT THOUGHT, BUT TRUE, NONETHELESS.

HOW DO WE KNOW THIS? SCIENCE TELLS US THAT WATER NEVER WEARS OUT. IT JUST BECOMES CONTAMINATED.

A strange paradox. Three-fourths of the earth's surface is covered with water. Yet only a small percentage of this is suitable for human use. And each day, that percentage becomes smaller because of pollution. Who is responsible?

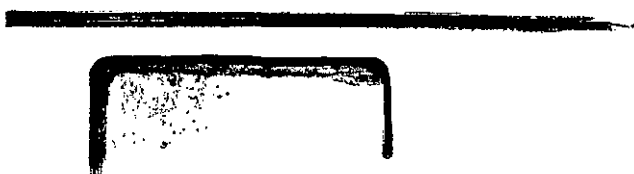
All of us. We all use water. Industry demands are fantastic. 1400 gallons to produce a dollar's worth of steel...nearly 200 gallons for a dollar's worth of paper...500 gallons to manufacture a yard of wool...320 gallons to make a ton of aluminum...600,000 for a ton of synthetic rubber.

People use water in homes. Tremendous quantities. Estimates of total usage vary. But it's safe to say that when our population reaches 260 million in 1980, our supply of fresh, usable water will be alarmingly short of even our most basic needs.

All of this water...from homes, business and industry...eventually is discharged into a river, lake or stream. A disgracefully large percentage of it is raw sewage...the cause of water pollution. Untreated sewage is not only destroying our supply of fresh water for human use, it also is killing our wildlife and robbing us of badly needed recreational facilities. In short, untreated sewage is rapidly destroying a priceless natural resource.

What can be done about it? First, we must realize that water must be treated so that it can be used...re-used...and re-used again. The only logical way to do this is to construct modern and adequate sanitary sewers and treatment plants. Much has been done by federal, state and local government agencies. But the task of cleaning up our nation's rivers and lakes is far from finished.

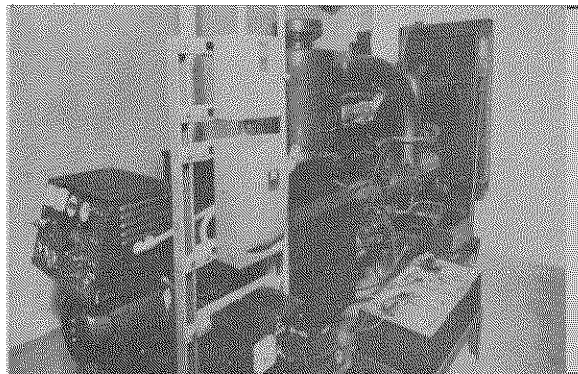
Our water pollution problem will be checked and in time solved only if all of us insist on adequate treatment of waste water through modern sanitary sewerage facilities. This is the responsibility of every citizen.



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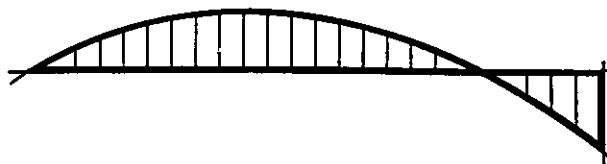
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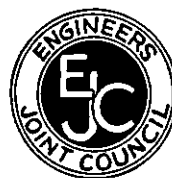
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ENGINEER

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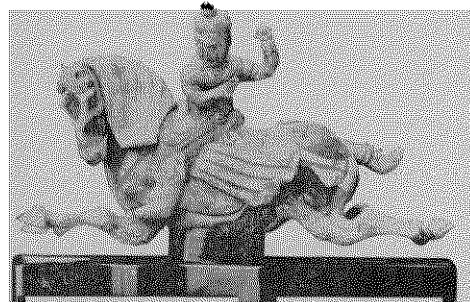
June, 1965



Are these the Ghost Riders in the sky?

LADIES OF THE COURT IN ANCIENT CHINA ARE ALWAYS THOUGHT OF AS BEING VERY DAINY AND DEMURE— BUT THEY MAY WELL HAVE RESEMBLED TODAY'S OUTDOOR- TYPE GIRL MORE THAN WE REALIZE. SOME OF THEIR RECREATION WENT FAR BEYOND THE QUIET DIGNITY OF SINGING FOLK SONGS BESIDE A POOL FILLED WITH LOTUS BLOSSOMS.

HOW DO WE KNOW THIS? BY THE PAINTED MORTUARY CLAY FIGURE OF A WOMAN PLAYING POLO.....



This figurine, from the Tang Period (619-907 A.D.) of China, established the active participation by women in a sport that is played entirely by men today. Notice, too, that the Chinese ladies rode astride the horse, not sidesaddle as European and American ladies did up to 50 years ago. Riding a horse may have changed, but the clay in the figure remained the same throughout time.

Proof again of the amazing permanence of clay.

Like the ancient figurine above, Dickey Pipe is made of clay. It, too, is unaffected by the passage of time. Modern manufacturing methods are used to make strength an inherent part of the pipe. The clay itself is immune to attacks of acids and alkalis found in today's sewers. The pipe is glazed to improve flow characteristics. And the patented Dickey Coupling is made of urethane, a resilient material providing tight, yet flexible joints. All of these advantages make Dickey Perma-Line Coupling Pipe your best bet for sanitary sewers...low-cost, trouble-free, permanent.



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DO YOU KNOW?

Why Deep-Strength Asphalt pavement overcomes cracking ... The solution to de-icing damage in winter... How to get maximum use out of road-building dollars...

Why build cracks into a pavement?

Cracks in a pavement cause a noisy, rough ride. Cracks permit water to penetrate into the road foundation. Cracks built into a pavement spall and become wider and rougher. Cracks cause the thump-thump-thump so annoying to drivers.

Some pavements must be built with cracks. The cracks are necessary to permit expansion and contraction with temperature change. These pavements have very little fatigue resistance and are brittle. Vibration or repeated flexure under traffic create more cracks. More cracks lessen impact resistance, etc., etc.

Some pavements that *appear* to be Asphalt crack after construction. These generally are reflected cracks—cracks that developed in the brittle base under the thin riding surface. These cracks also increase in size and number with time, and cause pavement failure.

There is a solution to cracks in a pavement. Build a pavement that is not rigid and brittle, that requires no expansion or contraction cracks, that will not develop reflection cracks. Build an all-Asphalt pavement. This pavement will be remarkably impact and fatigue resistant and will “give” under traffic loads—without cracking. It will ride better, be safer, look better, last longer and cost less. This pavement is Deep-Strength Asphalt concrete (Asphalt-surface on Asphalt-base).

What pavement solves the de-icing damage problem?

Results of an exacting test conducted by engineers of The Asphalt Institute have now proven conclusively that Asphalt pavements *are not damaged* by either sodium or calcium chlorides normally used on roads in winter. A duplicate test-series using ammonium sulfate and nitrate de-icing salts resulted in similar findings. (For a complete report of this significant test, see Highway Research Board Record No. 24, published by the Highway Research Board, 42nd Annual Meeting.)

What is stage construction?

Stage construction is a progressive road-building process that provides the road that is needed *now* and defers until tomorrow the construction that will be needed *then*, built with funds that will become available *then*.

Most of our existing roads in the United States represent a form of stage construction. Primitive trails were developed into wagon roads—later they were improved by layers of rock or gravel; and finally, they were widened, straightened and asphalt-surfaced as the need developed.

Modern stage construction is more important than ever. It can be accomplished in two ways. First, there is stage construction in *depth*. Here, a usable heavy-duty Asphalt-base is built, with one or more Asphalt riding courses to be added later when needed. Second, there is stage construction in *width*, building today the lanes that are sorely needed to relieve traffic congestion, while reserving right-of-way for additional future lanes when traffic needs increase.

Stage construction is a key to a solvent highway program!



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Dennis F. Natal, Jr. Engineering Writer

By WARREN K. BANKSTON

Editor

THE LOUISIANA ENGINEER

Dennis F. Natal, Jr., editorial assistant for THE LOUISIANA ENGINEER, died June 17 while on vacation in Brownsville, Texas.

Mr. Natal, a professional associate with Allen Johnson and Associates, Public Relations Counsel to the Louisiana Engineering Society, was a trained technical and industrial writer. His articles appeared in the New York Times, the Christian Science Monitor and other national, regional and local business and trade publications. Assisting with details of various writing assignments concerning the engineering profession, he was well known to members of the Louisiana Engineering Society and much respected by them.

THE LOUISIANA ENGINEER

Vol. 51

JUNE, 1965

No. 3

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OUR COVER—These three officers recently re-elected to the Louisiana Land Surveyors Association are (from left): Francis M. Tessier, Baton Rouge, secretary-treasurer; James I. Carter, Monroe, president, and Clarence J. Tircuit, Baton Rouge, vice president. See story on pg. 21.

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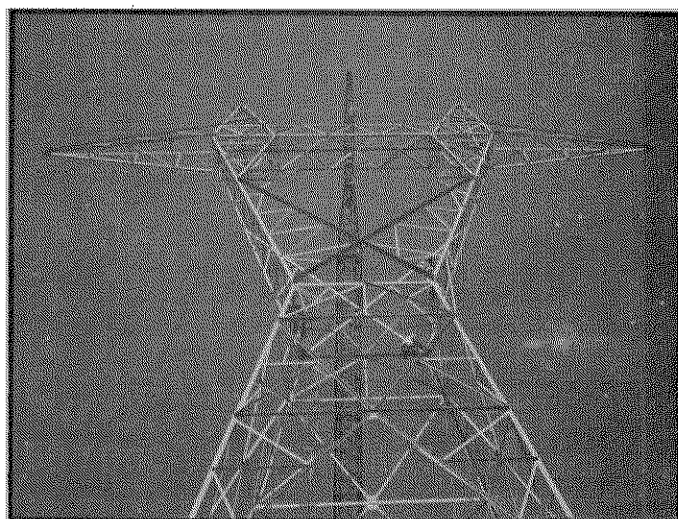
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Technical Papers:

Russell A. Hall, Chairman
Guy J. Seghers, Jr., Vice-Chairman
Wm. A. Cunningham
George J. Groh
John F. Grosch III
Claude Kelly, Jr.
Sidney F. Lewis IV
John F. Marshall
John K. Monlezun

Vocational Guidance:

Landry Murphy, Chairman
Wm. J. Drawe III, Vice-Chairman
J. I. Hebert, Jr.
Ronald R. Santos

Student Chapter Advisers

Student Chapter No. 1, University of
Southwestern Louisiana
Raymond E. Jenkins, Faculty Adviser
Emery Domingue

Minutes Of The Board, LES

LOUISIANA ENGINEERING SOCIETY
Minutes of Meeting of the Board of Direction
Held at the Engineers' Club, New Orleans on
Monday, April 12, 1945

The meeting was called to order by President Knight with Messrs. Ewing, Roy Johnson, McNamara, Meyers, Nelson, Odom, Sellers, Walk and Fernandez present. Mr. Allen Johnson, Public Relations Counsel, also was in attendance. It was moved by Mr. Sellers, seconded by Mr. Odom and carried, that the minutes of the Board Meeting held on March 15 in Lafayette be accepted as forwarded to board members by mail.

President Knight reported for the Annual Meeting Committee, outlining its plans for the meeting to be held at the Fontainebleau Motor Hotel in New Orleans on July 8-9-10. It was agreed that the state organization would be responsible for the meeting's finances, whereupon Mr. Nelson moved that \$500 be budgeted for the initial expenses of the Annual Meeting. Motion seconded by Mr. Odom and carried.

President Knight announced that an election of officers for the Functional Section for Professional Engineers in State Government was under way and that a statewide meeting was scheduled for April 26 in Baton Rouge. The secretary was instructed to mail a notice of this meeting to all LES members in order to give it wide publicity.

The president advised that he had requested each Chapter President to submit two nominees for the Functional Section for Professional Engineers in Industry. He also informed the board that the LES's recommendations prepared by the special committee had been forwarded to the State Legislative Construction Probe Committee, of which Senator Adrian Duplantier is chairman.

Mr. Ewing moved that the Ethics & Professional Conduct Committee investigate and submit a report to the Board of Direction on the professional conduct of Mr. J. B. Shipp. Motion seconded by Mr. Walk and carried.

President Knight stated that the Legislative Committee had been alerted for the forthcoming Legislative Session.

Messrs. McNamara and Walk have a comprehensive report on the activities of the Executive Director Selection Committee, advising that the list of applicants had been reduced to nine persons, all of whom have exceptionally good qualifications. Mr. Walk assured the board that the committee would be able to submit its recommendation at the May meeting of the Board of Direction.

The secretary reported that 378 ballots had been cast in the March membership election and that all applicants had been elected to their respective grades. A copy of the ballot is attached to these minutes.

The secretary presented a Financial Report for the first quarter of 1965, showing income of \$35,236.88 and expenditures totaling \$21,580.75 for the quarter.

The secretary announced that the Honors & Awards Committee was receiving nominations for the Civic Activities Medal, the Charles M. Kerr Public Relations Award, and for Honorary Membership in the Society. Board members were urged to submit their recommendations for these awards.

Mr. Sellers moved that the following resignations be accepted with regret, seconded by Mr. Johnson and carried:

Donald J. Garcia, New Orleans (Junior)
Henry D. Foot III, Mississippi (Junior)
Donald L. Richard, Texas (Junior)
Vernon B. Sauer, Baton Rouge (NSPE)
Robert W. William, Baton Rouge (Member)

President Knight read correspondence with the Woman's Auxiliary concerning reorganization and the formation of an advisory committee. Mr. Nelson moved that the expenses of the Ladies' Advisory Committee to the Annual Meeting, not to exceed \$50 per lady, be borne by the Louisiana Engineering Society. Motion seconded by Mr. Walk and carried. Mr. Nelson moved that the publication of the Woman's Auxiliary Year Book be taken care of by the Executive Director of LES. Motion seconded by Mr. Odom and carried.

It was decided to hold the next meeting of the board on May 17, 4:00 p. m., Baton Rouge. The meeting then adjourned.

JOHN P. FERNANDEZ,
Secretary-Treasurer

LOUISIANA ENGINEERING SOCIETY
Minutes of Meeting of the Board of Direction
Held at Oak Manor Motel in Baton Rouge
Monday, May 17, 1965

The meeting was called to order by President Knight with Messrs. Affolter, Carter, Duclos, Ewing, Ferguson, R. Johnson, Livingston,

Sellers, Stokes, Walk and Fernandez present. Mr. Allen Johnson, Public Relations Counsel, also was in attendance. The secretary advised that the penultimate paragraph of minutes of the board's April 12 meeting should be deleted, since dues of the member recorded as being dropped have been received. Mr. Odom moved that minutes of the last board meeting be accepted with this correction, seconded by Mr. Sellers and carried.

President Knight read a report on the 1965 National Engineers' Week observance in Louisiana, and commended all of the chapters for their fine work in publicizing this occasion.

The president distributed literature concerning exhibit space available at our annual meeting scheduled for July 8-10 at the Fontainebleau Motor Hotel. He urged board members to assist in obtaining exhibits and also outlined the meeting program.

The secretary read a report of the Nominating Committee wherein the following slate of officers were recommended:

For President-Elect Louis Duclos
For First Vice-President Edward J. McNamara
For Secretary-Treasurer John F. Vogt, Jr.
For National Director John P. Fernandez
For State Director for 2 yrs. Marion C. Bubenzer
For State Director for 2 yrs. Frank H. Walk

Mr. Sellers moved that the committee report be accepted and that the list of nominees be submitted to the membership by letter-ballot. Motion seconded by Mr. Affolter and carried.

Mr. J. B. Carter, newly elected Chairman of the Functional Section for Professional Engineers in State Government, reported on the organizational meeting of this section. He reported that a committee had been appointed to study whether or not additional dues should be levied upon the members of this section. A prolonged discussion followed on unionism as it affects Professional Engineers.

Mr. Stokes, Chairman of the Selection Committee for a full-time executive secretary, announced his committee's recommendation that Mr. Earl Martin be engaged to fill the position. Mr. Ewing moved that the recommendation be accepted and that the committee proceed to investigate his personal references and engage Mr. Martin if the latter are satisfactory. Motion seconded by Mr. Odom and carried.

Mr. Odom moved that the Louisiana Engineering Society contribute \$200 towards the James M. Robert Memorial Award recently established at Tulane University. Motion seconded by Mr. Ewing and carried.

President Knight appointed a committee consisting of Messrs. Frank H. Walk, John F. Vogt, Jr. and Allen M. Johnson to assist him in preparing a program for the Officers' Induction Conference to be held in Lake Charles June 11-12. The Board of Direction also will meet at that time.

A letter from the Shreveport Chapter inquiring about contributions toward Engineers' Week expenses was read, and the Secretary was instructed to advise that under the new set-up no monies were budgeted to assist the chapters in defraying expenses of Engineers' Week.

The secretary read a letter from NSPE headquarters advising that Mr. Marion C. Bubenzer was soon to become a Life Member of the national society, and since he had been a member of NSPE through the Texas Society for many years, the Texas SPE had requested that his Life Membership be carried on their rolls. This would not affect his membership in LES. The secretary was instructed to determine Mr. Bubenzer's wishes in this matter.

A letter from the Southern States Apprenticeship Conference requesting a contribution was read. It was moved by Mr. Duclos, seconded by Mr. Sellers, that the request be declined with regret. Motion carried.

President Knight read a report of the committee in charge of the NSPE Winter Meeting held in New Orleans in January. Mr. Odom moved that Mr. G. M. Baccich, General Chairman, and all of his committee personnel be congratulated upon the fine success of the meeting; that these commendations be made in writing, signed by the President in behalf of the Board of Direction, expressing the board's appreciation and containing appropriate comments in recognition of their expert handling of the entire meeting, including its finances. Motion seconded by Mr. Walk and carried.

Mr. Ewing moved that the resignation of Mr. Benjamin C. Sones, Bogalusa (Mbr.), be accepted with regret, effective December 31, 1965. Motion seconded by Mr. Roy Johnson and carried.

It was decided to refer a proposal for printing THE LOUISIANA ENGINEER, submitted by the Southern Printing Company, to the incoming Executive Secretary.

The meeting then adjourned.

JOHN P. FERNANDEZ
Secretary-Treasurer

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IT'S ANNUAL MEETING TIME—YA'LL COME!

GENERAL INFORMATION

Theme of the 1965 Annual Meeting of the Louisiana Engineering Society is "Research and Development in the Gulf South and its Effects on Industrial Expansion and Area Development."

The Fontainebleau Motor Hotel is the official headquarters of the meetings and all meetings and technical sessions will be conducted at this hotel except as noted. The badge issued each person upon registration must be worn at all events—so please wear it at all times. It is the wish of the L.E.S. Board of Direction that the meeting be self-supporting, and wearing your badge indicates that you are helping to make this possible.

Guest Cards for golf at Metairie Country Club are available at the registration desk. Please sign up to 5:00 P.M. Thursday.

Teen Coke Room and Baby Sitters available. Inquire

THURSDAY MORNING, JULY 8

10:00 A.M. Registration begins.

Exhibits open in the Grand Ballroom.

THURSDAY AFTERNOON, JULY 8

12:00 Noon Welcoming Luncheon and General Meeting, Carnival Suite.

Presiding: Colonel John T. Knight, Jr., U.S.A. (Ret.), President L.E.S.

Introduction: Keith P. Lanneau, member Board of Directors and Secretary Gulf South Research

Institute and President Micro-Tek Instruments, Inc.

Keynote Address:

The newly appointed Director of the Gulf South Research Institute.

Title: "THE GULF SOUTH RESEARCH INSTITUTE."

Annual Report: John P. Fernandez, Secretary-Treasurer.

Annual Report: Colonel John T. Knight, Jr., President.

Teller's Report: Calvin T. Watts, Chairman of Nominating Committee.

Installation of newly elected officers.

Presentation of token of appreciation to retiring President, Col. John T. Knight, Jr.

2:15 P.M. Technical Session No. 1, Napoleon Room
Chairman: Dr. J. J. Thigpen, Head, Department of Mechanical Engineering, Louisiana Polytech-
Vice-Chairman: Dr. Lee H. Johnson, Dean, School of Engineering, Tulane University, New Orleans, La.

Title of Paper No. 1: "AGRICULTURAL UTILIZATION RESEARCH STRENGTHENS THE SOUTH'S ECONOMY."

DR. HAROLD FISHER, Director, Southern Research and Development Division, U.S.D.A. Research Service, New Orleans.

3:00 P.M. Paper No. 2.
Title: "THE TRAINING OF MEN FOR RESEARCH IN THE PETROLEUM INDUSTRY."
DR. ROGER W. RICHARDSON, Dean of Engineering, Louisiana State University, Baton Rouge, La.

3:45 P.M. Coffee Break.

4:00 P.M. Paper No. 3.
Title: "PLANS FOR DEVELOPMENT OF RIVERSIDE RESEARCH LABORATORIES — TULANE UNIVERSITY."
JAMES C. SCHNEIDER, General Manager, Riverside Research Laboratories, Tulane University, New Orleans, La.

8:00 P.M. General Interest Program.
Place: The New Engineers Club, 920 Gravier Street.

Presiding: Charles W. Stokes, incoming President L.E.S.

Speaker: JUDGE CARLOS G. SPAHT, Executive Counsel to Gov. John J. McKeithen.

Title: "WE SHAPE LOUISIANA'S FUTURE."

Presentation of Life Memberships in Society: ANDRE R. BROUSSEAU, ALBERT J. FRANKSEN, J. HARRY GILLUM, DANIEL HALLARON, JR., OSCAR HIGGINBOTHAM, ARTHUR M. HILL, W. STONE LEAKE, HENRI J. MOLAISSON, WALTER S. RAINVILLE, JR., and HARRY H. SHUTTS.

Presentation of L.E.S. Civic Activities Medal—Andrew M. Lockett Award: MAJ. GEN. EDWARD S. BRES, USA (Ret.)—To be presented

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Presentation of L.E.S. Technological Accomplishment Medal: ARMAND L. WILLOZ—To be presented by Milton E. Dupuy, President, Orleans Levee Board

Presentation of Charles M. Kerr Public Relations Award: J. MASON GUILLORY—Presented by Frank H. Walk.

Refreshments will be served after the meeting through the courtesy of the Woman's Auxiliary of the Louisiana Engineering Society.

FRIDAY MORNING, JULY 9

9:00 A.M. Registration and Exhibits reopen.

9:30 A.M. Technical Session No. 2, Napoleon Room
Chairman: A. M. Moore, Chief Engineer, Central Louisiana Electric Company, Inc., Pineville, La.
Vice-Chairman: M. C. Abraham, Manager of Engineering, New Orleans Public Service, Inc.
Title of Paper No. 4: "DEVELOPMENTS IN TIMBER UTILIZATION."

GEORGE FOERSTER, Southern Pine Association, New Orleans, La.

10:30 A.M. Paper No. 5.

Title: "SEFOR—A DEVELOPMENTAL FAST REACTOR FACILITY."

K. HIKIDO, Manager, SEFOR Safeguards and Analysis, General Electric Company, San Jose, Calif.

11:15 A.M. Paper No. 6.

Title: "BUILDING A SPACE CENTER—THE STORY OF NASA'S MISSISSIPPI TEST FACILITY."

FRIDAY AFTERNOON, JULY 9

12:15 P.M. Society luncheons:

I.E.E.E. Luncheon, Carnival Room A.

A.S.M.E. Luncheon, Carnival Room B.

2:15 P.M. Technical Session No. 3 Napoleon Suite
Chairman: J. W. Affolter, Jr., Head of Construction Department, Humble Oil & Refining Co., Baton Rouge Refinery.

Vice-Chairman: W. S. Nelson, President, Waldemar S. Nelson and Company, Inc., New Orleans, La.

Paper No. 7.

Title: "VENICE REFINERY OF GULF OIL CORP.—A NEW REFINERY DESIGNED FOR HIGH GASOLINE YIELD."

JAMES K. WARNE, JR., Refinery Manager, Venice Refinery, Gulf Oil Corp., Venice, La.

3:15 P.M. Paper No. 8.

Title: "THE DRAVO BUCKET WHEEL RECLAIMER AND ITS APPLICATION AT THE NEW BULK HANDLING FACILITY—PLAQUEMINES PARISH."

W. H. LEHR, Sales Engineer, Dravo Corporation.

6:00 P.M. Cocktail Hour, Exhibit Area, Grand Ballroom. Admission by badge only.

SATURDAY MORNING, JULY 10

9:30 A.M. Exhibits reopen. Remain open until 4:30 p.m.

10:00 A.M. N.S.P.E.-L.E.S. Functional Section Committee Meetings.
Professional Engineers in Private Practice, Napoleon Room.

Presiding: Frank H. Walk, Chairman.

Professional Engineers in State Government, Patio Room No. 1.

Presiding: J. B. Carter, Chairman.

Professional Engineers in Industry, Patio Room No. 2.

Presiding: Francis B. Sessums, Chairman.

SATURDAY AFTERNOON, JULY 10

1:00 P.M. Tour of NASA Michoud Space Center. Buses leave and return to the Fontainebleau Motor Hotel. Limited to 100 people, United States citizens only. Tickets at Registration Desk.

SATURDAY EVENING, JULY 10

7:00 P.M. Cocktail Hour, Carnival Suite.

8:00 P.M. Banquet, Pelican Room.

9:00 P.M. Dancing.

LADIES ACTIVITIES

THURSDAY, JULY 8

10:00 A.M. Registration, Mezzanine Floor, Fontainebleau Motor Hotel.

8:00 P.M. General Interest Program and Coffee Party, New Engineers Club, 920 Gravier Street.

FRIDAY, JULY 9

10:00 A.M. General Meeting of State Auxiliary Chapters, Patio Room No. 1.

12:30 P.M. Luncheon, Al Hirt's French Quarter Club. Tickets (\$3.50) are available at Registration Desk.

6:00 P.M. Cocktail Hour, Exhibit Area, Grand Ballroom.

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A History Of The Louisiana Engineering Society

By JOHN P. FERNANDEZ

LES Secretary-Treasurer

The idea of forming the Louisiana Engineering Society was conceived in the fall of 1897 by J. F. Coleman, a distinguished engineer and a real southern gentleman. In proposing the idea to a group of fellow engineers, Mr. Coleman expressed the belief that it was the duty of a professional engineer to keep abreast of his profession, and having in mind his own "munificent salary of \$135 a month" it occurred to him that engineers could pool their resources to avail themselves to expensive journals and publications that were beyond their individual means.

From the beginning the group's efforts to form a library were great; in the first year, in addition of periodical subscriptions and 66 books purchased, some 130 volumes and 145 pamphlets on engineering subjects were donated. The library grew and provided a source of valuable technical information to the membership. Its usefulness continued through the years and it was not until 1955, when we lost our quarters in the St. Charles Hotel, that we were forced to dispose of it. But I'm getting ahead of my story.

Our Society's organizational meeting was held on December 22, 1897 with 14 members present; the constitution and bylaws were adopted on January 8th, and since Mr. Coleman was willing and able to do the work, he was elected our first Secretary. When the group tried to incorporate, they discovered that the state laws required at least 25 signatures. So our first membership campaign began and by the time the charter was recorded on February 3rd, the number had increased to 29. I have before me a copy of the act of incorporation which reads:

"The objects of this corporation are the professional improvement of its members, the encouragement of social intercourse among Engineers and men of practical science, and the advancement of Engineering; and for the promotion of these objects, stated meetings of the Society shall be held and a library formed for the use of its members."

Does this sound familiar? It should, because it is Article I of our revised constitution that was adopted just eight months ago. In fact, though our constitution

has been amended many times to meet changing conditions, it is still in essence the same as the original one drawn up in 1898. Another item of interest is that, in spite of inflation, dues in 1898 were \$12 per year and today our annual state dues are still \$12.

Our first President was Sidney F. Lewis, a native New Orleanian. At the time Col. Lewis was elected president he was and had been a member of the State Board of Engineers for 18 years. In 1908 he was appointed to the Board of Levee Commissioners and had the distinction of becoming our first Honorary Member in 1917. I'm happy to say that his great-grandson, Sidney F. Lewis IV, is a member of LES today, as are quite a few other descendants of charter members.

OUR FIRST REGISTRATION LAW

The Society's first milestone was the enactment of our registration law. The initial work toward securing passage of this legislation was begun as early as 1898. Our founding fathers were much concerned about engineering incompetency and wished to protect the public from the activities of "dabblers and quacks who had only to hang out a shingle in order to qualify for business." During the 1900 and succeeding sessions of the Legislature, bills were introduced at the Society's request, but it was not until 1908, when the Legislature realized that the efforts of the Society were not for the aggrandizement of the engineer, but solely for the welfare and safety of the public, that the law finally was passed. As proposed, it was intended to include all branches of the engineering profession, but unfortunately opposition developed, and the act which went into effect in July was the very first state law of its kind that regulated the practice of Civil Engineering and Land Surveying. Although the State of Wyoming had enacted a law in 1907, I've been told that the Wyoming law regulated the practice of engineering as it affected the mining industry.

Act 308 of 1908 created the Louisiana State Board of Engineering Examiners and provided that the Board Members be appointed by the Governor from a list of names submitted by the LES. This provision is still in our present law. The LES Board has always considered one of its most solemn obligations the preparation of such

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About The Author

John P. Fernandez, who has served continuously as secretary of the Louisiana Engineering Society since 1945, was presented with a plaque by the Monroe Section of LES during a dinner meeting at the Paragon Club there June 1, according to J. J. Thigpen, president of the Monroe Section.

Thigpen said that the meeting was held to honor Fernandez "for his many years of service to the Louisiana Engineering Society and for the extra he seemed to always put out for those of us who had to deal with him primarily by mail."

Fernandez delivered a paper on the "Highlights of the Louisiana Engineering Society" at the meeting. The paper is published herewith in part.

a list, for in the final analysis, no matter how well or how badly the law may be framed, its success or failure depends upon the personnel of the Board that administers it. As you know, the present capable Board includes two of your own charter members, Ben Bogard and Roy Sessions. Too great praise cannot be given to the Board Members, both past and present, who have done so much to maintain high standards in the registration of engineers.

When the original Board of Examiners was created, Col. Marcel Garsaud, who was at that time secretary of LES, became the first secretary of the State Board. In 1920, Col. Garsaud was elected first President of the National Council of State Boards of Engineering Examiners.

In 1914 it was decided that the LES should undertake the publication of its own journal. The first issue of the "Proceedings of the Louisiana Engineering Society" was published in February 1915 and in this past December we completed 50 years of its publication. From the time our journal was issued bi-monthly for a subscription price of \$2.00 per annum. It still is issued in the same months, at the same subscription price although in 1959 its title was changed to "The Louisiana Engineer."

The first issue of our journal was hailed with about the same optimism evidenced by your 1959 Board when our present public relations program was instituted. The original editorial said: "The launching of this publication represents one of the most important steps that the Society has ever undertaken . . . The record shows that the LES, with a comparatively small membership, and consequently with limited resources, has always been an active and going concern. Whatever it has undertaken to do in the past, has been well done. This means that the spirit of the Society as manifested in the activity and enthusiasm of its members is one of high ideals and accomplishments. This in itself is the best augury for the success of this, our new venture."

That was written by Dean Douglas Anderson, our first editor. Dean Anderson exemplifies the hard working professional-minded leaders with which the LES has been blessed. Five years after serving as President, Dean Anderson accepted editorship of the publication and remained editor for 16 consecutive years. On his retirement as editor, Dean James M. Robert said of him: "Un-

der his able direction we have seen the Proceedings grow from a doubtful venture to an accomplished institution of the highest order. He has a keen insight into general affairs, coupled with an uncanny judgment, both of men and things. As an inspiring teacher a wise and just counsellor, and a generous friend, he may have an equal somewhere in the world, but he certainly has no superior."

Truly a great statement about a great man. I'm happy to say that Dean Andersen was esteemed and appreciated by all of his fellow members and in 1936 he became our first non-charter member to be elevated to Honorary Membership. The optimism expressed by our Society in 1915 was well founded, our publication has grown throughout the years and much credit goes to Douglas Anderson, James M. Robert and Arthur M. Hill the editors who nurtured and guided its first 40 years.

THE GOLDEN ERA

In June 1920 the American Council of Federated American Societies was organized. The first president of this body was the Honorable Herbert Hoover and the LES was one of its charter members. Mr. Hoover was so impressed by the caliber and type of workers the LES had that when he became President of the United States he appointed three of our members to important positions. Col. Marcel Garsaud was appointed a Member of the Federal Power Commission, Prof. W. B. Gregory became a Member of the Advisory Committee of the National Hydraulic Laboratory, and of course Ernest Lee Jahncke was appointed Assistant Secretary of the Navy. Late in Mr. Hoover's administration, A. M. Lockett became local chairman of the Industrial Rehabilitation Commit-

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tee, a committee appointed by the President to study the grave unemployment problem. In August 1932 President Hoover appointed J. F. Coleman to the Engineers' Advisory Board of the Reconstruction Finance Corporation. As a matter of note Mr. Coleman in 1938 was asked to return to Washington to the same position and remained in that capacity until his death in 1944.

1935

1935 was another milestone in our history. President Edward S. Bres was the first to appoint District Contact Representatives for each Congressional District, with the object of providing closer contact with engineers located too far from New Orleans to attend meetings.

Over the years, our Society has served the public. As early as 1900 the Mayor of New Orleans requested the LES to study the building laws of that City and make recommendations for their revision and only recently our society submitted suggestions to Senator Adrian Duplantier's Legislative Construction Probe Committee. But in 1935 we reversed the order, when LES requested the Works Progress Administration to undertake a comprehensive engineering study. This book is the result of our request, its cover is titled: "Some Data in Regard to Foundations in New Orleans and Vicinity—Collected and compiled by the Soil Foundation Survey as requested by Louisiana Engineering Society." You would be amazed how many requests for copies we have received from all corners of the world.

On May 13, our Society had the honor of cutting the ribbon dedicating the bridge across the Bonnet Carre Spillway. These golden scissors were used at the dedication ceremony; the legend inscribed on them reads thus:

"These scissors used to open the Spillway Bridge on the Airline Highway between Baton Rouge and New Orleans, La." and on the other side "Shortening the distance from 115 to 82 miles—May 13, 1935—Louisiana Engineering Society Officiating." After the dedication ceremonies the entire gathering went on to Baton Rouge to attend the first LES meeting ever held outside of New Orleans. This custom of holding a regular meeting of the Society in Baton Rouge continued for many years, even after the establishment of the Baton Rouge Chapter.

Late in the same year plans were made for our first two-day annual meeting. The purpose of a two-day meeting was to include plant visitations, technical papers and social activities similar to the programs followed at national meetings. In this way it was hoped to bring together all Louisiana engineers in one common gathering, and thus promote and emphasize the solidarity of the profession. The annual meeting was a success from the start and has grown bigger and better with each passing year. To those of you who have never yet attended one, I recommend that you make plans to come to this year's meeting scheduled for July 8-10 in New Orleans.

CHAPTER ESTABLISHMENT

As early as 1925, efforts were made to establish a Baton Rouge Chapter, but it was not until November 20, 1939 that this was accomplished through the efforts of Prof. B. W. Pegues and Dean Leo J. Lassalle. The Lake Charles Chapter came next in November 3, 1947 under the guidance of F. Tackett Clarke and Ray E. Burgess. At this point I would like to pay tribute to two beloved past presidents of the Society—Charles M. Kerr and Hermann L. Lehmann, who were largely responsible for our chapter development and the tremendous increase in membership that took place in the late forties and early fifties.

1949 saw the establishment of both the Shreveport and Monroe Chapters. In 1948 Ernest M. Freeman, that popular and energetic engineer who was then serving as our 4th District Contact Representative, decided to carry the ball personally and bring about the establishment of a chapter at Shreveport. Jiggs enlisted the help of the 5th District Contact Representative, Dean Roy T. Sessums, and together they obtained enough new members to petition for the formation of the Shreveport Chapter. Their charter was granted on July 3rd, but Dean Sessums was informed he could not belong to the chapter he helped organize, because his domicile was in another Congressional District. This did not perturb the Dean, who was ready by August with another petition for the Monroe Chapter. Your chapter was established on October 3rd, exactly three months after the Shreveport Chapter. Then to the chagrin of Jiggs Freeman, you people beat the expert expeditor and received your charter at a meeting held at the Hollywood Restaurant in this city on October 25th, while the Shreveport Chapter did not formally receive its charter until November 11.

I have brought with me a copy of the Monroe charter. After we adjourn you younger men can come up and read the names of your charter members. In your brief history, three of them have become Presidents of the Louisiana Engineering Society, Roy Sessums, Ben Bogard and Calvin Watts. I'm sure you are well acquainted with each of their brilliant and distinguished administrations.

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Jarman the Lafayette Chapter was formed and their charter was presented on October 10, 1950. On February 15, 1951 Alexandria received their charter and Soule Butler the 8th District Contact Representative became their first President. And finally, as a result of our recent reorganization, New Orleans became a chapter in January of this year and its first President is Edward J. McNamara.

THE GENERAL ENGINEERING REGISTRATION LAW

Sporadic attempts to obtain a general engineering registration law were made during the first two decades after the passage of Act 308, but it was not until the late twenties that intensive efforts to register engineers in the other branches got under way. James M. Todd was the moving spirit in those days, heading committee after committee working toward that goal. When the original Act was passed in 1908, it was made applicable to Civil Engineering and Land Surveying only, because at that time, it was said that Louisiana could not be classed as an industrial state. Mr. Todd's committees worked tirelessly accumulating statistical data concerning the number of industrial firms, their effect on the State's economy, number of engineers employed, etc. For a while, success appeared to be only a matter of time, for in each succeeding session of the legislature passage came a little closer. For instance in 1930, the bill passed the House by a vote of 79 to 2. The Senate Committee unanimously reported the measure favorably, but the bill died on the Senate Calendar. In 1932, President F. N. Billingsley said: "The bill was passed by both Houses, but failed to become law because of a last-minute veto by the Governor." Does this sound familiar? Let me quote what President W. Stone Leake said 16 years later: "Even though the bill passed the Senate by a vote of 38 to 2 and passed the House by a vote of 66 to 0, it was vetoed by the Governor."

But I'm getting ahead of my story. The original registration law of 1908 was amended in 1914, 1920 and in 1946. The first two amendments were introduced at the request of the engineering profession and were considered beneficial. But in 1946, without our knowledge, a bill was introduced that was highly detrimental. Only at the last minute was the profession able to eliminate some of its worst provisions.

The action of the 1946 Legislature awakened the need for a united front. Early in that year the Louisiana Council of Engineers had been formed. At its initial meeting it was decided that the President and the Secretary of LES would hold the same offices on the Council. After the near success of 1948, President Leake said: "At least this time we can say that the failure was not due to a difference of opinion among engineers, for all selfish interests were put aside, many compromises were made, and for once the engineers themselves presented a united front. This united front was brought about to a large extent by the Louisiana Council of Engineers, an organization which was the brainchild of our Past President, Glenn Cappel. This organization spent many hours of tedious work, writing and rewriting, before the final draft of the bill was decided upon. I have mentioned that some individuals and groups put aside selfish interests and sacrificed some special advantages to themselves, and in this category I place the Louisiana Institute of Civil Engineers and the Louisiana Highway Engineers Asso-

ciation; and yet aside from our own society, these two organizations were the largest donors towards the expense of this project."

In 1950 we submitted practically the same bill and this time our goal was reached. Act 73 was passed, and at last we had a general engineering registration law. Eureka, the toil of fifty years had finally borne fruit. True, the law did not please everyone, for many compromises had been made and at the last minute we had to remove the engineer-in-training clause. I recall our spokesman quoting Disraeli as we walked down the halls of the State Capital: "Better than knowing when to seize an opportunity is to know when to forego an advantage." By giving in to the Veteran's objection on the engineer-in-training clause we had assured passage of the bill.

The enactment of the general engineering registration law was the result of the work of many individuals and organizations. It was teamwork to the nth degree, and your chapter, though less than one year old at the time played an important part. Our planning committee recommended that a legislator from the northern part of the State should steer the bill through final passage and see that there would be no last minute veto. You people of the Monroe Chapter volunteered to obtain the help of that legislator and did so. The engineering profession is truly grateful for your part in this epic event.

AFFILIATION

1957 was a year of decision. The issue before the Society was whether or not to affiliate with a national organization and, if such affiliation appeared desirable, whether that organization should be NSPE or EJC or

(Continued on Page 22)

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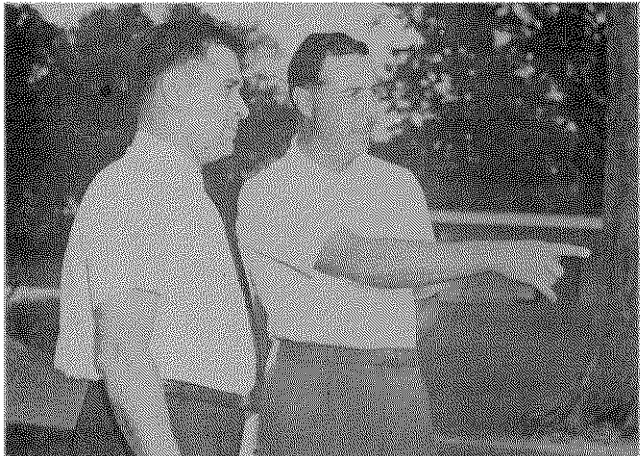
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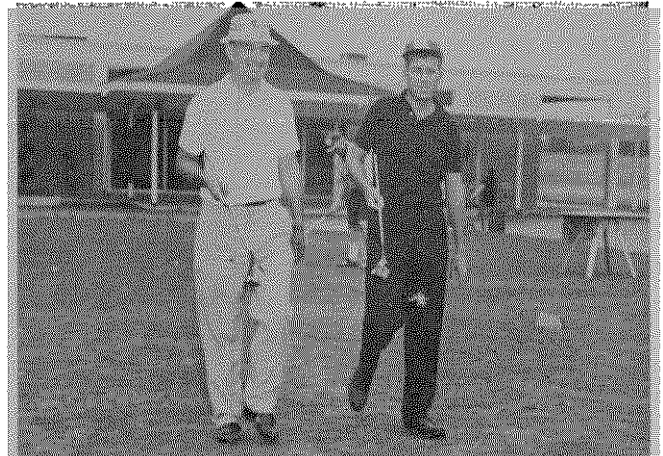
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ENGINEERS RELAX AT NE



Colonial Golf Club pro Joe Barbata (right) gives a guided tour of the links to James R. Gore, chairman, New Orleans annual outing.



Marking off the first tee are Henry Askew and Morgan Mickleberry.



Enthusiastic LES golfers line up at the first tee during the New Orleans annual outing.

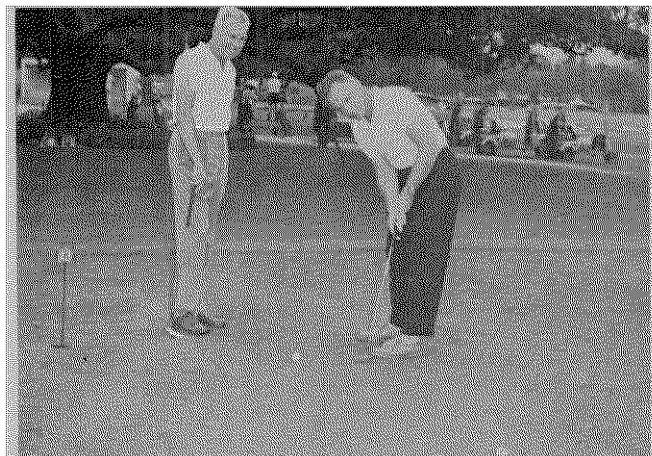


Swinging Rod Bannon displays his style to (from left) E. D. Cambon, Jr., Doug Douglass and Joe Childress.

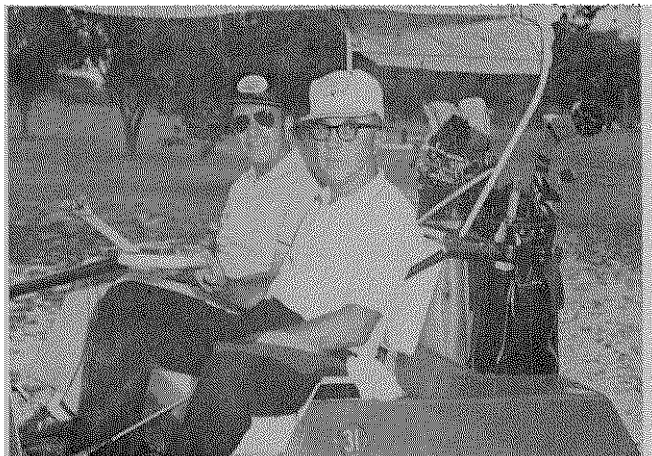


(From left) Rudy Duelfer, Jim Scott, Bill Hogan and Dan Hogan, Jr.

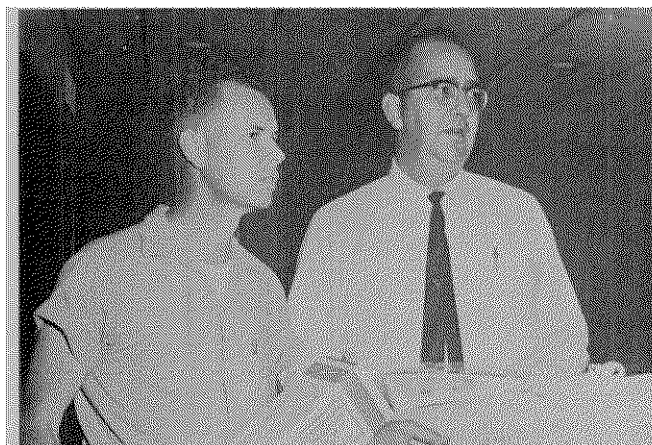
DRLEANS ANNUAL OUTING



Lining up on the putting green are, from left, J. G. Wedding-ton and W. R. Seay.



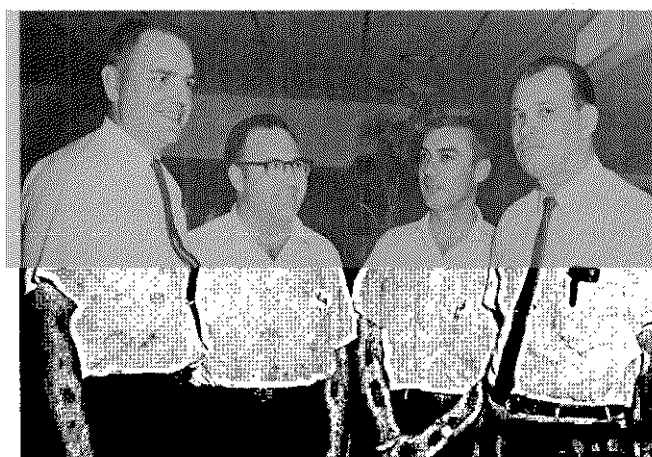
"It sure beats walking," William K. Becnel (left) says to Dr. Frank W. Macdonald (right) as they coast over the green.



Horseshoe doubles winners (from left) Antoine Ory, Jr. and Don Estopinal were rewarded for their efforts with an electric knife each.



Hank Armatis (left) and Warren Bankston talk over their game.



A quartet of winners includes (from left) John Grusch, horseshoe singles runnerup; C. M. Foreman, singles semi-finalist; Joe Pezold, doubles runnerup; and Curtis Lundstrom, doubles runnerup and singles winner.



Smiling over success at day's end are (from left) Mike Ruck, horse-shoes chairman; Earl Desselle, tickets and putting chairman; James Gore, general chairman, and William R. LeCorgne, prizes.



The new Engineers' Club which opened recently at 920 Gravier St. in New Orleans (over Morrison's Cafeteria) is proving to be a huge success, as indicated in the picture above. Shown here is the spacious lounge area. Inset is Mrs. Kathryn Pool, the Club's gracious secretary.



The main dining room is a favorite meeting place for Engineers during the lunch and dinner hours. A completely equipped kitchen, a private telephone area, an office and a very large and beautiful bar are included in the Club's facilities, according to DeWitt Morris, Club President.



From left, Paul L. Andry, Jr., 1st Vice President; G. Harvey Kellermann, Treasurer; DeWitt Morris, President; Rone Soileau, Club Manager; John Vogt, Past President; Fred H. Kinsley, Secretary, and Edgar H. Pavia, 2nd Vice President, enjoy a business lunch in the club's private dining room.

WELCOME TO PROFESSIONAL STATUS

Listed below are the engineers who were granted registration May 11, 1965 by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors:

Alford, Van Henry, McComb, Mississippi
 Allan, John William, Freeport, Tex.
 Allen, Arnold B., Livingston, New Jersey
 Arnold, Robert M., Cuyahoga Falls, Ohio
 Austin, William P., New Orleans, La.
 Baker, J. T., Haynesville, La.
 Battipaglia, Robt. J., New York
 Beatty, John W., Dallas, Tex.
 Bell, Donald L., New Orleans, La.
 Blitz, Murray, Washington, D. C.
 Boaz, Irvin B., New Orleans 23, La.
 Bond, William J., Jr., New Orleans, La.
 Brasher, Cecil K., Eufaula, Ala.
 Brown, Robert L., Metairie, La.
 Bruce, Russell T., Venice, Louisiana
 Burns, Thomas J., New Orleans, La.
 Caddoo, King H., III, New Orleans, La.
 Calvin, Ronald, Dallas, Tex.
 Campagna, Maurice, New Orleans 27, La.
 Coutret, Henry C., Jr., Shreveport, La.
 Crowe, William T., III, Beaumont, Texas
 Dantin, Terry J., Baton Rouge, Louisiana
 De Lee James A., Groves, Texas
 DeSavigny, Richard A., Baton Rouge, La.
 Dickson, James G., Houston, Tex.
 Dollar, Henry, Kensington, Maryland
 Doreck, Ronald D., Shreveport, La.
 Ellisor, Elmer W., Jr., Bellaire, Texas
 Ferber, Arthur H., Callicoon, New York
 Hogan, Robert E., Dallas 38, Tex.
 Hunter, Ted A., Shreveport, Louisiana
 Jacob, Ronald A., New Orleans, La.
 Karn, Edward L., Jr., Denver, Colo.
 Klein, Arthur J., Jr., Baton Rouge, La.
 Kummerle, Eugene R., Monsey, New York
 Kyger, William M., Shreveport, La.
 McClung, William E., New Orleans, La.
 Mei, Harry Thomas, Beaumont, Texas
 Miller, Daniel W., Pasadena, Texas
 Mistrot, Gustave A., III, Houston, Texas
 Moulton, George L., Mobile, Ala.
 Mozur, David, Cresskill, New Jersey
 Mullin, Charles B., Alexandria, Virginia
 Nagelberg, George, Bayside 64, New York
 Nester, James D., Wilmington, North Carolina
 O'Dell, Harry B., Dallas, Texas
 Ogletree, James O., Metairie, La.
 Orcutt, Howard S., Monroe, La.
 Ozell, Alan Munci, Jacksonville, Fla.
 Paige, Rodger D., New Orleans, La.
 Pantaleo, Anthony J., Lafayette, La.
 Parravicini, Waldo F., Baton Rouge, La.
 Pelham, James P., Metairie, La.
 Peterson, John F., Lafayette, Calif.
 Raggio, Cecil D., Baton Rouge, La.
 Reiche, Robert F., Wheaton, Illinois
 Richard, Harold R., New Orleans, La.
 Rush, George F., Affton, Missouri

(Continued on Page 18)

STATE BOARD MOVES TO NEW HOME

In 1942, the Louisiana State Board of Engineering Examiners, the predecessor of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, accepted the gracious offer of Tulane University to establish its offices on the Campus rent free. This State Board, then under the Chairmanship of the late Dr. Donald Derickson, was charged with protection of the public by regulating the practice of Professional Engineering only in the fields of Civil Engineering and Land Surveying. At the time the offices were moved to Tulane, only 511 Civil Engineers and 98 Land Surveyors were registered in Louisiana.

In 1950, when the Louisiana Legislature passed Act 73 creating the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, this new Board also accepted the hospitality of Tulane University and established their offices on the Campus. Under the provisions of the new statute, the duties of the Board were expanded to provide for registration in Agricultural, Chemical, Electrical, Mechanical, Metallurgical, Mining and Petroleum Engineering, as well as Civil Engineering and Land Surveying.

The Board in recent years has expanded its activities in many ways. The current Board Chairman, Mr. Leo M. Odom says, "While its basic mission—the safety of the public—is unchanged, it is now responsible for setting the guide lines for the practice of professional engineering in the many branches, and for a much larger group." With the development of industry in Louisiana and the advent of the Space Program developments, some of them in Louisiana, the State has experienced a large increase in the number of registered Professional Engineers. Following is a tabulation showing the number of registrants with the new Board at its inception in 1950, and the increases that have been experienced in recent years:

Year	Number of Registrants
1950	2861
1955	4429
1960	6621
1965	8505

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This period of growth has also seen the expansion of Engineering Curricula and increased student enrollment in the Engineering Schools of Louisiana Polytechnic Institute, Louisiana State University, University of Southwestern Louisiana, Tulane University and Southern University. The Board now offers the Engineer-in-Training examination twice a year, in May and December, to students of these Universities, and those passing the examination are certified in the Engineer-in-Training classification.

Every indication points to continued increases in the number of engineers registered in Louisiana and a demand for broader enforcement of the Engineering Law by the State Board. At this time when the Louisiana Engineering Society is undergoing reorganization, occasioned in part by these same factors, the State Board has been compelled to adjust its operation toward expanded service to the public and to the engineering profession. Outgrowing the office space that Tulane University has kindly provided for the last twenty-two years, and required to cope with an ever increasing work load, the Board in January of this year established Executive Offices at 4747 Earhart Boulevard near South Jefferson Davis Parkway in New Orleans.

The State Board has voted to continue its six-year-old policy of providing some financial support to the Public Relations Program of the Louisiana Engineering Society. This program includes publishing, in *THE LOUISIANA ENGINEER*, of articles on activities of the Board, litigation concerning violation of the registration law, the names and addresses of new registrants and news items regarding the engineering profession. The program also includes arranging interviews for press, radio and TV in connection with such activities as the National meetings in Louisiana of the National Council of State Boards of Engineering Examiners and the National Society of Professional Engineers, and furnishing information and photos to *THE AMERICAN ENGINEER* (55,000 circulation) on these National events. The State Board's financial aid has enabled the Louisiana Engineering Society to mail *THE LOUISIANA ENGINEER* to all Professional Engineers, Land Surveyors, Legislators and Libraries in the State.

In order to meet the costs of expanding physical requirements and additional personnel, the State Board at its meeting on March 16, 1965, voted to adopt the following changes in the annual renewal fees for registration:

Professional Engineers increased from \$5.00 to \$7.50 per branch with a maximum of \$10.00 for renewal in two or more branches.

Land Surveyors increased from \$2.00 to \$3.00
The effective date of these increases will be January 1, 1966.

The State Board extends a cordial invitation to all Professional Engineers and Land Surveyors registered in Louisiana to visit the expanded new facilities, and to become better acquainted with the increasing responsibilities and broadened activities made necessary by the growth of the profession in Louisiana.

(Continued from Page 16)

Saymon, Burton J., Miami 46, Fla.
Scherling, John D., New Orleans, La.
Schmidt, Frederick L., Jr., Metairie, La.
Scott, Robert N., Mobile, Alabama
Simpson, James L., Charleston 4, W. Va.
Smith, Harry C., Waycross, Georgia
Stanley, Howard C., New Orleans, La.
Stegall, Doyle E., Delhi, Louisiana
Wentworth, Robert B., Oklahoma City, Okla.
Wethern, James D., Wilmington, N. C.
Willis, Bernard M., Baton Rouge, La.
Williamson, Douglas J., Indianapolis, Ind.
Witty, Joseph B., Jackson, Miss.

Land Surveyors Notes

(See Cover)

The Louisiana Land Surveyors Association held its fourth annual meeting at Baton Rouge, La. recently. The meeting was co-sponsored by the Louisiana Section of the American Congress on Surveying and Mapping.

The meeting included the following:

"Use of Aerial Photogrammetry in Highway Location and Surveying" by Jack Reid, Location and Survey Engineer, Louisiana Department of Highways; "Adjustment of Optical Reading Instruments" by George D. Melton, Field Engineer, Wild Heerbrugg Instrument Company; "The Seagoing Surveyors" by D. J. Berard, Civil Engineer, Tennessee Gas Pipeline Company, Lafayette, La.; "A Surveyor Talks To The Computer" by C. J. Montgomery, Division Civil Engineer, Tidewater Oil Company, Houston, Tex.

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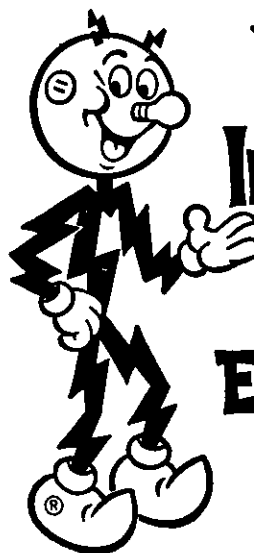
Engineering Technician Program

Senior Engineering Technician John Kennedy urges that all draftsmen contact him for information regarding their certification as Engineering Technicians. This program, sponsored by the NSPE, has established standards of ability, mainly gauged by experience, by which draftsmen can be certified in the appropriate grade of Engineering Technician. There are three grades, beginning with Junior Engineering Technician which requires two years experience and the recommendation of one P.E., progressing upwards.

The purpose of this certification is to establish standard qualifications by which draftsmen may be evaluated by engineers all over the country. The program is relatively new but is receiving more publicity as interest in it grows. When the qualifications of the Engineering Technician are fully recognized by prospective engineer employers, draftsmen will find that certification is necessary to secure employment or advancement in their careers. The time required to complete the necessary forms is brief—the subsequent certificate of great potential value. That segment of the engineering profession familiar with the program is highly enthusiastic and understandably so.

Mr. Kennedy may be contacted at the National Society of Professional Engineers, 2029 K St., N.W., Washington, D. C.

Harlow J. Reed has been appointed executive vice president for metals, Olin Mathieson Chemical Corporation, with overall responsibility for the company's aluminum and brass operations and its Winchester-Western Division, a major producer of sporting arms and ammunition.



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Lake Charles, La.	HE 3-1429	Vicksburg, Miss.	638-1142
Monroe, La.	325-8202	Magnolia, Ark.	CE 4-5440
Columbus, Miss.	328-3000	Memphis, Tenn.	526-0661

Daily Business Trends... WDSU—5:25 PM • Daily Business News... WWL—5:40 PM

Toll Road

Field Notes By Allen Johnson

Gov. John McKeithen of Louisiana, in a recent talk before the Louisiana Bankers Convention in New Orleans, said it is imperative that a 350-mile, \$350,000,000 Shreveport-to-New Orleans toll road be constructed as soon as possible.

McKeithen said the proposed road would require a new Mississippi River bridge at New Orleans, and the highway's route would go from Shreveport through Alexandria, Ville Platte, Opelousas, Lafayette, Morgan City, Houma and Larose to New Orleans.

McKeithen, at a news conference following his talk, said he had appointed Roy T. Sessums, LES, a vice president of Freeport Sulphur Co., to the State Expressway Authority, and asked him to be chairman.

Sessums, of New Orleans, was dean of the Louisiana Technical Institute's Engineering Department from 1940-52 at Ruston, and director of the Louisiana Department of Public Works, 1952-55, at which time he joined Freeport Sulphur.

McKeithen told the bankers he learned there are no federal plans for north-south superhighways other than the present Interstate system, until 1972, and that means it would be as late as 1980 before a highway could be in use.

"Louisiana can't wait that long for this road," he said.

An engineering firm, McKeithen said, had completed a free survey and informed the state the toll highway could be built in from three to four years.

Many prizes were awarded at the LES Annual Outing at Colonial Country Club in Harahan on May 20. Prize donors and recipients were:

Boland Machine & Manufacturing Co., A. G. Armatis; Dickey Clay Manufacturing Co., J. S. Riorda; Walter J. Barnes Electric Co., Owen LeBlanc; Eustis Engineering Co., Vince Massimini; Allis-Chalmers Manufacturing Co., Bill Hogan; Freeport Sulphur Co., Joe Montgomery; Lionell F. Favret Co., N. W. Markel; ETCO Engineers & Associates, Harold Deloney; Creole Engineering Co., B. C. Stewart; Armco Metal Products, W. H. French; Standard Supply & Hardware Co., E. W. Olsen; General Electric Agency & Distributor Sales, W. K. Beceel.

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Betz Engineering Sales Co., Riorda; Gore Engineering Co., Inc., E. D. Cambon, Jr.; J. Ray McDermott Co., C. Lundstrum; Boh Bros. Construction Co., John Grosch; Delta Testing & Inspection Co., C. M. Foreman; Fidelity & Deposit Co. of Maryland, Irwin Ory; Dixie Machine Welding & Metal Works, Don Estopinal; Waldemar S. Nelson & Co., Irwin Ory; Eugene Dietzgen Co., Joe Pizzio; N. O. Blue Print & Supply Co., C. Lundstrum; A. M. Lockett & Co., Doctor Taylor; Gabler Insulations, Bob Grush; Fromherz Engineers, Jim Scott; R. E. Gosa, Jules A. Lorio; Markel Lumber Co., E. D. Cambon, Jr.; Woodward Wight Co., John Marshall.

E. G. Boh Forest Products Co., Stan Walsh; United Gas Pipeline Co., Paul Lagarde; McLellan Equipment Co., Dennis Natal, Jr.; Reagan Equipment Co., Ed Olsen; Verlander Equipment Co., J. S. Janssen; Service Supply & Engineering Co., R. Maddox; Metal Building Products Co., Inc., C. M. Foreman; Prestressed Concrete Products Co., Mickleberry; Perriliat-Rickey Construction Co., Lewis Clements; Orleans Material & Equipment Co., Jack Knight; New Orleans Cement Products Co., John Wein-ning; Carl E. Woodward, Inc., H. M. Rhodes; Allan J. Harris Co., Sidney Lewis.

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Elections

Auxiliary Notes By Mrs. Edward J. Welsch

New officers of the Woman's Auxiliary of LES installed at a recent meeting are Mrs. Thomas A. Fromherz, president; Mrs. John A. Haase III, president-elect; Mrs. Daniel Vliet, vice-president; Mrs. John P. Fernandez; honorary vice-president; Mrs. Joseph R. Pezold, recording secretary; Mrs. Edward J. McNamara, corresponding secretary; Mrs. E. Landry Murphy, Treasurer and Mrs. Frank A. Birdsong, financial secretary.

New Orleans . . . Mrs. Otha E. Barron, Jr. was hostess Wednesday, May 5th, at a luncheon at the Vista Shores Club honoring board members of the Woman's Auxiliary to the Louisiana Engineering Society. An arrangement of spring flowers was the centerpiece on the luncheon table.

The luncheon followed the final meeting of the 1964-65 year. Those attending the event were Mrs. Thomas A. Fromherz, Mrs. John A. Haase, III, Mrs. L. Villere Cressy, Mrs. E. Landry Murphy, Mrs. Joseph R. Pezold, Mrs. Daniel H. Vliet, Mrs. Forney Fuller, Mrs. S. G. Davis, Mrs. G. J. Groh, Mrs. Miles B. Hutson, Mrs. Ronald P. Cressy, Mrs. George Schroeder, Mrs. W. P. Musgrave, Mrs. Raymond K. Goode, Mrs. Edward J. Welsch, Mrs. Albert J. Fransen, Mrs. Mario G. Zervigon, Mrs. Roy E. Johnson, Mrs. Roy G. Cappel.

A tea closing the 1964-65 season of the Woman's Auxiliary took place at the home of Mrs. John A. Haase, president. Receiving with Mrs. Otha E. Barron, Jr. past-president were Mmes. Thomas A. Fromherz, John A. Haase, III, L. Villere Cressy, E. Landry Murphy, Joseph R. Pezold, Daniel H. Vliet and Forney Fuller.

Pouring were Mmes. S. G. Davis, G. J. Groh, Miles B. Hutson, Ronald P. Cressy, George Schroeder, W. P. Musgrave, Raymond K. Goode, Edward J. Welsch, Jr., Albert J. Fransen, Mario G. Zervigon, Roy E. Johnson and Roy G. Cappel.

Tea girls were Misses Paula and Porge Davis, Dorothy Wilke, Janet Vliet, Christie Lea Cappel, Beryl Louise Fransen, Nancy Elizabeth Welsch, Barbara Johnson, Patricia Lorraine Barron and Alison Ann Goode.



At a recent meeting held by the Women's Auxiliary of LES officers for 1965-66 were chosen. Shown here are (from left): Mrs. John A. Haase III, president elect Mrs. Daniel Vliet, vice president; Mrs. Otha E. Barron, Jr., past president and Mrs. Thomas A. Fromherz, president.

CONSENT JUDGEMENT

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors reports that some months ago, the State Board of Professional Engineers received complaints directed against Hinrichs-Kreppein, Inc., a firm owned by Messrs. Hinrichs and Kreppein. This firm had been sending out letters offering to perform engineering services. Neither of the principals, nor any employee of the firm, was registered as a Professional Engineer.

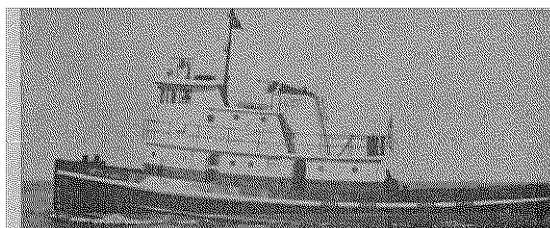
After efforts to settle the matter amicably were unsuccessful, the Board filed a suit against the firm and the individuals to enjoin them from practicing or offering to practice professional engineering unless there was proper compliance with the registration law.

The suit was vigorously resisted in its preliminary stages. However, a few days before trail on the merits, attorneys for the defendants agreed that a consent judgment be entered against them, and accordingly, the Twenty-fourth Judicial District Court for the Parish of Jefferson, on April 7, 1965 entered a judgment in favor of the Board enjoining the defendants from the violations of the statute complained of.

EJC Notes

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Abstracts and index terms accompany articles having lasting technical significance. These are clustered in one section of each journal.



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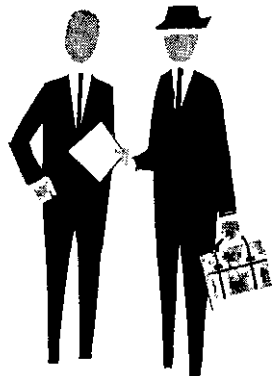
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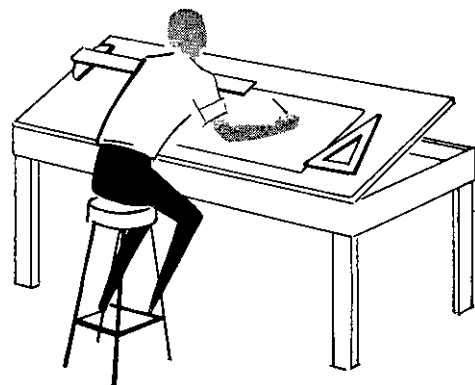
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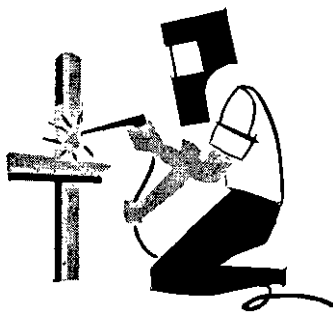
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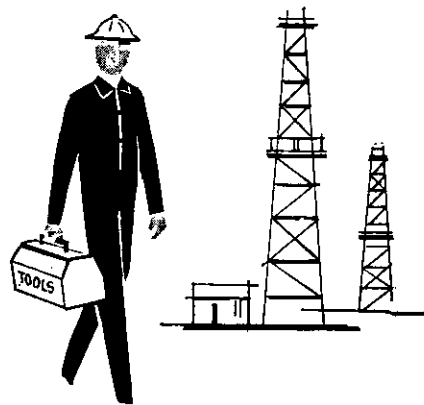
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(Continued from Page 13)

both. In the latter part of 1956 two committees were appointed to investigate the desirability of affiliating with these organizations. Your own Ben Bogard was chairman of one committee and the only individual to serve on both committees was Roy Sessums. I have here a copy of the two committee reports which were mailed to the entire membership in March. During 1957 President Waldemar S. Nelson and the Secretary met with every Chapter to discuss the reports. Many questions were asked about the activities of the national organizations. These were collected by the Secretary and forwarded to the national offices of NSPE and EJC. The list of questions and answers were published in our journal and mailed to the voting membership.

Your 1957 Board supported the Functional Plan, in which it was proposed that EJC would coordinate technical matters, ECPD would coordinate educational matters, and NSPE would coordinate professional matters. Accordingly your Board recommended that we affiliate with both organizations and that an effort be made to bring the two together. As you know, our membership voted to join both and the implementation of the Functional Plan led to the formation of the Board of Engineering Cooperation, consisting of the presidents and vice presidents of EJC, ECPD and NSPE.

STATE CONFERENCES

Also in 1957 another major step was taken toward making the Society a truly statewide organization. The Section Coordination Committee was reorganized. This committee, with the inspired efforts of Otha E. Barron and the hard work of the entire Alexandria Chapter, conducted the first Statewide Section Coordination Conference in November. The object of this meeting was and is to obtain better communications between our chapters, officers and committee personnel. It is now known as the State Planning Conference and is held annually in Alexandria.

Likewise in 1962 the first Officers' Indoctrination Conference was held in Lake Charles. The object of this conference as the name implies, is to acquaint the incoming chapter officers with their duties and responsibilities and to permit the incoming State President to inform them of his administration's objectives. Both the State Planning and Officers' Conferences have been most valuable, not only in improving communications and the exchange of ideas but in the development of personal contacts among fellow officers and committeemen.

PUBLIC RELATIONS

1959 was another milestone in that we moved into an area of much closer cooperation with the Louisiana State Board of Registration. The generosity of the State Board enabled us to improve the format of our journal, increase its circulation overnight from 2,000 to 7,000 copies and to engage a public relations counsel. In fact our new journal "The Louisiana Engineer" ceased to be ours alone; it became the official organ of both the LES and the State Board of Registration. These two organizations were now partners.

The public relations program was initiated with great expectations; now the engineers' image would be enhanced as never before. For decades the Society had worked towards this goal, and now it was within our grasp. No longer would our publicity be handled by a

continuous turnover of amateur personnel who squeezed their efforts in between their bread and butter duties. Now we would have the services of an expert in public relations, who would devote much time in developing an effective continuing program. I, for one, thought the millennium had arrived. I knew that the engineers had built the world's best mousetrap, but no one had beaten a path to our door because no one was aware of our mousetrap. Now the profession would receive the publicity it deserved. Though this golden dream has not yet fully materialized, we are still working towards it, and our recent reorganization should bring us closer to this realization.

One reason why our public relations program has not developed as rapidly as we hoped is that so much of our energy had to be expended in fighting adverse legislation. In the 1960 session of the State Legislature, two concurrent resolutions were introduced to reopen the Public Employee Clause. A bill also was introduced to revise the registration law. These were felt by our Board to be against the best interests of the engineering profession and with lots of cooperation from other organizations we were able to have all of the actions withdrawn. We also joined with the Gulf Institute of Consulting Engineers in a suit against the State Board of Registration, seeking to restrain them from licensing some 129 persons who sought registration under a 1959 Concurrent Resolution, and from renewing licenses which had been granted upon instructions of the Attorney General. The suit was not accepted in the lower court on the basis that no true disagreement existed between the parties but the case was appealed to a higher court which held in our favor.

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Application Engineers to Southern Industry

Our Society has always desired to give recognition to engineers for outstanding service or accomplishment. With this in mind, James M. Todd proposed that an annual award be given to a Louisiana Engineer for distinguished civic service performed without compensation to himself. The development of this idea resulted in the "LES-Civic Activities Medal." When the A. M. Lockett Company offered to underwrite all of the expenses entailed in the design and preparation of the medal in honor of its illustrious civic-minded founder, it became known as the Andrew M. Lockett Award. President Lionel J. Cucullu was so enthused with the idea of medal awards that he suggested using the funds allocated for the Civic Activities Medal to establish the LES Technological Accomplishment Medal. Both medals were awarded for the first time in 1951. Messrs. Cucullu and Todd did such fine work in setting up these two medals that when the A. B. Paterson—Engineer in Management Award was suggested, President Knight requested those two Past Presidents to handle the arrangements for its preparation. The A. B. Paterson—Engineer in Management medal was presented for the first time this past January. All three medals were designed by an accomplished sculptress—Angela Gregory, who happens also to be the daughter of one of our Past Presidents.

You probably know that one of your own members, Prof. Joseph H. Barnwell, received the LES Technological Accomplishment Medal at our last Annual Meeting. I have brought with me replicas of the medals, you can take a look at them after the meeting. At our Annual Meeting in July we expect to present still another award for the first time—The Charles M. Kerr Public Relations Plaque.

REORGANIZATION

As you know, the subject of reorganizing the Society has been studied for years. While all reports considered reorganization desirable, the financial problem has prevented a favorable recommendation. In 1964 it was decided that by reducing the dues rebated to the chapters, a calculated risk could be taken. Accordingly the constitution was revised and in my opinion three important by-products have resulted:

First, the establishment of the New Orleans Chapter. The formation of this chapter is important because it separates New Orleans from the State organization. This permits your Board more time to deal effectively with such statewide matters as membership, chapter development, legislation, ethics, unionism, engineers' liability, etc. Also this reduces the workload of the Secretary, since those duties pertaining to the New Orleans group will be performed by the New Orleans Chapter Secretary.

Second, the dates of the administrative year and many other organizational details have been changed. This will enable the Board to work more closely with NSPE. The revised constitution provides for functional sections. True, the Professional Engineers in Private Practice have had a functional section in operation for several years, but this was our pioneer group that was classified as a committee under the old constitution. Incidentally PEPP has proven its worth; Its publications "Manual of Practice for the use of Engineers and Clients" are a great asset to our profession. Last month the functional section for Professional Engineers in State Government was established, and we hope to hold an organizational meeting for

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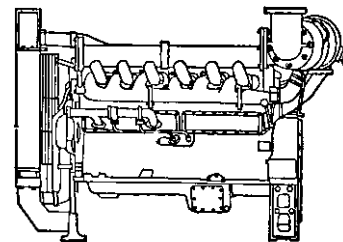
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Professional Engineers in Industry next month. The Board of Direction has been expanded to include the chairman of each functional section.

The third important by-product is that Bylaw five provides for the employment of a full-time Executive Secretary and such other staff as may be required. We hope the new Executive Secretary will be able to develop a good public relations program, conduct an effective membership campaign, expand and coordinate chapter activities, and maintain a good working relationship with the Louisiana State Legislature and with the other professions. This is a mighty big assignment and though the individual who has been selected has excellent qualifications, he will need plenty of assistance and guidance.

CONCLUSION

In this brief history I have tried to point out our rich heritage, and have of necessity omitted the names of many hardworking members who deserve much credit. While only the big milestones have been mentioned, it should be recognized that the accomplishments of one administration usually are made possible by the sweat, discouragements and frustrations of many preceeding administrations. Also by naming some of our outstanding leaders the conclusion should not be drawn that ours is a history of great leaders alone. The prestige and status the LES enjoys today is due to teamwork behind the scene, for it is great committee workers who make great administrations. Thru the years I have never ceased to wonder at the number of unsung heroes who perform their assignments without fanfare or acclaim and who volunteer their assistance again and again. No matter what the job may be there is always somebody ready to step forward and do it. It is most gratifying to find so many so willing to give so much for the good of the

profession.

Our founders built well; from a small beginning our Society has gone steadily forward. Today we are at the crossroads, no that's not right, today we are at the threshold of greater things to come. But they must be done by engineers. If our efforts are to count, your wholehearted cooperation is needed. When your new administration makes a request, follow the Society's tradition, pitch in and do it. Give the LES the support it deserves. You owe it to your profession.

P.E.G.'s Meet In Texarkana

A group of Professional Engineers in Government officer from the State Chapters of National Society of Professional Engineers of Louisiana, Texas and Arkansas met in Texarkana May 20 and discussed problems and programs of mutual interest.

This was the first of such regional meetings in this area and similar annual regional meetings are being planned in order to have a mutual exchange of ideas and suggestions with regard to the strengthening of the Functional Sections of the states and to establish closer relationships with the national organization.

Attending the meeting from Louisiana was Professional Engineers in Government vice-president H. B. Myers, Chief Engineer, Louisiana Department of Public Works; from Arkansas chairman V. A. Roy, State Highway Department, Little Rock; and from Texas was Chairman Robert F. Mountz of the Red River Army Depot, Texarkana.

Also attending was Robert L. Nichols, Professional Engineer, Partner, Freese, Nichols and Endress of Fort Worth, Texas, president-elect of the Texas Society of Professional Engineers.



Left to right: V. A. Roy; Jerry Dyson, LES; Robert F. Mountz, and H. B. Myers, LES.

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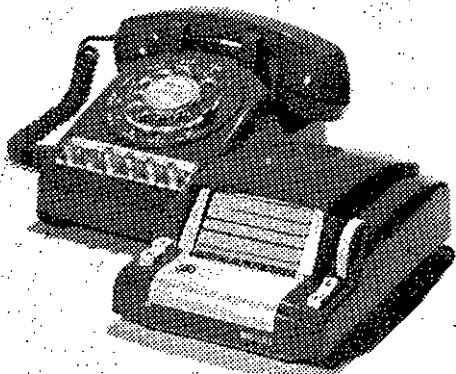
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New Orleans, La.—Robert H. Kuhlman was appointed district manager for the Louisiana District of the Portland Cement Association on April 1, 1965, with headquarters in New Orleans. He succeeds Andrew J. Spradlin, who has requested retirement.



Kuhlman joined the Association in 1954 as a general field engineer in the Tennessee District. He served as statewide paving engineer for Arkansas from 1956 to 1960, when he was transferred to the Oklahoma-Arkansas District of the PCA as supervising engineer for Arkansas.

Kuhlman holds a bachelor of science degree in civil engineering from the University of Arkansas, and is a registered professional engineer in that state. He is a member of NSPE, and a director of the Central Arkansas Chapter of the Arkansas Society of Professional Engineers. He is also a member of ASCE and president of the Little Rock Branch, Mid-South Section of that organization.

B. R. Observes Engineer's Week

BATON ROUGE—Participating in Engineers' Week activities here were Jerry Affolter, president of the Baton Rouge chapter of LES and head of the construction division of Humble Oil and Refining Co.; Dr. Lawrence L. Durisch, head of government relations and economics staff of the Tennessee Valley Authority; Dr. D. R. Scholz, department of mathematics, LSU; Jack R. Rountree, project manager of the Bull Run Steam Plant Project, TVA; Dr. Richard H. Wiggins, professor of journalism, LSU; William B. Singleton, city planner for the Greater Baton Rouge area.

Mrs. Carol Seip, wife of John J. Seip, LES, Baton Rouge, in a signed column in the **Baton Rouge Register**, reminded her readers that George Washington was America's first engineer and Herbert Hoover had a successful career as a professional civil engineer before he entered politics.

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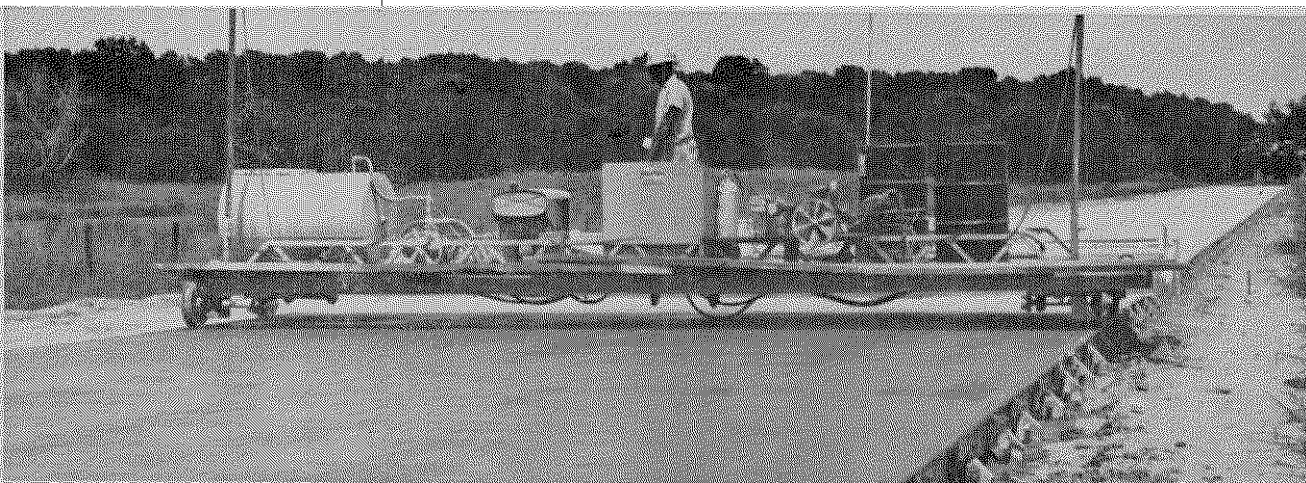
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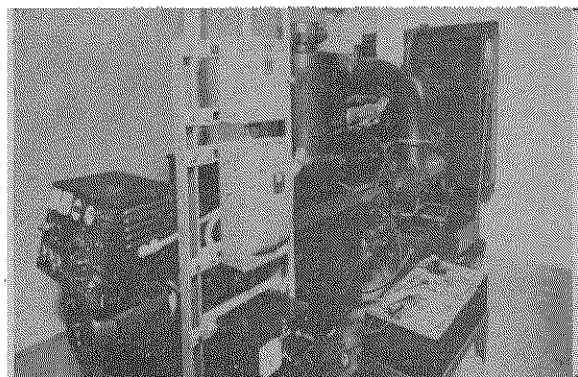
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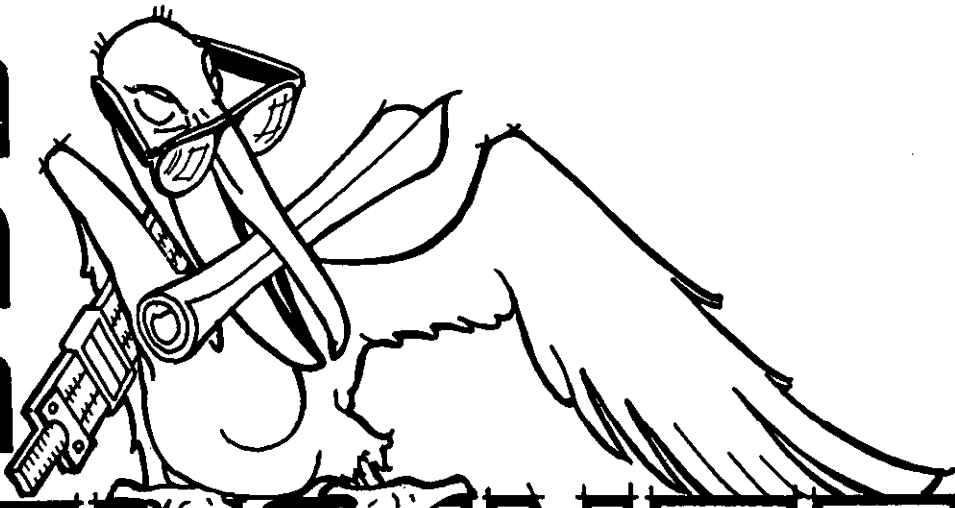
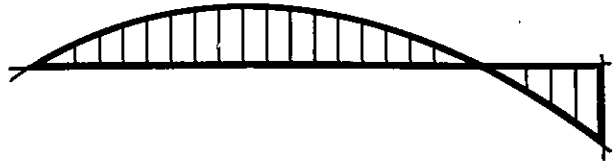


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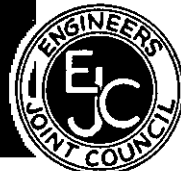
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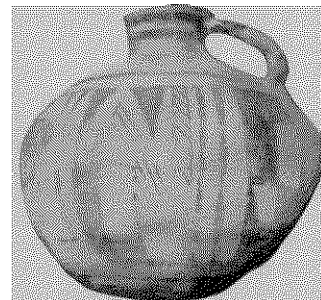


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JOHN W. ROACH, JR.

Mr. John W. Roach, Jr. has been made a member of the firm of Eustis Engineering Company, Consulting Foundation Engineers of Metairie, Louisiana. Mr. Roach, who has been with the firm since 1948, is currently Chief Engineer for Eustis Engineering Company, Inc. and will continue to work in this capacity.

Mr. Roach received his degree in Civil Engineering from Mississippi State University and is a registered professional engineer in the States of Louisiana and Mississippi.

Mr. Roach is a member of the American Society of Civil Engineers, the Louisiana Engineering Society and the Engineers Club of New Orleans.

THE LOUISIANA ENGINEER

Vol. 51

AUGUST, 1965

No. 4

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Signed

Oct. 31,
1963

W. K. Bankston,
Editor

Charles W. Stokes, L.E.S. president, is pleased to announce the opening of the new L.E.S. state office at 833 Howard Ave., New Orleans, La. 70113. Telephone number: 525-9502, Area Code 504.

OUR COVER—Members of the State Board of Registration for Professional Engineers and Land Surveyors attending a meeting August 10 in their new quarters at 4747 Earhart Blvd. in New Orleans are (from left) Dr. F. W. Macdonald, Dr. Jesse Coates, Roy T. Sessums, A. D. Jackson, Leo M. Odom, E. E. Taylor, Wood Brown, Dean B. T. Bogard and Dr. F. W. Zurburg.

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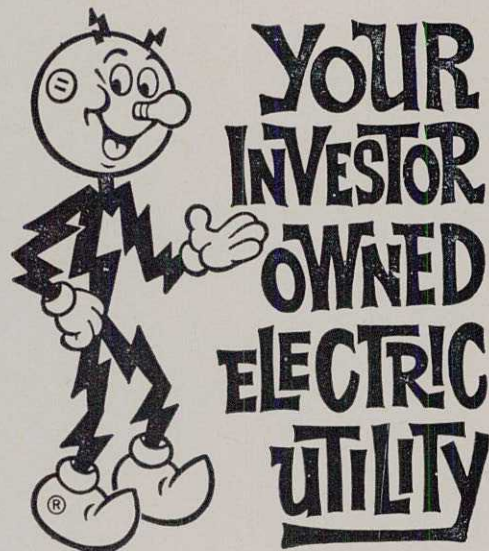
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Minutes Of The Board, LES

LOUISIANA ENGINEERING SOCIETY

Minutes of Meeting of the Board of Direction

Held at the Fontainebleau Motor Hotel, New Orleans on

Thursday, July 8, 1965

The meeting was called to order by President Knight with Messrs. Affolter, Bubenzer, Cade, Duclos, Eustis, Ewing, Johnson, McNamara, Odom, Nelson, Sellers, Stokes, Thigpen, Vogt and Fernandez present. Messrs. Earl M. Martin, Jr. and M. J. Marchese, Executive and Assistant Secretaries, also were in attendance.

The secretary reported a correction in minutes of the board's May meeting: deletion of the name of the selectee for the position of Executive Secretary. Mr. Nelson moved that the revised minutes be accepted, seconded by Mr. Vogt and carried.

The president distributed copies of a "Message to the Membership from J. T. Knight, Jr., Outgoing President 1965" after reading a part of this report. He also discussed some problems of the Functional Section for Professional Engineers in State Government and their conferences with Mr. McDougall of the State Civil Service Commission.

The secretary announced the receipt on May 25 of a petition signed by 48 members in good standing, requesting that additional nominations for 1965-66 be included in the ballot. In accordance with Section 2, Article III of the constitution, a letter ballot containing two slates of nominees for officers was mailed to the membership on June 1. President Knight appointed a committee consisting of one proponent of each slate to assist the secretary in

counting the ballots. A total of 554 ballots were received and the following officers were elected:

First Vice-President and President-Elect
for 1966-67 Louis Duclos
Second Vice-President Edward J. McNamara
Secretary-Treasurer John F. Vogt, Jr.
National Director for 2 Years John P. Fernandez
State Director for 2 Years Marion C. Bubbenzer
State Director for 2 Years Frank H. Walk

The secretary announced that 474 ballots had been received in the June membership election and all candidates had been elected to the grades indicated on the ballot, a copy of which is attached to these minutes. The secretary presented Membership and Financial Reports for the six month period ended June 30, 1965, copies of which are also attached to these minutes.

The secretary read communications from President Longenecker and Dean Johnson of Tulane and from Mrs. Robert thanking the society for its generous contribution to the James M. Robert Memorial Fund.

The secretary announced that John Taylor Bentley had received the LES scholarship award at L.P.I. for 1965 and that Brian Thomas Barcelo (Tulane 1965), Maxie Joe Fowler (L.P.I. 1964) and Charles Henry Green (L.P.I. 1965) had received Junior Membership Awards.

Mr. Nelson, National Director, presented a preliminary report on the NSPE Annual Meeting held at Albuquerque, New Mexico, June 30-July 3. Mr. Nelson reported that the items of greatest interest discussed at this meeting were the forthcoming constitutional convention to reorganize NSPE, expansion plans of PEPP activities, and inroads of unionism into the ranks of employed professional engineers.

It was moved by Mr. Vogt, seconded by Mr. McNamara and carried, that Mr. Roy A. Perrin, Jr., New Orleans, be reinstated to Junior Grade membership. On motion by Mr. Thigpen, seconded by Mr. Nelson, 27 student members who have been graduated from the University of Southwestern Louisiana in June 1965 were transferred to Junior Grade:

Allain, Billy	Johanputra, Pravin
Barthold, John Larry	LeBlanc, Aldon A.
Boix, Jose A.	LeBlanc, James C.
Booty, Bobby	LeBlanc, Larry J.
Burguières, Philip	Manuel, Willard R.
Chenevert, Wayne	Maudlin, Frank
DeRoussel, Larry	Merrick, Max M.
Dixon, J. M.	Pariuk, Aschok
Etienne, Billy J.	Power, Michael A.
Fontenot, Gerald J.	Resweber, Albert F.
Forgey, Don	Reveron, Freddy
Hans, Svatos	Theriot, A. P.
Hereford, Charles D.	Trahan, Edward V.
Huval, Malcolm	

Mr. Nelson moved that Junior Members of L.E.S. holding EIT registration certificates be urged to join NSPE's EIT grade of membership and that all newly elected Junior Members with EIT registration certificates be invited to join NSPE. Motion seconded by Mr. Affolter and carried. During the discussion it was brought out that dues collected and rebates to NSPE of the EIT members would be handled in the same manner as the finances of LES-NSPE Member Grade are now administered.

The president appointed the 1965-66 Finance Committee consisting of Messrs. Louis Duclos, Chairman, John F. Vogt, Jr. and John T. Knight, Jr. The committee was instructed to submit a budget for the incoming administrative year at the next meeting of the Board scheduled for August 6 at Alexandria. Mr. Nelson moved that incoming officers Louis Duclos, Edward J. McNamara, Charles W. Stokes and John F. Vogt, Jr. be authorized to sign checks for the society and have access to the society's safety deposit box, and that the signatures of any two of them would validate checks drawn on the society's funds and gain access to the safety deposit box. Motion seconded by Mr. Ewing and carried.

Mr. Martin reported on the quest for office space. Mr. Nelson

moved that Messrs. Fernandez, Martin, McNamara, Stokes and Vogt be authorized to sign a rental lease for not more than 12 months, to contract for alterations and purchase office furniture, the total cost of the latter two items not to exceed \$2,000. Motion seconded by Mr. Odom and carried.

Mr. Eustis stated that if the Fee Schedule prepared by the L.E.S.—P.E.P.P. Functional Section had not been officially adopted, he would like to recommend that the Board of Direction consider naming a committee to work with a committee from the Consulting Engineers Council, to prepare a Fee Schedule acceptable to both organizations.

President Knight appointed Messrs. Eustis and Walk to work with representatives of CEC of Louisiana in the preparation of a joint resolution of appreciation to Governor McKeithen and the State Legislature for the enactment of Senate Bills 79, 80, and 81.

The meeting then adjourned.

JOHN P. FERNANDEZ
Secretary-Treasurer

New Sales Districts Formed

Johns-Manville has announced the formation of two new Sales Districts for the direct sales of its Transite pipe products. The new districts will be headquartered in New Orleans and Florida.

C. M. Bennett, presently Assistant Manager of J-M's Atlanta District, will assume the responsibilities of District Manager—Florida District. He will be located in the Atlanta District office until arrangements can be made to permanently locate him at J-M's new pipe plant at Green Cove Springs, Florida. The Florida District will include areas of both Florida and Georgia.

W. P. Richardson, LES, presently Assistant Manager of J-M's Houston District, will assume the responsibilities of the New Orleans District and will continue to operate from the Marrero pipe plant where he is now located. The New Orleans District will include areas in the states of Alabama, Arkansas, Florida, Louisiana, Mississippi, Missouri, Kentucky, Tennessee, and Texas.

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LES Holds Annual Meeting in N.O.

The LES annual meeting was held in the Fontainebleau Motor Hotel in New Orleans July 8-10. The theme of the meeting was "Research and Development in the Gulf South and its Effects on Industrial Expansion and Area Development."

Keith P. Lanneau, a member of the Council of Trustees and Board of Directors of the Gulf South Research Institute, spoke at the welcoming luncheon July 8 on "The Gulf South Research Institute". He explained the problems encountered in planning such an institute to be located in Louisiana and the purpose and expected effects of it once established.

Research papers were presented by representatives of industry and education throughout the country. Dr. C. Harold Fisher, director of Southern Utilization Research and Development Division, A.R.S.-U.S.D.A., told of the many research contributions made to agriculture in the state.

Dr. Roger W. Richardson, making his first talk as the new Dean of Engineering at L.S.U., said, "one of the strengths of the state must be the capability of adequately training the engineers and scientists needed for the tremendous industrial growth ahead of us."

"Significant industrial growth is apt to follow: a strong undergraduate program, a strong graduate program, and 'research at the frontiers'. This combination," said Dean Richardson, "seems to cause interactions of men and ideas which result in practical applications of scientific knowledge—the technology of the future."

Plans for the development of Tulane University Riverside Research Laboratories in Belle Chasse were outlined by James C. Schneider, general manager.

James R. Hodges, architectural engineer for the Southern Pine Association, talked on developments in timber utilization, including the possibilities opened up by tremendous improvement in Southern Pine supply.

"According to recent reports of the United States Forest Service, current annual growth of Southern Pine saw timber is 16 billion board feet—far above the rate of harvest and three times the growth of any other species in the nation.

"The Forest Service predicts the south will eventually at least double current production of lumber and wood products while continuing to increase forest reserves," said Hodges.

The South will have a new nuclear power plant in 1967 that will furnish information on commercial applications to the entire free world, said Katsumi Hikido, SEFOR Safeguards and Analysis, General Electric Co. in San Jose, Calif.

Scheduled to start up in August, 1967 in Fayetteville, Ark., the venture will be a forerunner of advanced nuclear plants for the 1970's, and will provide information for the fast breeder reactor liquid sodium-cooled and using plutonium dioxide fuel.

Jack Beachboard, chief of Laboratory Services NASA, Mississippi Test Facility, Bay St. Louis, Miss., spoke on "Building a Space Center — The Story of NASA's Missis-

sippi Test Facility." Excellent color slides accompanied the paper.

Gulf Oil Corporation is building a new refinery in Venice, La. due for completion in September 1966, said James K. Warne, refinery manager. He discussed the problems of building a refinery in Venice, described the equipment used, and discussed the engineering problems associated with the processes.

W. H. Lehr, sales engineer for the Dravo Corporation, spoke on the new bucket wheel reclaimer which will transport coal from barges at its new bulk handling facility in Plaquemines Parish.

Life memberships were presented to Andre R. Brousseau, Albert J. Fransen, J. Harry Gillum, Daniel Hallaron, Jr., Oscar Higginbotham, Arthur M. Hill, W. Stone Leake, Henri J. Molaison, Walter S. Rainville, Jr., and Harry H. Shutts, at a general interest program held in the new Engineers Club.

Major General Edward S. Bres was presented with the Civic Activities Medal-Andrew M. Lockett Award by James M. Todd for his service as chairman of The Battle of New Orleans Sesquicentennial Celebration Commission. In this position Bres was responsible for bringing to the celebration the Canadian Black Watch, the U. S. Navy's largest ship the U. S. S. Newport News, HMS Whirlwind, descendants of Generals Jackson and Jakenham, and the pirates, and leading military personnel from the United States and Great Britain.

The Sesquicentennial Celebration was to commemorate the 150 years of peace between the United States and England since the Battle of New Orleans during the War of 1812.

The Charles M. Kerr Public Relations Award was given to J. Mason Guillory, director of the Transit and Community Relations Departments for New Orleans Public Service, Inc., by Frank H. Walk.

Armand L. Willoz, chief engineer of the Orleans Levee Board and a nationally recognized expert on flood protection and hydraulic engineering, received the Technological Accomplishment Medal.

The award, made infrequently, was "in recognition of attainments or discoveries contributing to the advancement of engineering." The presentation was made by the Hon. Milton E. Dupuy, president, Orleans Levee Board.

The Institute of Electrical and Electronic Engineers and the American Society of Mechanical Engineers held their luncheons Friday afternoon, July 9.

A tour of NASA Michoud Space Center was conducted Saturday at 1 p.m.

Industries and consulting engineers occupied an exhibit area in the Grand Ballroom where demonstrations of their products or services were given to visiting engineers in the society.

Saturday at 8 p.m. a banquet was held in the Fontainebleau for members and their wives. Dancing followed the occasion.

(See pictures on Pages 16-17)

Engineer Must Make His Choice

One of the most significant problems facing the Louisiana State Department of Highways today involves the status of the Engineering Personnel who are now acknowledged to be a key group in this fine organization.

The vital group is beset today with appeals to abandon past and present relations, with Civil Service and embrace collective bargaining as the only satisfactory means toward professional and economic progress. All of the major Professional Engineering Societies oppose this view; but believe that the Highway Department, the Professional Societies and the individual Professional Engineers can cooperate to improve the professional, economic and social status of all professional engineers.

The issue of professionalism, or unionism in the Engineering Profession is today's challenge to the Professional Engineers of Louisiana. It is a challenge which must be quickly and decisively resolved.

Yet surprisingly, a large portion of the profession is completely unaware of this issue.

What is the nature of this problem? It is simply whether the Engineer will remain a professional man and advance as such, or whether he is going to allow the Unionism philosophy to represent him in all his affairs as the device for resolving his economic problems. All side issues such as the theory of the "professional union" simply beg the main question.

The National Society of Professional Engineers' position is clear and unequivocal. They have stated that "it is definitely unprofessional for a professional engineer, professionally employed, voluntarily to join a heterogeneous labor union, dominated by, or obligated to, non-professional groups." As long ago as 1948 NSPE declared that "the individual responsibility and independent judgment required of a professional engineer are incompatible with the regimentation fundamentally inherent in unionization." This statement clearly indicates that labor union affiliation necessarily means the sacrifice of professional status.

The naked issue then is whether the temporary economic benefits the unions claim they can obtain for Professional Engineers are worth the long-range loss of professional status. We cannot eat our cake and have it too; we must make our choice.

Immediately following World War I, unions of engineers came into existence from time to time; but, it may be observed that they were not regarded by the profession as anything more than a "fringe" element.

The Taft-Hartley Act of 1947 provided that those defined as "professional employees" must be given the opportunity for determination of their desires on collective bargaining (and decertification questions) by a separate unit vote confined to the affected professional employees. This was a major step forward and reflects credit on the many Engineering Societies which participated in the work to obtain the much needed reform. With this provision in effect we have largely eliminated

a legal situation which permitted professional employees to be forced into trade unions.

The United States is about to give the world an example of conformity by coercion, if Section 14-B of the Taft-Hartley Act is repealed—how intolerant majorities in Congress and in labor unions ride roughshod over dissenting minorities of wage earners and compel them to surrender their "freedom of belief" and "freedom of association." This may be the beginning of the end of all freedom.

Some rather loose figures have been widely circulated by some of the union organizers. According to a recent survey released by the Louisiana Manufacturers Association only about 12.9 per cent of the state's labor force is organized. This figure is somewhat less than the 20 per cent used by union organizers earlier this year.

At this writing only four per cent of the Engineering Personnel of the Highway Department are members of Local 853, AFSC & ME AFL-CIO, or more commonly called The Union of Public Employees, and reliable sources say that this union is at a standstill. It has a membership of less than a hundred and some are trying to withdraw.

The union organizers say they will not strike against

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the State. How can anyone believe that, when strikes and threats of strikes are unions' greatest bargaining power? Presently dues are three dollars per month for the members of these newly organized locals; whereas, according to a recent survey made by the Louisiana Manufacturers Association the yearly average for union members in the state is \$70 per year. How long can these members be permitted to ride for half fare?

The unions contend that they can operate in a professional manner and without sacrifice of the individualism which is inherent in a profession. It is also self-delusion to think that "professional" unions can operate outside of the traditional rules and without traditional weapons of trade unionism. We have already observed the use of the strike and the picket line by "professional" unions, and whether they desire it or not, they will have to resort to boycotts, featherbedding, compulsory membership and all other usual methods.

Dean W. R. Woolrich, a former president of American Society for Engineering Education, listed the following effects of unionization of engineers:

1. Individual initiative would be restricted.
2. Individuals would be regimented by the Union organization.
3. A "typing" of engineering positions and a "leveling" of salaries would result.
4. Professional status and prestige of engineers would be damaged if not lost entirely.
5. Individual advancement and recognition of individual achievements would be stifled.

This is an age of organization and group action. Nothing we say or do can change this condition. What then can the engineering personnel do to advance their professional and economic status short of unionism? They can, it is submitted, start with the premise that all engineers in a particular company, supervisor or employee, are part and parcel of one and the same profession. They can affiliate as a professional group to discuss, consider, work on and in every other way deliberate together about their problems as professional people. They can educate each other and management; they can recommend suggested changes of procedure and status. They can, in short, apply intellectual engineering thinking to their professional interests. America has advanced just because of such mutually profitable activity and not by being arbitrary and without regard for constructive thinking.

The other thing we can and are doing is to obtain a sympathetic understanding of the problem of engineers in Civil Service, to cooperate with them and to seek solutions to their problems on a variety of fronts, including ever-closer contacts and understanding relations with management. The recently-formed LES Engineer in State Government Committee is dedicated to this task and has developed an ambitious and practical plan of worthy endeavor.

When the State employs engineers on assignments of a sub-professional or clerical character, the end result is likely to be frustration, retarded professional development and at least the danger of opening the door to the acceptance of the collective approach inherent in unionism. In these times of high demand for engineering manpower, the State can ill-afford to use these profes-

sional talents for other than truly professional work.

Industrial Louisiana needs the engineer in its business more than ever before. Louisiana cannot stand still. It must continued to make improvements of all its products and especially of its highway system over which to move these products.

The basic ingredient in the complex industrial colossus that typifies the state today is engineering know-how. now-how in design, know-how in the design of new tools, which may be necessary to efficiently and economically assemble the new product. As a result of this, industry is rapidly turning to the Engineering Profession for administrative and executive leadership. Why? Simply because it is this kind of person who can more readily grasp the significance of research, design, manufacture and sale of the product.

We face a major problem that we must meet it head-on; with the determination of the Engineering Profession to remain a profession, we can achieve our goal of continuing professional development and public service.

NLRB Sides With Engineers

Louisiana engineers in industry and government combatting unionization won a great victory recently when the National Labor Relations Board in Washington, D. C., sided with nine Chrysler Corporation engineers at Michoud who say they are not laborers and would rather seek promotions on their own than have a union bargain for them.

The union involved is the International Union, United automobile Aerospace and Agricultural Workers of America (UAW), AFL-CIO.

The NLRB, in siding with the engineers, handed down a decision voiding the contract and election of a union as a bargaining agent between certain employees and Chrysler.

The nine engineers filed a protest stating they were professional employees by virtue of their educational background and experience and should not be termed laborers.

The engineers based their appeal on a U. S. Supreme Court decision which said professional workers were a separate category from laborers.

Roger B. Jacobs, attorney for the engineers, said that as a result of unionization, a number of engineers have left Michoud because they did not want to be represented by the UAW.

He said the engineers feel they can do better without a union as a bargaining agent since they consider their promotions due to their own capability.

The Board found, "The principal question to be resolved . . . is which, if any, employees in the unit certified by the Regional Director are professional employees within the meaning of Section 2(12) of the Act. It is clear, from examination of the statutory definition, that the resolution of this question turns on the nature of the work engaged in by the employees involved. If the work is predominantly intellectual and varied rather than routine or standardized, if it consistently involves discretion and judgment in its performance, and if it requires an advanced type of knowledge customarily ac-

(Continued on Page 13)



Newly elected 1965-66 officers installed July 8 are (from left) Charles W. Stokes, Lake Charles, president; Louis Duclos, Baton Rouge, president-elect; Edward J. McNamara, N. O., vice-president; John F. Vogt, Jr., N. O., secretary-treasurer; John P. Fernandez, N. O., national di-

rector; Marion C. Bubenzer, Shreveport, state director; Waldemar S. Nelson, N. O., national director; Leo M. Odom, Baton Rouge, and Roy E. Johnson, N. O., state directors. Not shown are Frank H. Walk and Col. John T. Knight, Jr., N. O., state directors.

Stokes Installed as New President

Charles W. Stokes, LES's new president, is a native of Waco, Texas. He moved with his parents to Austin in 1912. He was educated in the public schools of Austin and received his B.S. in Mechanical Engineering in 1931 from the University of Texas. He was a member of Pi Tau Sigma, honorary mechanical engineering fraternity, and Tau Beta Pi, honorary scholastic engineering fraternity.

Stokes worked in the Utilities Department of the University of Texas and attended graduate school from 1932 through 1935. He received his M.S. in Mechanical Engineering minoring in Business Administration in 1935.

He served as Assistant Consulting Engineer to the Texas State Board of Control from 1935 to 1937. In 1937 he was employed by the General Electric Company in Schenectady, New York; Lynn, Massachusetts; and Dallas, Texas; as a Large Steam Turbine Installation Supervisor.

He resigned from General Electric Company in 1944 and became Technical Assistant to Chief Engineer, Cities Service Refining Corporation, Lake Charles, La., specializing on pumps, turbines, and compressors. In 1948 he was transferred to General Supervising Engineer, responsible for design-engineering, cost estimating, and contract construction. In 1963 he transferred to the position of Chief Staff Engineer of Cities Service Oil Company to deal with special engineering problems, to the present time.

Stokes is a member of the First Methodist Church, Lake Charles Association of Commerce, and American Society of Mechanical Engineers. He is also Institutional Representative for the Boy Scouts of America and a recent member of his church's Official Board and chairman of its Boys' Work Committee. Duck hunting and retriever training are his hobbies.

Louis Duclos of Baton Rouge was installed as president-elect. He is a native of Rayne, La. He received his Bachelor of Engineering in Mechanical and Electrical in 1925 from Tulane University.

He has been employed by consulting engineers in Louisiana and Arkansas, by the Louisiana Department of Highways where he served as Chief Planning Engineer until his retirement in June, 1964.

He was a member of the American Association of State Highways Officials, receiving a 25-year certificate. He served as Chairman of the Board of Trustees of the Louisiana State Employee Retirement System, President of the Highway Federal Credit Union, and Chairman of the Baton Rouge Credit Union. He also served as a

member of the Advisory Committee to the Civil Engineering Department of Tulane University, received the 1961-62 award for Professional Development by the Baton Rouge Council of Engineering and Scientific Societies. He received the 1961 Charles E. Dunbar, Jr., Career Service Award by the Louisiana Civil Service League.

He is a member of the American Welding Society and the American Concrete Institute.

Other officers installed were Edward J. McNamara, New Orleans, vice-president; John F. Vogt, Jr. New Orleans, secretary-treasurer; John P. Fernandez, New Orleans, and Waldemar S. Nelson, New Orleans, national directors; Marion C. Bubenzer, Shreveport, Leo M. Odom, Baton Rouge, Roy E. Johnson, New Orleans, Frank H. Walk, New Orleans, and John T. Knight, New Orleans, state directors.



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NSPE PONDERES REORGANIZATION

By **WALDEMAR S. NELSON**
NSPE National Director

The Board of Directors of the National Society of Professional Engineers met in Albuquerque, New Mexico June 30 - July 3, 1965, and received reports of substantial activity and progress in the Society's affairs. The meeting was well attended with keen interest being shown by the officers and directors in the various issues presented for discussion.

Of primary interest was the proposal for calling a constitutional convention to consider reorganization of the NSPE to increase its effectiveness. The Long Range Planning Committee had presented such a proposal in its interim report to the Board on January 22, 1965, in New Orleans. At the Albuquerque meeting the Long Range Planning Committee presented a further report in which it recommended that the Board of Directors:

1. Authorize the calling of a Constitutional Convention immediately preceding the Annual Meeting in Minneapolis in July 1966. The purpose of the Convention will be to agree on the scope of expanded programs, and on a new Constitution and By-Laws. The Constitution

and By-Laws will be submitted to the Board of Directors for their approval at their 1966 Annual Meeting. Further, that if approved by the Board, this new Constitution be placed before the membership for ratification by letter ballot at the earliest practicable date.

2. Adopt the rules of representation, voting, and related matters, for the Convention, as developed in this report.
3. Authorize the Officers of the Society to make necessary announcements and to develop appropriate plans to insure the success of the Convention."

In discussion of these recommendations debate centered around qualifications of delegates to the convention. It was agreed that the delegates to the Constitutional Convention will be the National Director or Alternate National Directors plus any additional delegates to make the number of delegates equal to the number of votes to which each state society is entitled. In addition each State Society President or an alternate Vice-President or President Elect for the administrative year 1965-1966 will be delegates entitled to one vote each.

All delegates must be certified in writing to NSPE Headquarters 30 days in advance of the convention. This is necessary in order that each delegate may be provided with the agenda and timetable of the convention prior to its opening. This will permit time for relevant subjects to have been digested and discussed with section officers by the convention delegates in their home states.

With respect to the proposed time table for disseminating information on the reorganization plan, it was decided that "First draft of the new Constitution and By-Laws, together with Chapter Program and discussion kits will go out to State Societies and Chapters not later than September 1, 1965. Comment and suggestions must be back to the Long Range Planning Committee by January 1, 1966.

"Revised draft of Constitution and By-Laws will go out to State Societies and Chapters not later than March 1, 1966. This draft will be the Convention discussion document.

As approved by NSPE Board, a final version of the Constitution and By-Laws will go to membership for ballot not later than September 15, 1966. If approved, the effective date is visualized as January 1, 1967."

From the above it will be seen that ample time is provided for discussion and review of any proposed changes in the Society's make-up, membership and operations, Inasmuch as two years will have elapsed from the original proposal in January 1965 to revise the Constitution to the effective date of the new Constitution visualized as January 1967. It behooves all members and officers of the Louisiana Engineering Society interested in this matter to follow developments closely in the Society's

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publications and the general technical press; and to advise the section officers and directors who will be delegates to the Constitutional Convention of any suggestions or comments they may have. The Texas Society of Professional Engineers for instance submitted a resolution to the Albuquerque meeting suggesting in part

"That the Long Range Planning Committee expand and develop programs on the Chapter, State and Functional level in order to accomplish membership growth, and that this growth should be promoted through programs developed to encourage qualified engineers to become licensed and licensed engineers to become members of the Society, rather than **changing** the requirements for membership;"

was proposal by the Functional Section of Professional A second item of major interest at the Annual Meeting Engineers in Private Practice (PEPP) that its organization be revised to greatly expand the operations and activities of this group within the NSPE. This proposal was the outcome of a special PEPP meeting in Indianapolis on May 13-14, 1965 and included five propositions. These included

"Proposition 1. National PEPP should be governed by a Board of Governors, composed of the members of the Executive Board and one representative from each state PEPP Section as endorsed by the state society.

Proposition 2. To be recognized for representation on the PEPP Board of Governors, a state PEPP section would apply with the approval of the state society, submitting its rules of operation and a roster of members . . . applications would be . . . approved by the Board of Governors.

Proposition 3. Qualification for individual membership in PEPP to be defined as follows:

'A member of PEPP shall be a member of NSPE and his approved State Functional Section who is engaged as a proprietor, partner, officer or employee of a firm which primarily offers engineering services to the public for a fee, and which firm is not engaged in contracting, manufacturing, sales, or similar commercial activities. Any other member of NSPE may be a Participant without a vote or the right to hold office.'

Proposition 4. PEPP shall have an Assistant Executive Director on the NSPE staff to administer its programs as directed by the PEPP Board of Governors, subject to the availability of funds.

Proposition 5. Starting January 1, 1966, PEPP shall be financed by appropriations from the NSPE budget, sup-

plemented by a due structure, as follows:

Membership Through Sustaining Firm—\$50 per year, plus \$5 per year for each registered engineer in the firm. A registered engineer NSPE member in such a firm shall be a voting Member of PEPP without payment of additional dues. Only Members would have a vote in the affairs of the Section, and the right to hold office. **Member**—A registered engineer member of NSPE not holding membership through a sustaining firm — \$10 per year.

Participant—Any other member of NSPE interested in the work of PEPP — \$10 per year. (EIT members would be eligible as participants)."

After considerable debate the proposal by PEPP to revise its operations was approved by the Board. It was emphasized that PEPP is not seeking autonomy and will operate fully within the framework of the NSPE organization. PEPP feels, however, that its activities in behalf of engineers in private practice must be substantially increased and wishes to do so without having these activities become a drain on the Society's resources of manpower and money. It is for this reason that the additional dues structures and staff member are proposed for PEPP.

The proposal for the expansion of PEPP's activities was opposed by the Consulting Engineers Council whose National President, Mr. Leonard Crawford, appeared at the meeting and addressed the Board and the Executive Committee to this effect. CEC believes there may be unnecessary duplication of effort between its activities and those of PEPP. It was felt, however, by the Directors, that the NSPE should not relinquish its responsibilities to its members engaged in private practice because of the existence of another organization with similar objectives.

NLRB Ruling

(Continued from Page 10)

quired by a prolonged course of specialized study in an institution of higher learning, the employees performing the work come within the meaning of Section 2(12). It is likewise clear that the statutory definition does not limit professional status to employees who have received a degree from, or completed a prolonged course of specialized study in an institution of higher learning. Thus, the requisite knowledge may also have been acquired through training or experience. Accordingly, when a group of employees are being evaluated to determine whether they are professionals, the principal test depends not so much on the individual qualifications of each employee as on the predominant character of the work in which they are engaged."

It can be gathered from this that the NLRB will probably have a significant impact on future unionization attempts in the space industry.

A Message to the Membership

J. T. KNIGHT, JR., OUTGOING PRESIDENT 1965

At this time, the close of one administration, and the commencement of a new one, under changed Constitution and By-Laws, there is real need for each member, and each chapter, to re-assess and re-evaluate, the needs for an organization such as the Louisiana Engineering Society.

If as a result of such re-assessment and re-evaluation the membership is chapters assembled come to the conclusion that the Society is essential for more reasons than just having a Society of "birds of a feather who flock together", then what do we do. I make the following suggestions, in the sincere, and ardent hope that they might be helpful in Chapter and State deliberations.

I suggest that Article I of the Constitution be reconsidered. We must do more than improve our members, we should spell out in more specific terms what we intend to do. The very importance of the professional engineer in our Society demands more than encouragement of social intercourse among engineers and men of practical science. If our objective must be stated in general terms rather than definite terms, then let's bring such a statement up to date, and say that we must point every effort, every program towards greater growth and development toward ever greater service to our profession and to the general public.

At this point, for what value it may be in your thinking, I quote the "Objectives" of the National Society of Professional Engineers:

"The objectives of the National Society shall be the advancement of the public welfare and the promotion of the professional, social and economic interests of the Professional Engineer."

I believe that it is crystal clear to all engineers that we are living in an era of "government" and "unionism", in another way we might say "politics and labor". The center of politics in this state is in Baton Rouge, much of the State wide labor efforts seem to be also emanating from Baton Rouge. Although we are constantly under pressures, we find ourselves once each year for a period of sixty-days fighting encroachment from both politicians and labor. Add to these sixty-days a forty-five day preparation for the legislative session, and another post legislative period of say forty-five days, we have five months out of every year when there is much that concerns L.E.S. happening, and it happens for a large part in Baton Rouge. The breakdown of our membership has, and always will, indicated the large number of our membership in New Orleans, but this group is served by the New Orleans Chapter. It is further agreed that in the future that New Orleans will probably host two out of every three annual meetings due to the basic fact that the facilities in New Orleans are more complete and adequate than in other Chapter locations in the State. Granting all of this, it still seems most logical to establish Baton Rouge as the Society's State Headquarters. It is recommended and suggest that those staunch and valued members, all of whom have contributed richly to the growth of the Society up to this point, who signed the petition to retain the Head-

quarters of the Society in New Orleans, reconsidered their position, and that a Constitutional amendment may be forth coming establishing Baton Rouge as the Headquarters City for L.E.S.

Now, we as a Society function somewhat differently than in the past, our future is in the hands of the Chapters, our Chapters are the basic organization, and they depend upon the members. Our strength lies in our membership, and the indoctrination of both old and new members under our "new" organization is a direct charge to the State and Chapter Officers. Without an informed membership the State Organization is not and cannot be really effective. The Chapter being the key to membership development and indoctrination, my prayers and sincerest hopes are with the Chapter Officers and Committee Chairmen for this, the first year of a new era. They shoulder a very important duty in this process of indoctrination of members.

There is a time, and this time is 1965-66 when the Louisiana Engineering Society, and all its Chapters, need to evaluate where we are going, how and when we get there. Therefore a strong and determined Committee on Chapter Activities at the State level needs to be activated promptly. Specifically this Committee should be charged with a "Chapter Evaluation Program". This Program as set up by N.S.P.E. has two phases: **One**, to effectively acquaint Chapter Officers and Committee Chairmen with their responsibilities and potentialities of their role in the progress of their Chapter and, **Two**, to provide a method whereby the performances of the Chapters may be evaluated and compared.

Next year at this time it is hoped that we may welcome, and honor, the Officers and Committee Chairmen of the "best" and "most effective Chapter in the L.E.S." and be able to let all other Chapters know how they rated in comparison with "the best."

In urging the functional sections concept as the basic organization for the local chapters and the state chapters, I can hardly improve upon the statement made in the "State Society and Chapter Handbook" and therefore I quote:

"The statement 'In Union there is strength' is not merely an effective and inspiring motto. It is particularly applicable to the cast of a profession whose

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members want to carry their legitimate weight in Society, so that their opinions, objectives, and ideals become known and respected by the general public. There is no denying that only a portion of the total membership of a state society or chapter will have a direct or immediate interest in many individual professional questions. But it is also obvious that all members of the Society should be alert to problems that affect their fellows, and should be ready to lend the weight of their support to appropriate action to alleviate them.

The provision for Functional Sections at state and local levels in which members with similar employment may focus attention on their common professional interests is the advantage of providing a means of developing activities of interest to a particular segment of the profession, at the same time enlisting the support of the entire membership of the Society."

Without strong Functional Sections starting with the Chapter level and the State level, we will not be able to cope with many problems, some of which face us at this minute. Every member of the Society should be assigned and indoctrinated upon admission to membership to a Functional Section in his Chapter. At this moment the State Board of Direction cannot expect to leave this most important activity of putting across the idea of Functional Sections to the membership, entirely in the hands of Chapter Officers, they will need much help as the basic idea has just not really caught on, or perhaps it has not been accepted. As of now the Consulting Engineers Council does not generally approve of the Professional Engineers in Private Practice Functional Section. Both groups are largely composed of L.E.S. members. Recently the Engineers in State Government Functional Section was activated, and almost immediately a group called "Professional Engineers in Civil Service" was formed, and these two groups both have L.E.S. members in them. In addition to these two the "Highway Engineers Association" has become active, so in this area of State Engineers there exists these three groups. It seems obvious that no one group could possibly wield the influence that all three together under the banner of the "Functional Section for Engineers in State Government" of L.E.S. could bring to bear.

Public Relations for the past two administrations has been directed by Frank Walk who has with his Committee done an outstanding job, but this area is of continuing importance. At the last Annual Meeting in Lafayette a Public Relations Program for the Louisiana Engineering Society was presented and adopted by the Society. All phases of this program except Part Five was activated. This part called for an annual indoctrination ceremony at which the new graduates of the accredited engineering colleges of the State would publicly repeat the Professional Engineer's Creed, and be formally accepted into the profession at an appropriate ceremony. This has not been ignored, but some obstacles were met. It is still important, and in some form should be tested out if only at one of our colleges. In a general sense Public Relations is ever with us, and we either do something about it, or we pass up making use of our greatest implement with which to upgrade the professionalism of the engineer in the eyes of the general public.

There are two other areas or targets upon which we need to direct our most powerful Public Relations efforts:

1. To inform the public about the implications of unionism for professional engineers.
2. To publicize the L.E.S. position to all Public Officials and Agencies as well as Industrialists regarding the bidding for professional engineering services.

For a final recommendation pertaining to Public Relations, I enthusiastically recommend to all who receive The American Engineer that they read Report #1 "The NSPE PR Program for the Profession", pages 36 and 37 of the June 1965 issue, then pass this on to some other L.E.S. members who are not members of N.S.P.E. To put over a satisfactory "Professional Image" each of us must determine for ourselves just what image we wish to be gauged by, its an individual effort by our entire Society.

In conclusion, I would be derelict if I did not express my personal appreciation to each and every Board of Direction member. Never to my knowledge has there been a harder working board, I believe that I called more meetings than most any other president, and the Board serving as a Committee of the Whole actually rewrote the entire Constitution and By-laws. Added to the above, I must mention the Chairmen and members of all State Committees. To all of these fine people my thanks and appreciation, most of these like the Board served for eighteen months. Finally just a word about John Fernandez, I am grateful, and most fortunate, that he served his twentieth year as Secretary-Treasurer during this past administration. It is alarming to even think of the problems of the past eighteen months without having had the sage and knowledgeable help from John. Many, many thanks John.

Finally, may I express to each of you my humble appreciation for your having so honored me by having me serve as your president at this time. I sincerely hope that the work of the dedicated group that served with me will bear fruit in the immediate future.

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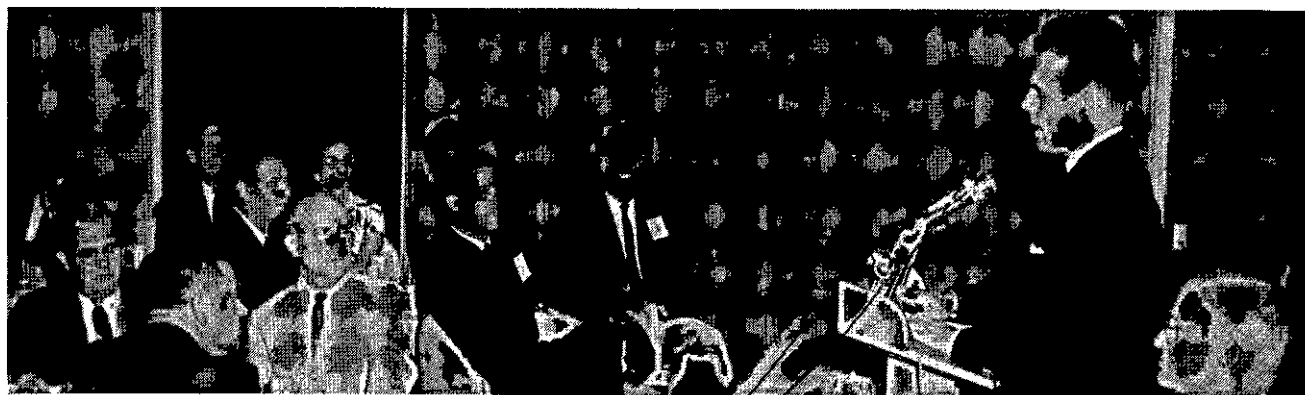
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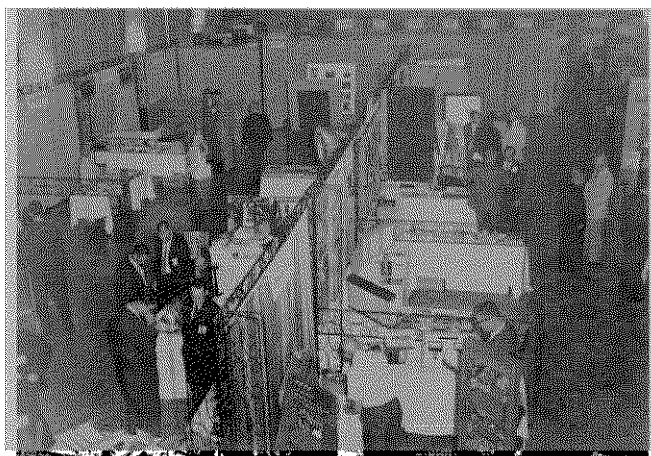


Keith P. Lanneau, a member of the Board of Directors and Secretary of the Gulf South Research Institute, gave the keynote address at a

welcoming luncheon, July 8.



Technical papers were presented by (from left) John H. Beachboard, chief of Laboratory Services, NASA, Mississippi Test Facility, Bay St. Louis, Miss.; A. M. Moore, chief engineer, Central Louisiana Electric Co., Inc., Pineville, La.; and Katsumi Hikido, Manager, SEFOR Safeguards and Analysis, General Electric Co., San Jose, Calif.



Industries and consulting engineers occupied an exhibit area in the Grand Ballroom where demonstrations of their products and services were given to visiting engineers in the society.



Shown serving Michael C. Abraham (center) and DeWitt L. Morris, president of the Engineers Club of New Orleans, at a reception in the new club is Mrs. Blaire Carriere.



Carlos G. Spaht, left, executive counsel to Gov. John J. McKeithen, is shown with award winners, (from left) Gen. Edward S. Bres, Armand L. Willox and J. Mason Guillory, at the Engineers Club where he spoke.

LD IN NEW ORLEANS



Professional Engineers in Industry are (from left, seated) R. O. Beckham, Walter Seditz, Col. John T. Knight, Jr., Charles W. Stokes, (from left, standing) T. J. Hague, Francis Sessums and Whitney P. Musgrave.



Shown at the Functional Section Committee Meeting for Professional Engineers in State Government are Roger P. Guissinger (left), secretary, and Hu B. Myers, vice-chairman.



Professional Engineers in Private Practice, (from left), Leo M. Odom, Frank H. Walk and Edgar H. Pavia attended their Functional Section Committee Meeting at the annual meeting.



Shown at the annual meeting banquet are committee members and their wives, (left to right) Messrs. and Mmes. Don Farrelly, Roy E. Johnson, George J. Groh, and Edgar H. Pavia.



Annual meeting committeemen (from left) A. J. Adove, Raymond P. Maddox and Whitney P. Musgrave, are seen with their wives at the dance July 10.



Dancing at the annual meeting's end are committeemen and their wives, (left to right) Messrs. and Mmes. Hoyt W. Brown, Jr., Thomas A. Fromherz and Michael J. Cade.

LES Appoints Martin

Earl M. Martin, Jr., formerly executive secretary of the Printers and Stationers Association of Louisiana and sales representative for Franklin Press and Martin's Printing Co., Inc., has been appointed as full-time executive secretary to the society.

New state offices for L.E.S. have been established at 833 Howard Ave., New Orleans, La. 70113. Telephone number: 525-9502, Area Code 504.

As executive secretary to L.E.S., Martin's duties will be to achieve unity and close liaison so that engineers in all branches may better serve the public; to promote better understanding and cooperation between engineering society chapters within the state and those in other states; to continue the conduct of L.E.S. on a sound business basis; and to improve the status of the engineering profession in general.

Martin's appointment followed an intensive recruitment program for the position. Col. John T. Knight, Jr., immediate past president of the society, said, "Mr. Martin was selected after consultations with approximately 35 outstanding candidates on the basis of his outstanding background, enthusiasm and capabilities."

"His selection comes at the beginning of what might be termed a new era in one of the oldest engineering societies in the United States.

"In the years to come the executive secretary will provide for the society new opportunities for service to the professional engineers of Louisiana in private practice, in education, in government and in industry.

"In representing the State Society as one of the members of the National Society of Professional Engineers, Mr. Martin will receive and be able to activate many of its fine national programs, emphasizing to the public the true function of the Professional Engineer," Col. Knight said.

Martin, a native of New Orleans, resides in Baton Rouge with his wife and three children. He received a B.A. degree from the University of Southwestern Louisiana, Lafayette, La. A veteran of the U. S. Marine Corps, he has been engaged in the printing business since 1956. His service includes experience in management, production and sales.

He is a member of the East Baton Rouge Lions Club, the Advertising Club of Baton Rouge, the Baton Rouge Chamber of Commerce, the Better Business Bureau of Baton Rouge, Public Affairs Research Council and Executive Club.

WELCOME TO PROFESSIONAL STATUS

Listed below are the engineers who were granted registration June 14, 1965 by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors:

Albus, James W., New Orleans, La.
Barton, Richard A., Jr., Shreveport, La.
Bernstein, Bertram P., Brooklyn, New York
Bradley, Charles T., Sharon, Mass.
Brock, James S., West Monroe, La.
Buisson, Robt. A., Jr., Metairie, La.
Castelluccio, S. L., Jr., Metairie, La.



Earl M. Martin, Jr., new executive secretary (left), is shown with Keith Lanneau, keynote speaker, Waldemar S. Nelson, and J. Bres Eustis at the annual meeting.

Castleberry, V. E., El Dorado, Ark.
Chute, Earl W., New Orleans, La.
Clough, Russell A., Metairie, La.
Eitel, George L., Jr., Baton Rouge, La.
Forss, Hendrick A., Haworth, N. J.
Fort, Thomas H., LePlace, La.
Foster, Arthur P., Jr., Shreveport, La.
Foster, Frank M., Houston, Tex.
Fox, Richard K., Sr., Decatur, Ga.
Greco, Claude A., New Orleans, La.
Guillot, Edward C., Jr., New Orleans, La.
Hayes, Robert C., New Orleans, La.
Koppi, Ridgway K., Slidell, La.
Kuhlman, Robert H., New Orleans, La.
Lacy, Russelle R., Mobile, Alabama
Lammert, Frederic R., Huntsville, Ala.
Langston, James H., Harahan, La.
Levert, William F., Shreveport, La.
Luck, John C., Jr., Morgan City, La.
Lockett, Wm. J. L., Jackson, Miss.
MacKichan, Keith B., Grand Forks, North Dakota
McCutchen, John W., Shreveport, La.
McDonald, Thomas B., Shreveport, La.
Montgomery, Fred, Jr., Baton Rouge, La.
Boreau, Larry L., Springfield, Va.
Nelson, Billy L., Dallas, Texas
Ng, Kung Moon, San Antonio, Texas
Norwood, James M., New Orleans, La.
Nothnagel, Edwin J., Jr., Chamblee, Georgia
O'Kelley, John S., Little Rock, Ark.
Palmer, Charles R., Orange, Texas
Penick, Rawley M., III, New Orleans, La.
Pfeffer, Philip B., New Orleans, La.
Plymale, Thomas W., New Orleans, La.
Randolph, Sterling P., Shreveport, La.
Rosenblath, Quinlan T., Jr., Bastrop, La.
Rosteet, Edgar M., Maplewood, La.
Staggs, Horace M., Jr., Dallas, Tex.
Stearns, Ellis J., Jr., New Orleans, La.
Thoman, Charles L., New Orleans, La.
Thompson, Dale C., Huntsville, Ala.

WELCOME TO PROFESSIONAL STATUS

The following engineers were granted registration August 10, 1965 by the Louisiana Board of Registration for Professional Engineers and Land Surveyors:

Achord, Bonnie J., Jr., Shreveport, La.
 Ahern, Vincent G., Shreveport, La.
 Alfred, Shelby, West Monroe, La.
 Alsop, Othniel, Morgan City, La.
 Alspaw, Dewey I., Lafayette, La.
 Arthur, Charles P., Baton Rouge, La.
 Ashmore, John E., Houston, Texas
 Baker, Bruce H., Ellsworth, Kansas
 Baker, Michael, III, Beaver, Pa.
 Bean, James W., Plaquemine, La.
 Boling, Don R., Metairie, La.
 Boswell Marvin D., Shreveport, La.
 Boutte, Ronald L., Shreveport, La.
 Brzinard, Clifford C., Alliance, Ohio
 Brauer, E. Bernard, Houston, Texas
 Brentzel, Reese J., Houston, Texas
 Britt, Duncan E., Jr., Fort Lauderdale, Fla.
 Callegari, William A., Washington, Illinois
 Carter, Jack N., West Covina, Calif.
 Castellvi, Jorge A., Baton Rouge, La.
 Clark, Malcolm E., Jr., Highland, Calif.
 Clement, Donald J., New Orleans, La.
 Crossfield, Harry B., Jr., Atlanta, Ga.
 Curtis, Raymond Emmet, Metairie, La.
 Danks, Richard T., Springfield, Ill.
 Diamond, John F., Medford Lakes, N. J.
 Donohue, William J., Baton Rouge, La.
 Firmin, Marvin L., New Orleans, La.
 Frazier, Billy G., Houston, Texas
 Gomez, Ivan, Thibodaux, La.
 Gurley, Derrel G., Shreveport, La.
 Gurney, William B., Beaumont, Texas
 Harrel, Thomas A., New Orleans, La.
 Herrington, Robert J., New Orleans, La.
 Huval, David S., Baker, La.
 Johnson, Raymond C., Baton Rouge, La.
 Jones, Albert L., Jr., Tyndall AFB, Fla.
 Jones, Clarence R., Augusta, Ga.
 Kemp, Ray F., Baton Rouge, La.
 Koerner, Roy H., Shreveport, La.
 Lennox, Julius J., Baton Rouge, La.
 Leo, John A., New Orleans, La.
 Lodge, Richard D., San Francisco, Calif.

Macken, Robert J., Thibodaux, La.
 Mack, Wallace L., Walker, La.
 Mallette, Frank B., Metairie, La.
 Marsh, Jerry Lee, Pineville, La.
 Matthews, William R., Lafayette, La.
 McGregor, Donald W., Houston, Texas
 McNeal, Sheldon R., Baton Rouge, La.
 Morrow, Timothy N., Houma, La.
 Nyitray, Z. John, Miami, Fla.
 Paris, John L., Baton Rouge, La.
 Perkins, Paul D., Lafayette, La.
 Perry, Thomas M., Beaumont, Texas
 Peterson, Delano D., Aurora, Colorado
 Pike, Ralph W., Jr., Baton Rouge, La.
 Rawlins, George S., Charlotte, N. C.
 Rein, Harold E., New Rochelle, N. Y.
 Reiser, Benjamin W., Baton Rouge, La.
 Rogers, Bruce G., Beaumont, Texas
 Rubero, Paul A., New Orleans, La.
 Ryckman, Seymour J., Dayton, Ohio.
 Schultz, Chester L., Fullerton, Calif.
 Schwartz, Herbert M., Miami Beach, Fla.
 Sherry, Edward V., New Orleans, La.
 Sullivan, Edward H., Shreveport, La.
 Sullivan, Philip J., Jr., Slidell, La.
 Thornton, Robert E., Houston, Texas
 Thorpe, Robert M., Metairie, La.
 Vann, Warren T., Huntsville, Ala.
 Veca, Donald J., Shreveport, La.
 Williams, Bobby H., Baton Rouge, La.
 Williams, Lewis M., Lafayette, La.
 Youse, William H. III, Shreveport, La.

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Fernandez Makes Final Report

STATEMENT OF LIQUID ASSETS

As of June 30, 1965

Cash in Bank	\$21,011.77
U. S. Savings Bond, Series J. March 1955.....	936.00
U. S. Savings Bond, Series J, April 1955.....	936.00
Columbia Homestead Association.....	2,000.00
Commonwealth Savings & Loan Association.....	2,000.00
Greater N. O. Homestead Association.....	3,157.02
Security Building & Loan Association.....	1,500.00
State Savings & Loan Association.....	1,500.00
Union Savings & Loan Association.....	1,500.00
Lapel Emblems on Hand, Value of.....	117.60

Total Liquid Assets June 30, 1965.....\$34,658.39

Total Liquid Assets January 1, 1965.....25,388.79

Net Increase\$ 9,269.60

LOUISIANA ENGINEERING SOCIETY MEMBERSHIP REPORT

For the Six Month Period ended June 30, 1965

GAINS:

Elected: Members	25
Affiliates	9
Juniors	10 44

LOSSES:

Deceased: Life Member	1
Members	5 5

Resigned: Members	20
Affiliates	2
Juniors	4 26

Dropped: Members	3 34
-------------------------------	------

Net Gain 10

TRANSFERS:

Junior to Member.....	1
Affiliate to Member.....	3

SUMMARY:

Honorary Members	10
------------------------	----

Life Members	101
Members	1,297
Affiliate Members	233
Junior Members	284
Student Members	70

Total1,995

SEMI-ANNUAL REPORT OF INCOME AND EXPENSE

For the six months ending June 30, 1965

INCOME:

Advertising (NSF Check \$45 deducted)	\$ 5,726.91
Annual Meeting	9,410.50
Dues (NSF Check \$12 deducted)	21,064.00
State Board Contribution.....	6,000.00
Miscellaneous	222.75
	\$42,424.16

EXPENDITURES:

Annual Meeting	\$ 8,462.64
Awards, Medals, etc.....	673.89
Dues Rebated	11,333.25
Miscellaneous	326.46
Publication and Public Relations	8,008.75
Salaries & Executive Secty. Expenses	3,818.30
Stationery, Printing & Postage	659.64
Increase in Bank Balance.....	33,282.93
	\$ 9,141.23

RECONCILIATION:

Bank Balance June 30 per June Financial Report.....	\$21,011.77
Bank Balance Jan. 1 per January Financial Report.....	11,870.54

Increase in Bank Balance.....\$ 9,141.23

Increase in Book Value of

Liquid Assets 128.37

Total Increase in Liquid

Assets \$ 9,269.60

REMARKS

Being an amateur historian and statistician, I would like to make a few comparisons to illustrate our growth in the past 20 years. When I first became secretary in 1945 our total membership was 633. I recall Dean Lassalle saying a year later, that some day we would have 1,000 members. I thought at the time, that this would only be realized in the very distant future. Today, you have just heard that our membership has doubled the goal set by Dean Lassalle.

The total operating income for the entire first year that I served as secretary amounted to \$4,444, and our total expenditures were \$4,232. You have just learned that

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during the first six months of this year our cash receipts totaled \$42,424 and our expenditures were \$33,282. Just think, our monetary transactions for a half-year are now almost ten times what they were for an entire year back in 1945.

Our liquid assets in January of 1945 were less than \$8,000. To be exact, they were \$7,899. Today our liquid assets are almost \$35,000, four and one-half times what they were twenty years ago.

This gives the M & M story. Members and Money,—those two big problems all non-profit organizations must solve. I'm sure that our record of steady growth influenced your 1964 Board of Directors to take the calculated risk of establishing a headquarters office and engaging a full-time executive secretary. Also, I believe that our financial stability was a factor in helping us to acquire the services of such a well qualified full-time executive secretary as the one we have been fortunate enough to obtain.

However I do not believe that members and money are everything. To me, the services we furnish the public and the profession, the enthusiasm evidenced by the membership for our programs, and above all the genial fellowship developed while engaged in committee work, are the things that make the Louisiana Engineering Society great.

Recently I looked over the list of former presidents of our Society and checked those I have had the honor of knowing personally. Of our 66 past presidents, I have been privileged to know 52, and have worked closely with the last 19. I'm saying this not to inflate my pride, though I am proud of knowing each and everyone of them, but to convince you that I know what I'm talking about, when I say that the LES has been blessed with wise, hardworking professional-minded leaders who have been responsible for guiding our society through its dynamic growth. To each of them we should all be truly grateful.

We also have been blessed with many willing workers. I have never ceased to be amazed at the number of volunteers, behind-the-scene members who offer their services time and again, knowing that their only reward will be the satisfaction that comes from a job well done. As I said last month in Monroe, it is great committee work that makes great administrations and we are fortunate in having such an abundance of generous, cooperative members. If I were asked to make one and only one

recommendation to the incoming administration, my advice would be select committee personnel carefully.

It is with mixed emotions that I complete my long term of office as secretary-treasurer. Of course I welcome the relief of no longer having to remind some hard-working committee chairman that he must meet an unrealistic deadline. But on the other hand, I will greatly miss working with the fine, dedicated engineers who are doing so much for their profession. To all of you who have made my job so easy and especially so pleasant, I thank you from the bottom of my heart. It was indeed an honor, a privilege and a pleasure to have been so closely associated with our great society.

JOHN P. FERNANDEZ
Secretary-Treasurer

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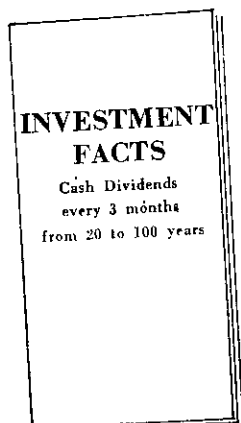
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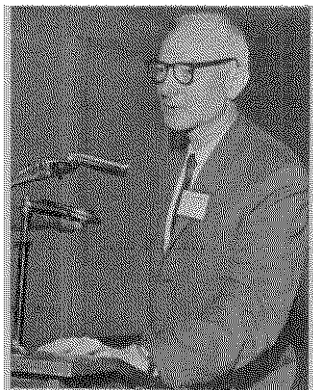
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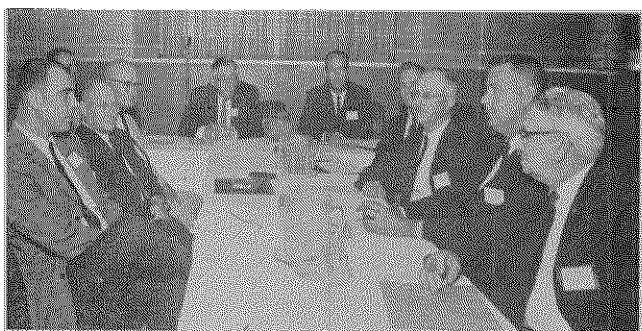
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Speaking at the State Planning Conference is W. T. Edwards, Chief Engineer, Southern Bell Telephone & Telegraph Co. The topic of his speech was "Engineers—Leaders or Followers".



Daniel B. Sandefur, president of the Alexandria chapter, presided at the State Planning Conference August 6-7.



Newly-formed Functional Section of Engineers in State Government met at the State Planning Conference in Alexandria.



Attending the Committee Workshop for Engineers Week and Public Relations are (from left) Sylvan Richard, Lafayette; A. G. Durning, New Orleans; Milton Johnson, Ruston; Farrell Adams, Shreveport; and Ted DeBlanc, Alexandria.



Engineers in Private Practice obviously enjoyed their Functional Section meeting in the Hotel Bentley.

W. T. Edwards Speaks At Conference

If engineers are to be civic leaders, they certainly must be aggressive, W. T. Edwards, Chief Engineer, Southern Bell Telephone and Telegraph Co., told the State Planning Conference of L.E.S. in Alexandria.

Edwards spoke at a luncheon meeting in the Hotel Bentley August 7, presided over by Daniel D. Sandefur, president of the Alexandria Chapter.

Edwards said the engineers' outlook on ethics should not be limited to engineers' relationship with each other, but should consider the broader relationship, that with the public. He encouraged the extension of leadership in the educational field. He spoke of the need for engineers to have a broader education including such non-technical subjects as Engineering Economy and the liberal arts to help engineers communicate their ideas.

He quoted Ben S. Gilmer, president of Southern Bell, in giving the attributes of a good engineer. "Men who have been taught—even forced if necessary—to think for themselves; Men who distrust the obvious; Men who doubt the methods of the past; Men who are able to conceptualize the future; Men who have the boldness and imaginativeness to pioneer in the development of new business systems and new businesses; and Men who have the ingenuity and drive to develop and reimprove new devices and techniques."

Special attention was given to the problems of engineers in state government, industry and private practice at the conference.

A series of workshops dealt with Engineers Week, public relations, legislature, the Annual Meeting, ethics and professional conduct, honors and awards, membership, state planning and vocational guidance.

Earl M. Martin, Jr., executive secretary, said that the workshops were aimed at providing continued quality in engineering for the protection of the public.

A general meeting was held, with Charles W. Stokes presiding. The Ladies State Advisory Committee also met. Reports of the committee chairmen were heard.

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La. Engineering Representative

Exchange Field Notes By Allen Johnson

Mutual exchange of information by 22 state engineering society executive secretaries brought Earl M. Martin, Jr. to St. Louis this month.

Highlights of N.S.P.E. sponsored 2-day shirt-sleeve session were meetings with J. Neils Thompson, San Antonio, Texas, N.S.P.E. president, and Harvey Pierce, past-president and chairman of N.S.P.E. Constitutional Long Range Planning Committee. Thompson, who helped guide University of Texas football fortunes to Orange Bowl January 1, 1965, told Pierce, a Floridan, Texas will be back. Martin warned him to watch out for L.S.U.

Paul Robbins, P.E., N.S.P.E. Executive Director, indicated that all comments, suggestions and alternatives from state and local chapters be returned to N.S.P.E. by January 1, 1965. Compilation of all of this material will be presented during a scheduled forum at the Miami Board Meeting of N.S.P.E. The revised draft is expected to be ready and mailed by March 15, 1966 for final consideration at the July 5th and 6th Constitutional Convention in Minneapolis.

The meeting began with a short explanation by N.S.P.E. President Thompson and Committee Chairman Pierce, on the work of the committee to date as well as the reason for the meeting with state secretaries. Then a page by page reading and discussion of the proposals was made. This proposal contains descriptive suggestions

by the Long Range Planning Committee of the recommended changes in the Constitution and By-laws. It was very apparent that quite a few of the states had already held meetings and discussions on some of the proposals. However, the real extended arguments were not made until the page by page comparison of the present N.S.P.E. Constitution as compared to the recommended changes was made. Quite a few written objections have already been submitted by Texas, Ohio and Illinois. These objections range from minor wording changes to complete revisions of proposed changes along with suggested new writings that might be more acceptable.

Engineering Dean Emeritus of U.S.L., F. W. zurBurg heads the Site Selection Committee for the Gulf South Research Institute. Interest in the research facility was heightened by Louisiana's entry in the competition for the Atomic Energy Commission's proposed \$300 million proton accelerator. Louisiana survived the first "cut" from 70 to 33 applications for the site of the A.E.C. operation.

Governor John J. McKeithen has led an intensive effort to obtain this plum.

Congratulations to the Alexandria chapter for an outstanding program at the State Planning conference. Plaudits to O. E. Barron, chairman, and his fine committeemen from Alexandria.

Scientific Reporting Problems Discussed

Engineers and reporters discussed what might be done to improve reporting of scientific news in the mass media at a conference in Philadelphia recently. Many suggestions were made to improve communications between the two professions.

A Harvard University professor said that engineering reporting suffered because "journalists have an inadequate scientific background for reviewing many specialized areas." He added that engineers were also at fault "for not insisting on checking facts and interpretation of reports before publication."

Some of the frequent complaints were the newspaper reporters' tendency to play up and exaggerate the significance of a contribution to engineering and the common use of terms such as "breakthrough", "major advance" or "key to life". Also criticized were stories which were written "as if the most recent findings described are completely new, instead of being based on and continuing from many other works."

Reporters asked that engineers make a policy of sending out advance material and calling press conferences in order to have more time to work on the story and a better understanding of it. It was agreed that engineering stories should not be written under sharp deadline pressure as this might lead to distortion of the facts.

Engineers said that the complicated results of engineering stories should not be written under sharp deadline simply cannot be understood and will sound distorted to the engineering and not terribly meaningful to the reader."

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Hospitality Room Auxiliary Notes By

Mrs. Jerry L. Dickson

The new president of the Woman's Auxiliary to the New Orleans Chapter of the Louisiana Society, Mrs. Thomas A. Fromherz, and her officers and committee chairmen welcomed all visiting ladies to the Annual Meeting of the Louisiana Engineering Society when they met July 8-10 at the Fontainebleau Motor Hotel in New Orleans. Convention chairman for the ladies activities was Mrs. George J. Groh assisted by her vice-chairman, Mrs. Allen H. Jensen.

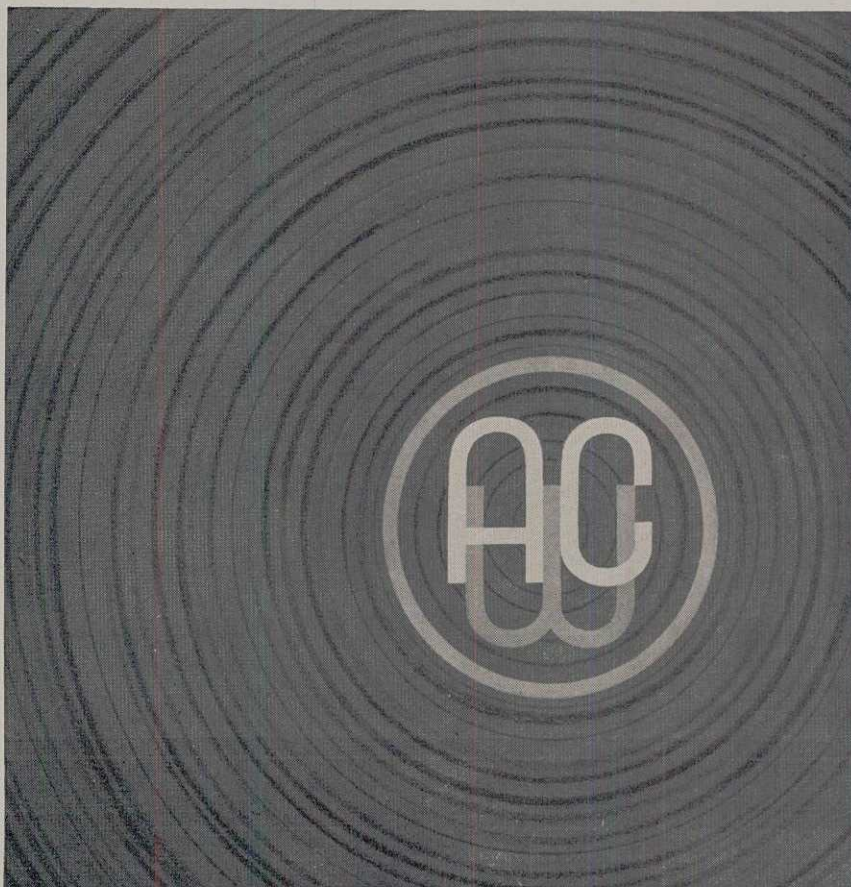
One spot for the ladies to rendez-vous was the Hospitality Room, opened two mornings during the convention. Mrs. John A. Haase and her committee acted as hostesses for the coffee pouring. Thursday evening brought both attending members and their wives together for a coffee party at the Engineers Club. A luncheon was held Friday at Al Hirt's French Quarter Club. The climax to the social activities of the convention was the gala evening of entertainment on Saturday, when the festive banquet, preceded by a cocktail party, was enjoyed as the final event on the calendar. Dancing followed the dinner hour. Chairmen assisting with the various events were Mrs. Whitney P. Musgrave, coffee party; Mrs. Frank Birdsong, luncheon; and Mrs. Ronald P. Cressy, registration



Shown registering at the annual meeting are (from left) Mrs. Ronald P. Cressy, Mrs. Blaise Carriere, Mrs. George J. Groh, Mrs. Eugene M. Sellers, and Mrs. Thomas A. Fromherz.

chairman for all activities.

Representing the various out-of-town chapters were Mrs. P. Brooks Metcalf, Lafayette; Mrs. Charles W. Stokes, Lake Charles; Mrs. O. T. Ice, Shreveport; and Mrs. A. W. Albritton, Baton Rouge. Other out-of-towners were Mmes. Fred C. Culpepper, Jr., Marion P. Garrison, Eugene Sellers, R. W. Richard, John Huffman, James H. Prescott, R. W. Richardson, Briant Fournat, Lawrence Hunsinger, Emery Domingue, and G. R. Dyson.



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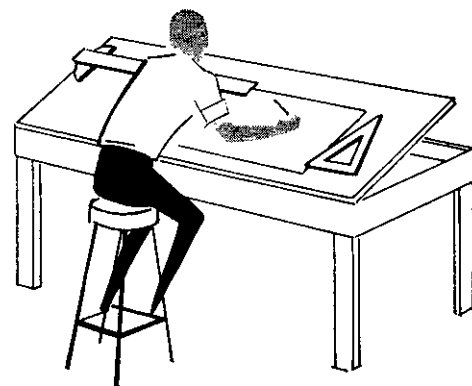
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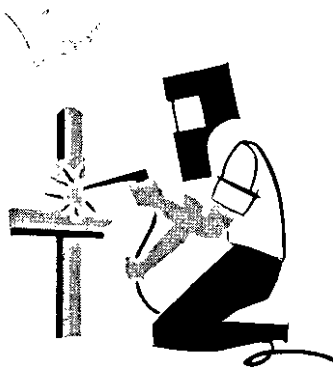
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EJC Notes

The nation's engineer is a man, median age 41, who works in industry or is self-employed, and, though he leans toward electronics and work management, may be employed in any of 115 areas of technology. In addition, he and his fellow engineers tend to concentrate in New York and California.

These are some of the findings of the most thorough study of the engineering profession ever conducted, based on questionnaires returned by over 57,000 individuals representative of the membership of 41 leading engineering societies. The study was conducted by the Engineers Joint Council (EJC) for the National Science Foundation's National Register of Scientific and Technical Personnel. The report *ENGINEERING MANPOWER IN PROFILE*, based on the survey, was released jointly today by the Council and the NSF, which provided the funds for the study.

Walker L. Cisler, President of the EJC and also President of the Detroit Edison Company, described the report as an important phase of the Council's program to "develop a broad range of information on the characteristics of engineers in the United States."

Some significant findings of the survey include:

About 71 per cent are employed in industry or self-employed, another six per cent work for educational and non-profit institutions, and only 15 per cent are employed by government.

More than one out of every five engineers has earned his doctorate or master's degree.

Only one-half of one per cent of responding engineers are women.

California and New York top the list for concentration of engineers.

About 42 per cent of the respondents are receiving some degree of support or sponsorship from Federal programs.

The profession is characterized by its great variety of specialties.

The report, *Engineering Manpower in Profile*, may be obtained from Engineers Joint Council, 345 East 47th Street, New York, N. Y., 10017, at \$1.00 per copy, prepaid.

NSPE Notes

Engineering salaries have increased 5 per cent on the average since 1962, according to NSPE's seventh biennial salary survey of its membership "Professional Engineers Income and Salary Survey."

Well over 27,000 engineers were included in the 1964 Survey, reporting a median annual income of \$12,050. The median income figure for the 1962 Survey was \$11,460.

Almost all (92 per cent) of the engineers responding to the 1964 Survey have a bachelor's degree or higher.

Seventeen per cent hold graduate degrees. Aeronautical, chemical, agricultural and sanitary engineers have the highest educational levels among the respondents, with over 30 per cent of the engineers in these fields reporting an advanced degree.

Engineers in the East Coast states reported the highest salaries. Earnings of engineers in the Plains states were \$2,440 below those on the East Coast. Educators are the best paid in the Midwest, and there is a decided differential in favor of East Coast engineers in private practice.

Chemical engineers, who in past surveys ranked first with the highest median earnings, slipped to second place in the 1964 Survey, with the heterogeneous group of "other" engineers taking over the top position. Aeronautical engineers followed closely behind the chemicals. Strikingly low median incomes continue to be reported by the small group of agricultural engineers. Civil engineers have the next to the lowest incomes.

The 1964 Survey shows that younger engineers do best working for industry or the Federal Government. On the other hand, for the more experienced men, educational institutions, consulting firms and construction contractors rank among the three highest paying employers.

The highest gains for engineer salaries for the 1962-1964 period were achieved by engineers employed by the Federal Government (12%); in education (9%); in municipal and county government (8%); and among new entrants, in grades 2 and 3 (8%). Engineers in industry and the construction business showed slightly below average gains for the same period.

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A Professional, by accepted standards, belongs to one of the learned professions that is dedicated to dealing with the problems of humanity without being motivated only by thought of highest possible financial compensation. Professionals have been instrumental in setting up licensing laws to reduce to a minimum the exposure of the public to incompetent practitioners. All of the learned professions have Codes of Ethics, many of which are published and scrutinized at reasonable intervals to determine whether they meet current objectives and requirements.

The point is that Professionals are constantly seeking to upgrade their competence in attempting to solve the problems of mankind. This is the motivation or starting point which is now so desperately needed in our country. In the past, Professionals have limited themselves to upgrading their competence in their specialized fields. This is where the change must be made. There is no point in being concerned about the equipment in a surgical room, if the hospital cannot be operated, or formulate plans for schools or ships if they cannot be built or conceive inventions if they cannot be made available by production processes. In short, the Professional's useful employment is dependent upon a sound economy. It therefore should be concluded that a sound economy is the fundamental foundation upon which everything tangible rests.

We have heard of "Deficit Financing," "Spending our way to Success," and "Evaluating our economy in terms of the gross national product." In spite of these delusions of grandeur, the fact remains that the dollar buys about one half of what it did twenty-five years ago of most commodities or services. This is inflation. It has happened and is happening right now. It will continue to proceed on its spiraling course as long as our country's yearly outgo is greater than its yearly income.

There may be temporary justification for an unbalanced budget under certain economic circumstances but this must be reversed in good times to regain our former financial status. We are supposed to be enjoying good times now but we are not balancing the budget. The outgo is greater than the income. If we cannot reverse this trend now, under what circumstances could we? If we never reverse the trend what is the end point or do we not dare to face the issue?

I was interested to note recently a quotation from a speech* attributed to Professor Alexander Fraser Tytler of the University of Edinburgh. This occurred while our original states were colonies of Great Britain and referred to the fall of the Athenian Republic. The quotation follows: "A democracy cannot exist as a permanent form of government. It can only exist until the voters discover they can vote themselves largesse (we call it relief, subsidies and doles) out of the public treasury. From that moment on, the majority always votes for the candidates promising the most benefits from the public

(Continued on Page 30)

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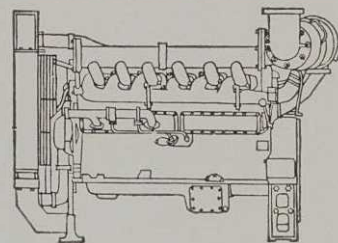
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'Top Out' Trade Mart

The International Trade Mart, already New Orleans' tallest structure and destined to become the skyline symbol of the Crescent City, was "topped out" July 6 while a blue-ribbon audience of some 350 invited guests looked on and many thousands more watched on live television.

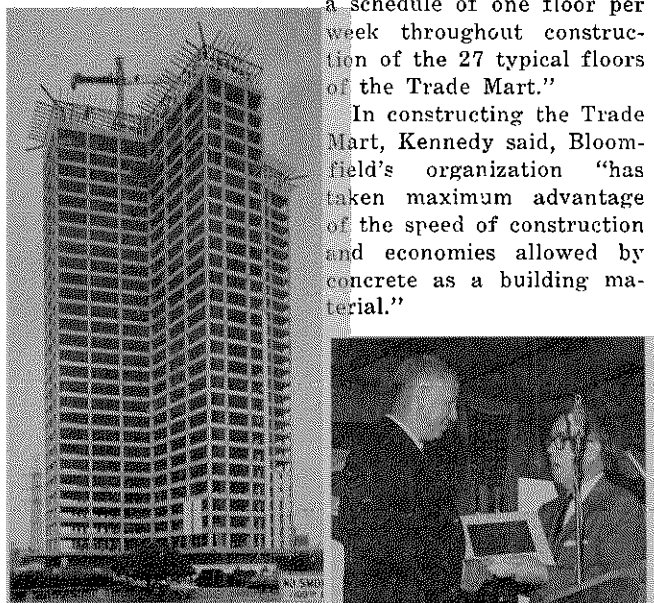
The ceremonies symbolized the completion of the reinforced concrete frame and floors of the 33-story structure. Precast concrete exterior panels and some interior finishing remain to be added before the building will open in late 1965 or early 1966. The structure was designed by architects Edward Durell Stone of New York and Robert Lee Hall & Associates of Memphis. Structural engineers were Ellers & Reaves; constructor is Southern Builders, Inc., subsidiary of Bloomfield Building Industries, Inc. of Memphis. The structure is part of a large complex located where Canal Street meets the Mississippi River. A huge convention and exhibition facility nearby is now under construction.

G. Donald Kennedy, president of the Portland Cement Association, noted in his remarks at the ceremonies that the Trade Mart is destined to become the permanent skyline symbol of New Orleans due to its dramatic location and impressive design. "There is a special genius that has manifested itself in the concept, the design, and the construction of the Trade Mart," Kennedy said. "It will become, and remain for decades to come, the skyline symbol which identifies this great city throughout the world."

In the highlight of the ceremonies, Kennedy presented a specially made concrete plaque to Harry Bloomfield of Bloomfield Building Industries, Inc., Memphis, constructor of the building.

The plaque noted the organization's "exceptional achievement in concrete construction, including meeting a schedule of one floor per week throughout construction of the 27 typical floors of the Trade Mart."

In constructing the Trade Mart, Kennedy said, Bloomfield's organization "has taken maximum advantage of the speed of construction and economies allowed by concrete as a building material."



G. Donald Kennedy, president of Portland Cement Association (at right), presents a specially made concrete plaque to Harry Bloomfield of Bloomfield Building Industries, Inc., Memphis, constructor of the Trade Mart.

PEG Section Formed

A new functional section for engineers in state government has been formed to meet the specialized professional needs of engineers in the various state agencies.

The section was organized under charter provisions of the Louisiana Engineering Society. Mr. J. B. Carter has been elected president, Hu B. Myers vice president and R. P. Gussinger voted secretary.

The basic aim of the section is to set a job description and salary scale that will be endorsed by LES, NSPE, and EJC so they could be presented to the Louisiana Civil Service Commission with some hope of acceptance. This would result in better engineering service to the public by state agencies, members believe. There are other goals of the section, however, which when reached will alleviate many of the professional problems that presently impair the efficiency of the state engineer.

The objectives of the Section are:

1. Fair and equitable salaries comparable to those received in other types of practice. The retention of qualified personnel has become increasingly difficult because of salary considerations.

2. Determination of the qualifications and salaries for various Engineering Classifications and endorsements of same by professional societies and approval by the Louisiana Civil Service Commission. This will provide better opportunities to recruit as well as retain highly qualified engineers.

3. Function as a standby committee on legislation affecting engineers in government as well as work for diligent enforcement of existing laws.

4. Promotion of closer liaison between state engineers and consultants in all matters of mutual interest.

5. Serve as an effective forum to express the views of members on matters affecting their interest and to formally provide the President and Board of Directors of the L.E.S. with an expression of these views.

6. Fulfillment of these objectives as swiftly and effectively as possible.

Achievement of these goals will be of ultimate benefit to all members of the profession as well as the public. Better engineering service rendered by state agencies will reflect well the entire engineering profession. Certainly the higher salaries and greater professional incentives urged by the new section are long overdue. It is hoped that, for the professional and public good, these goals will soon become realities.

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(Continued from Page 28)

treasury with the result that the democracy always collapses over a loose fiscal policy, always to be followed by a dictatorship."

Like most statements it is only true if the premise exists. It was not true with us as long as we balanced the budget. This country has gone through some very arduous tests and come up stronger than ever. We are undergoing such a test now. We need our dedicated professional leadership to successfully emerge.

It is possibly moral to spend all of our income whether individually or collectively, although I do not consider it prudent. However, I believe it is almost the worst kind of immortality to spend the income of our children and unborn generations. Parents and grandparents are supposed to protect the young instead of victimizing them when they are helpless. When we engage in spending orgies beyond our income, we are committing future generations to pay the bills. Instead of reverencing us for a job well done they may well hate us for our profligacy and lack of protection.

It may still not be too late if our Professionals will emerge from their specialties and apply their dedicated way of life to insisting that the Pied Pipers of Politics cease their reckless course and return us to living within our income.

*Reference—Mr. Thurman Sensing, Nov. 5, 1964 Issue, Chattanooga News-Free Press.

The above article was reprinted from *The Kraissl Quarterly*, April 1965.

'Big Brothers' Help—A. U. S. contractor has two elephants on his payroll and claims the "big brothers" outmaneuver tractors in the jungle, handle big logs easily, require little maintenance; and, they work for "peanuts." The elephants are clearing a path through jungle ahead of 300 miles of highway under construction near Bangkok, Thailand.—*Construction Methods*.

Fire to Ice Water—Headed for the dinner table in cooking utensils is a material that received its start with missile nose cones. The all-purpose cook-and-serve housewares can go right from the flame to ice water without cracking due to its thermal shock resistance.—*Product Engineering*.

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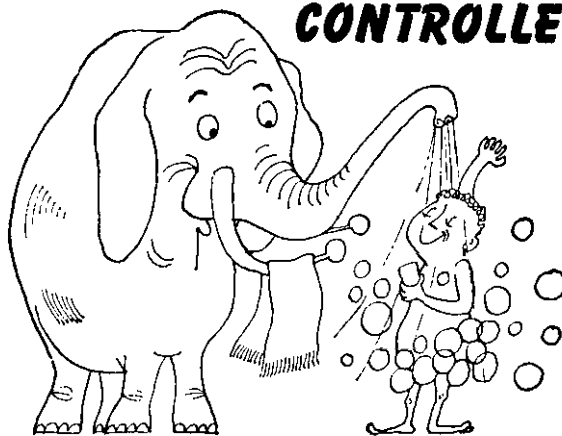
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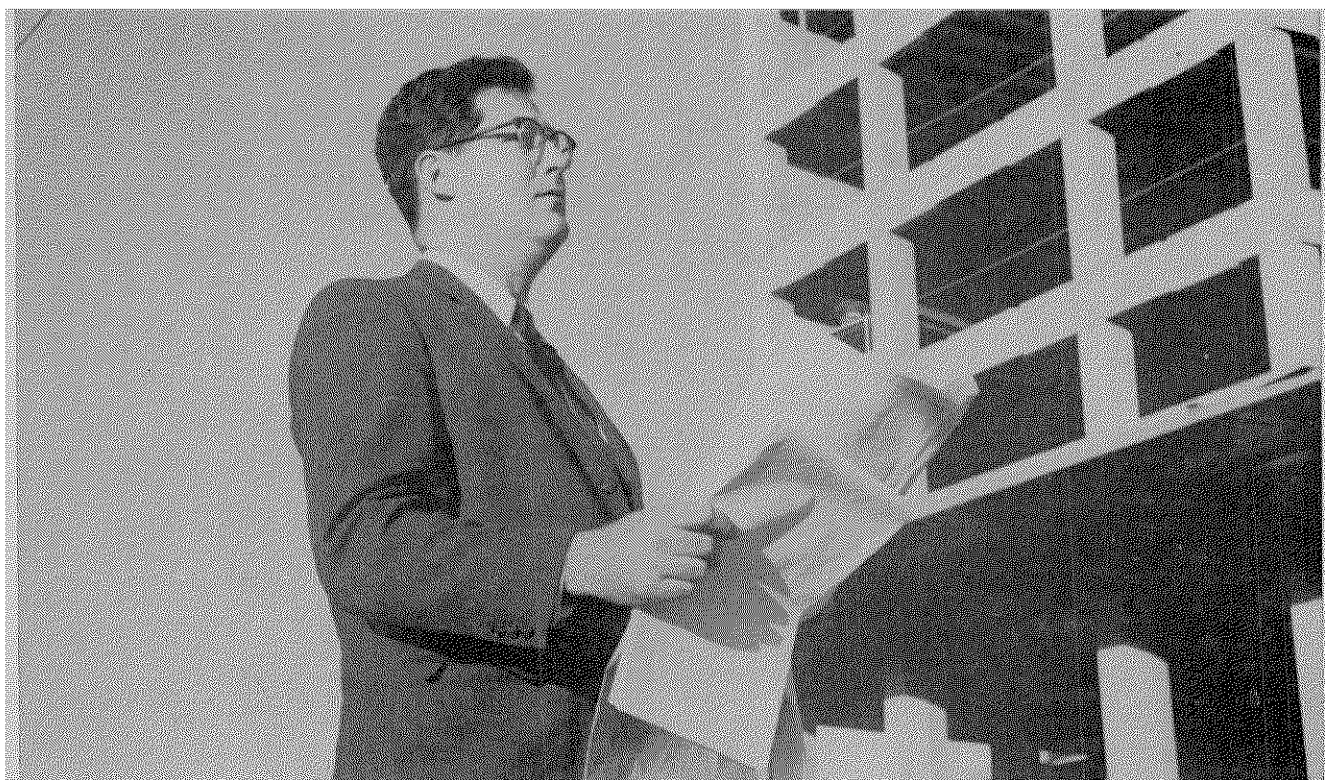
crete technology, newest construction methods and research and development. A typical day may find field men helping a ready-mixed concrete producer design a high-strength mix for a special project—or consulting with highway engineers on pavement designs for a modern expressway.

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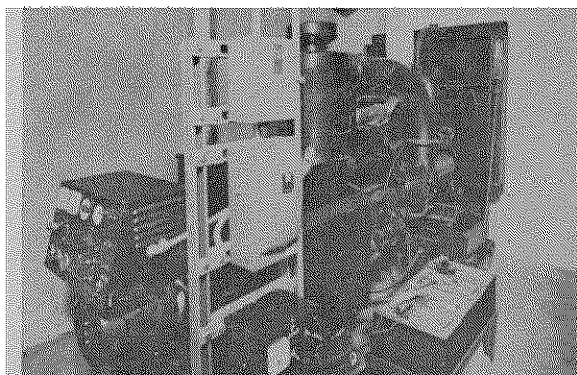
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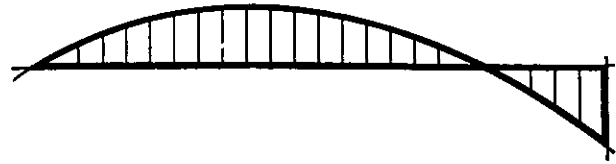
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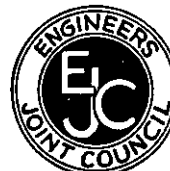
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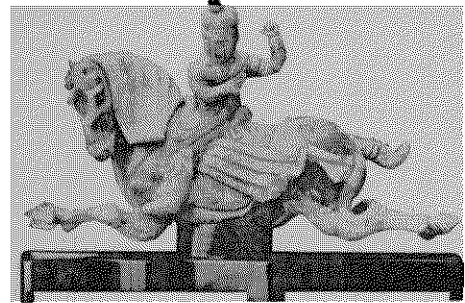


Are these the Ghost Riders in the sky?



LADIES OF THE COURT IN ANCIENT CHINA ARE ALWAYS THOUGHT OF AS BEING VERY DAINY AND DEMURE— BUT THEY MAY WELL HAVE RESEMBLED TODAY'S OUTDOOR- TYPE GIRL MORE THAN WE REALIZE. SOME OF THEIR RECREATION WENT FAR BEYOND THE QUIET DIGNITY OF SINGING FOLK SONGS BESIDE A POOL FILLED WITH LOTUS BLOSSOMS.

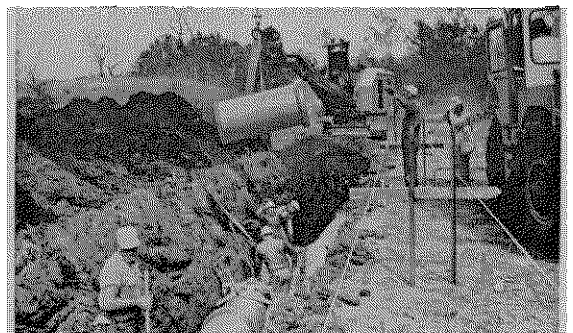
HOW DO WE KNOW THIS? BY THE PAINTED MORTUARY CLAY FIGURE OF A WOMAN PLAYING POLO.....



This figurine, from the T'ang Period (619-907 A.D.) of China, established the active participation by women in a sport that is played entirely by men today. Notice, too, that the Chinese ladies rode astride the horse, not sidesaddle as European and American ladies did up to 50 years ago. Riding a horse may have changed, but the clay in the figure remained the same throughout time.

Proof again of the amazing permanence of clay.

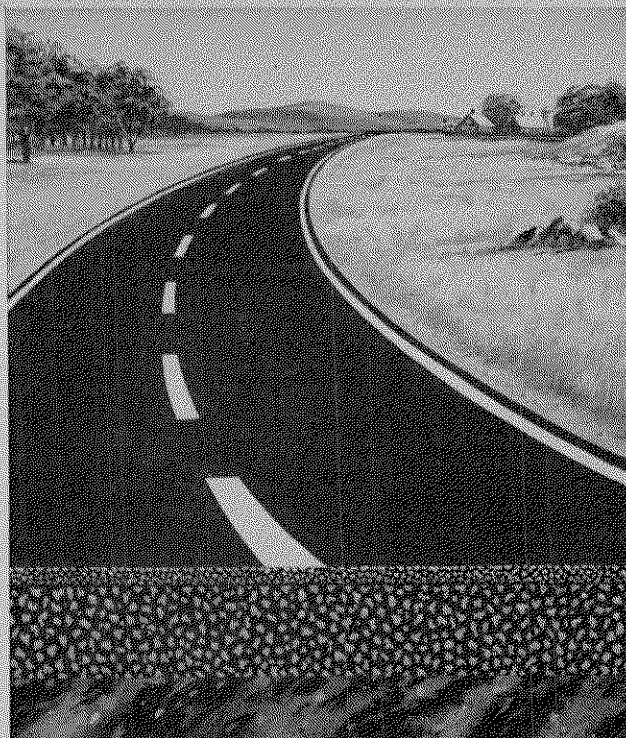
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THE LOUISIANA ENGINEER

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OCTOBER, 1965

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CUR COVER—

DISTINGUISHED SERVICE certificate is awarded to Dean Ben T. Bogard (left), of the Louisiana Polytechnic Institute at Ruston by President Leo W. Ruth, Jr. of the National Council of State Boards of Engineering Examiners at Miami, Florida. Award was for "outstanding service in maintaining high standards for promoting the profession of engineering, and particularly in recognition of his efforts in behalf of engineering registration." He has been active in the work of the National Council for many years as a member of the Louisiana State Board of Registration for Professional Engineers and Land Surveyors, and particularly in work of its committees on examinations and the accreditation of engineering curricula in cooperation with the Engineering Council of Professional Development. Dean Bogard is past chairman of the Louisiana State Board, and a past president of the Louisiana Engineering Society.

October, 1965

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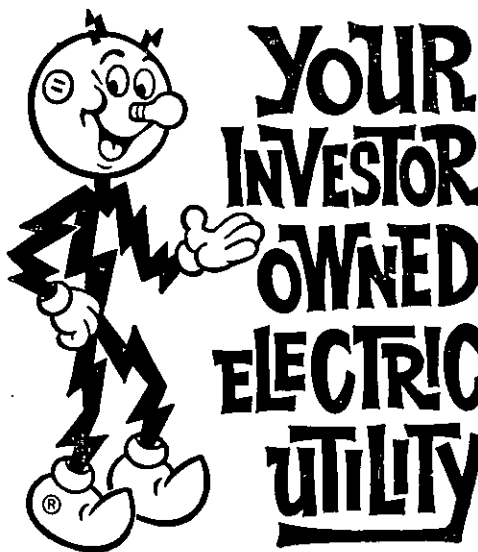
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NOTICE

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LOUISIANA ENGINEERING SOCIETY
Minutes of Meeting of the Board of Direction
Held at the Bentley Hotel, Alexandria on
Friday, August 6, 1965

The meeting was called to order by President Charles W. Stokes with Messrs. Duclos, McNamara, Odom, Bubenzer, Knight, Sandefor, Capozzoli, Sellers, Williams, Thigpen, Cade, Beckham present. Also present was Messrs. Earl M. Martin, Executive Secretary, Nash Ogden, John McCain, Al Williamson of Baton Rouge, and Ralph Caffery of Lafayette.

Minutes of the July Board Meeting were read. Mr. Sellers moved that the revised minutes be accepted, seconded by Mr. Bubenzer and carried.

The Auditor's report was read by the Executive Secretary. Copies of the Report to the Finance Committee and President were recommended for further study.

Mr. Louis Duclos, Finance Chairman, furnished copies of the proposed budget for the 1965-66 administration. President Stokes asked that the Executive Secretary make a month by month breakdown of monies to be spent for further consideration by the Finance Committee and the Board. Mr. Bubenzer made a motion that the budget be accepted as a guide, it was seconded by Mr. Sellers and carried.

President Stokes asked Mr. Martin to report on the State Office location. Mr. Martin explained the temporary set-up at 833 Howard Avenue, the Acme Life Building, in space provided by Walk-Haydel & Associates. After October 1, the office would move to the 7th floor, with its own lease for \$150.00/month. A copy of the lease is attached to these minutes. Reference was made to the committee appointed at the July meetings, authorizing to negotiate the lease.

President Stokes asked that the Board officially recognize and thank Mr. Walk for his co-operation in securing office space, and for donating office space for the next few months. Mr. Duclos made a motion that a letter be prepared and sent to Mr. Walk expressing the Board's feeling. It was seconded by Mr. Sandefor and carried.

President Stokes announced that copies of the letter of agreement between the L.E.S. and Mr. Martin were available on request. He announced that copies of the division of duties between the Secretary-Treasurer and the Executive Secretary, compiled by Messrs. Fernandez and Vogt, were available, and would be used as a guide for setting up the operation of the State Office.

President Stokes read a list of suggested memberships for L.E.S. and Executive Secretary, and asked the Board's recommendations. Mr. Odom moved that these memberships be deferred until the detailed budget was made, and final action be taken when the budget was approved. Mr. Duclos seconded the motion and carried. Mr. Odom added that the Finance Committee should offer the recommended membership to the Board.

President Stokes asked for proposals from interested Chapters to

held the 1966 Annual Meeting in their area. Dr. Capozzoli made a proposal on behalf of the Baton Rouge Chapter. Mr. Beckham made a proposal on behalf of the Shreveport Chapter. Mr. Cade indicated availability of the New Orleans Chapter, if so desired by the Board. Mr. McNamara moved that the annual meeting be a function of L.E.S. and therefore L.E.S. should underwrite the gains or losses incurred. Seconded by Col. J. T. Knight and passed.

A motion to hold the 1966 Annual Meeting in Baton Rouge was made by Mr. Odom, seconded by Dr. Capozzoli and carried.

President Stokes made copies listing the State Officers, State Committees, and Functional Sections available to the Board, and asked for suggestions for additional members, as well as ratification by the Board. Chapter presidents were asked to recommend Junior Members to serve on Committees and President Stokes asked them to complete their nominations for all committees as soon as possible.

President Stokes announced that he had formed a Constitution and By-Laws Committee, with John Fernandez as Chairman, members to be President-Elect Louis Duclos, Vice-President Ed McNamara, NSPE National Director Waldemar S. Nelson, to consider L.E.S. changes, as well as those to be considered for the NSPE Constitution & By-Laws. Mr. Duclos moved that the Board ratify these committees including additions, seconded by Mr. Bubenzer, and the motion carried. Copies are attached to these minutes.

President Stokes requested that H. Nash Ogden, the new Legislative Chairman, take over the preparation of a joint resolution of appreciation to Gov. McKeithen and the State Legislature for the enactment of Senate Bills #79, #80, and -81, with the cooperation of representatives of the Consulting Engineers Council.

President Stokes read portions of By-Law 5—designating the official title of Mr. Martin as Executive Secretary, and asked the Board's feeling about changing the title to "Executive Director." Mr. Martin was excused during the discussion. As there was some objection to change, the matter was dropped.

The President asked Mr. Martin to give the status report of the Ladies' Year Book. He indicated that except for the Baton Rouge Auxiliary, the book was ready for the printer, and that the printed book would be ready as soon as possible.

Following a question from Mr. Duclos, President Stokes asked for the Board's ideas as to what time was best to start Board meetings. It was suggested that the time be set at 7:00 P.M., since staying overnight was necessary in most cases, and the late start would allow more time for members' regular work.

Mr. Stokes stated the other items of business were such that they could be deferred, and inasmuch as time for the social gathering was approaching asked for a motion for adjournment. The meeting was adjourned on seconded motion and no objection.

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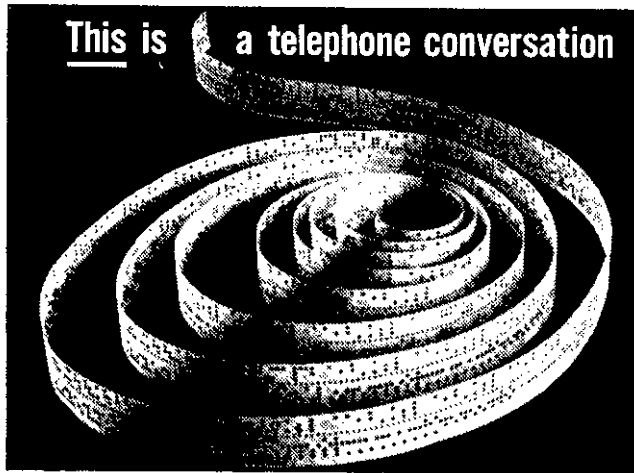
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LOUISIANA ENGINEERS HE

Most Orleanians through their lifetimes have experienced the passage of a number of hurricanes. But those who remember the hurricane of 1915 generally agree that, in terms of the damage wrought and wind intensity, Hurricane Betsy, which passed over New Orleans on September 9-10, was the worst of the storms.

New Orleans Public Service, supplying electric, gas and transit services to the city of New Orleans, sustained damage primarily to its electric distribution facilities, described as the most severe in the company's history. Despite this, in a little more than a week practically all customers had electric service. Gas service was generally normal throughout the storm except in flooded areas where gas was cut off as a safety precaution. Transit service, suspended as the hurricane winds struck the city, was back to normal several days later.

When it became apparent on Thursday, September 9, that the hurricane would strike New Orleans, the Company's previously developed Hurricane Procedure was activated, and those employees with specific assignments reported to their duty stations. Others were placed on standby call. Material, supplies and equipment were placed in readiness to minimize damage by the hurricane winds and for use after the storm passed. News releases to radio, television and newspapers about possible service interruptions and safety precautions for the general public were issued. Among extra precautions taken because of the severity of the approaching hurricane was Public Service's arrangement to secure the help of special crews and equipment from electric companies in Arkansas, Texas and the Carolina-Virginia area.

Hurricane winds up to 140 mph, coming in severe gusts, buffeted the city on the night of September 9-10 as the eye of Hurricane Betsy passed to the west of the city, knocking out about 90 per cent of the company's electric customers.

At dawn Friday morning, before the trailing winds of the hurricane had subsided, electric service crews, plus backup men, started the mammoth job of restoring service. In many areas hurricane-strewn debris had to be cleared before restoration work could begin. When the entire repair crew had been mobilized, 266 pieces of mobile equipment and their crews, including airplanes, helicopters and boats, carried out the restoration.

Work was first concentrated on restoring primary (13,800 volts) feeder lines, each of which furnishes electricity to an average of about 1,300 customers. Then work was concentrated on the painstaking and time-consuming job of reconnecting individual services, replacing damaged transformers and broken poles and correcting various defects in hundreds of scattered locations in the city. Service crews tackled this job on a street-by-street basis.

The company set a goal to have 95 per cent of the lines which were accessible for repair back in service by the following weekend and this goal was exceeded. By Tuesday, September 21, 11 days after Hurricane Betsy struck

Service customers who could take service had had their electric service restored.

On the night of the hurricane transit service was maintained until 8:30 p.m., by which time the mounting winds had blown so much debris onto the streets that it was necessary to suspend service. However, for several hours, with storm winds near hurricane strength, transit operators evacuated refugees in transit buses from flood-threatened areas. In the days that followed thousands of people were moved by buses which made hundreds of trips to emergency shelter areas. At dawn on Friday, as storm winds were abating, repair crews in the company's Transit Department began clearing the right-of-way of fallen trees, limbs and other debris. Later the same morning limited service was provided on some lines. By the following Tuesday normal transit service was being provided on all lines.

Gas Department people were able to maintain generally normal gas service throughout the storm period and the critical days after the storm. However, during the clean-up operations gas service was cut off temporarily in the flooded areas as a safety precaution. As the flood waters subsided and the evacuees returned to their homes, gas service was systematically turned on.

LP&L Drafts Out-of-State Crews

Hurricane Betsy slammed into the South Louisiana service area of Louisiana Power & Light Company the evening of September 9—causing more damage to a single utility company than perhaps any storm in history.

"Hurricane Betsy was—by far—the most vicious storm in the history of the Company," commented W. O. Turner, chairman of the board and chief executive officer of the Company.

"The devastation caused by Hurricane Betsy was widespread and extremely severe in Louisiana Power & Light Company's operations in South Louisiana," Turner said. "More than 1,300 heavy transmission structures were knocked down or seriously damaged by the high winds, and several river and bayou crossing towers were flattened or seriously damaged."

The Company's nearly 200,000 customers in the Greater New Orleans Area and other parts of Southeast Louisiana were knocked out of service by the hurricane, with the most severe damage occurring along Bayou Lafourche south of Lockport and in the River Parishes area from the Bonnet Carre Spillway through LaPlace and Litcher to Sorrento.

In addition to the 150 miles of transmission line down, along with numerous other breaks in these lines, literally hundreds of miles of electric distribution line were flattened or seriously damaged. Winds in the New Orleans area were clocked at 161 miles per hour, with gusts up to 175 miles per hour.

LP&L had 90 per cent of its customers back in serv-

RESTORE BETSY DAMAGE

ice within ten days, but several more days were being required to get them all back in service.

In restoring electric service, LP&L brought in every available crew from its North Louisiana operations as well as out-of-state crews from as far away as Pennsylvania, North Carolina, and Illinois. A total of more than 400 crews, comprising more than 2,000 men, have been working to restore service.

Along with about 500 ground vehicles, a dozen helicopters of various sizes have been utilized by LP&L in restoring service and rebuilding its hard-hit system.

Port Sustains Damages

The Port of New Orleans, buffeted Sept. 9-10 by Hurricane Betsy and back in partial operation mere hours after gale force winds died down, is rapidly completing all emergency repairs (Sept. 24) to wharves and shedding and is moving fast to replace specialized cargo-moving equipment destroyed in the disaster, Capt. James R. Ayers, Jr., president of the Board of Commissioners of the port, said today.

While general cargo could be moved across all of the port's wharves within 48 hours after the big blow, banana and grain terminals sustained more serious damage. Barge movements of grain through the port's public elevator were slowed down when three of the four marine unloaders were blown down by the 120-mile-per-hour winds. Rail movements of grain and limited barge unloading continue. Power failures at the public as well as at other private port area elevators were corrected within 48 hours after the winds diminished.

One of the port's two banana terminals remained in operation—the Erato Street Wharf used by United Fruit Co., and portable conveyors were put in use at the Desire St. terminal by Standard Fruit Co., to restore that facility where conveyors were damaged.

Shedded general cargo docks throughout the port sustained widespread damage when panels of metal sheeting, skylights and some overhead doors were blown out. Cargo losses were held to a minimum, however, by the height of wharf decks. Eye witnesses on ships and docks who remained at their posts during the disaster described scenes of an 11-foot surge of water, and more than a six-foot rise in the river level within an hour, at the height of the big blow.

The Public Bulk Terminal is now almost clear of flood waters. No movement of dry bulk materials at the facility will be possible for some time yet, until flood damage to rolling stock, scales and machinery can be repaired. Such services usually performed at the terminal are still available at private facilities in the port. The wind gauge at the bulk terminal recorded gusts of over 80 miles per hour for four hours and up to 124 miles an hour at the height of the hurricane, at approximately 11:40 p.m., Sept. 9.

Engineers and maintenance personnel, busy making

emergency and pushing for permanent repairs and replacements, indicated no accurate estimate of the total cost of damage to public and private port facilities can be made for some time, although all agree it will run into many millions of dollars.

Damage to shipping interests, likewise, cannot be accurately assessed. The rising waters and high winds caused some ships to break their mooring lines and move out of control in the river. A drydock, containing a freighter at the time, capsized and the freighter floated free. Derelict ships and barges engaged in considerable bumping of ships still moored, causing damage to both ships and docks.

Fleets of hundreds of barges broke loose and were strewn on river and canal banks, some sinking and others remaining high and dry on land after the water receded. Numerous small craft, including tugs and other floating equipment sank. A barge loaded with 600 tons of liquid chlorine sank in the river in the Port of Baton Rouge, some 100 miles upriver from New Orleans, and no movement through the area of barge tows or shipping was permitted by the Coast Guard until the barge could be located, approximately a week after the disaster.

Both the river and the Mississippi River-Gulf Outlet, the two deep draft waterways into the Port of New Orleans, have been pronounced clear to traffic and vessels are using both routes. Within 24 hours after the hurricane, both bar and river pilots resumed movement of ships in and out, port to sea. The Crescent River Port Pilots Association reported that in the 12-day period from 6 a.m., Sept. 11 to noon, Sept. 23, a total of 196 vessels were piloted in and 191 out, figures pronounced near normal.

In general, tonnage of cargo movements remained near normal throughout the first and second weeks immediately following the blow, and in a few cases were above normal. Rail, truck and barge movements are now proceeding with little or no delays. Pilotage, tug, stevedoring, bunkering and all other shipping services are now back in full operation.

The worst blow struck by Betsy, was to the persons who live in and near New Orleans. Hardly a single residence in the metropolitan area of approximately one million population escaped at least minor damage. Some 85 lost their lives or are still missing. At this writing, two weeks after the blow, over 5,000 refugees are still living in shelters. Several small residential areas still have some flood waters in the streets, although Civil Defense officials are now allowing the last families in and south of New Orleans to return to their homes to begin the huge task of cleanup and restoration. Many have no homes to return to at all. Emergency loan programs for restoring homes and small businesses have been established, and those who are destitute are being cared for with funds administered by the Red Cross and various new funds being raised by charitable groups and institutions.

(Continued on Page 11)

(See Pictures on Pages 14-15)

SEFOR PROJECT EXPLAINED

From a paper delivered by K. Kikido, General Electric Co., San Jose, Calif., at the annual meeting of LES in New Orleans July 8-9.

The Southwest Experimental Fast Oxide Reactor Program, known as SEFOR, is an internationally sponsored development of a new type of nuclear reactors for use in nuclear power stations of the 1970's. These plants, which will generate 1,000,000 kw or more, are fast breeder reactors designed to operate with plutonium-dioxide and uranium-dioxide fuel.

Its main advantage will be reduced costs of power generation and the reactor's unique ability to produce more nuclear fuel than it consumes. This will result in part from the conversion of spent uranium fuel into new usable plutonium fuel.

The \$25,000,000 SEFOR program consists of the design and construction of the SEFOR facility at Fayetteville, Arkansas, and an extended Research and Development program. This program will be carried out both prior to reactor construction and during the first three years of operation. It will provide vital engineering information and experience for commercial applications for this type of reactor.

On the basis of the favorable economics of thermal nuclear reactors currently in operation, it has been predicted that within the next several decades, nuclear power will begin to generate a significant fraction of the nation's electricity. It is estimated that by 1980, approximately 10% of the electricity will be generated from nuclear energy.

At the present time, the major portion of the nuclear power is generated with thermal reactors cooled with water; however, the 1962 AEC Report to the President on Civilian Nuclear Power stresses the long range importance of fast breeder reactors in the nation's energy requirements. With their unique breeding capability fast reactors can significantly increase the nation's fuel resources.

The fuel conservation factor is not the only reason for the current attitude in the development of the fast reactor concept. To meet future power demands, an eco-

nomically attractive fast reactor must be developed. General Electric has performed studies on a concept of the fast ceramic reactor as part of the AEC's program.

Certain nuclear characteristics of the plutonium-uranium-dioxide fast reactor are significantly different from those of most present fast reactors which utilize fuel in metallic form. In particular, a large volume core and a high internal breeding capability permit more complete utilization of the ceramic fuel. This leads to low fuel cost. Also, the studies show that plutonium-uranium-dioxide fuel has an appreciable negative power coefficient, (that is, the ability to shut itself down) due to the Doppler effect. The Doppler effect comes into play during a sudden increase of temperature in the nuclear fuel. The U-238 in the fuel absorbs more neutrons when the temperature goes up, thus acting as an inherent neutron blotter if the fuel ever becomes overheated. This means that the reactor will shut itself down.

This Doppler power coefficient appears to be more dependable and quicker acting than the negative coefficient based upon mechanical movement of fuel due to the thermal expansion upon which most present fast reactor concepts are dependent. SEFOR will demonstrate the operating characteristics of large fast breeder reactors controlled by the Doppler effect.

The design and construction of the SEFOR reactor and necessary facilities, estimated to cost approximately \$12,350,000, are being funded by Southwest Atomic Energy Associates (SAEA), the West German Federal Government through its Karlsruhe Laboratory, the European Atomic Energy Community (Euratom) and the General Electric Company. The Research and Development work, including the operating program, is expected to cost approximately \$12,700,000 and is being financed by the U.S. Atomic Energy Commission.

General Electric's Advanced Products Operation in San Jose, California, will design and construct the facility and will have overall responsibility for conducting research and development. Special test facilities for the preoperational SEFOR program have already been established by GE at San Jose. Both design and development have been under way since Spring of 1964.

At the present time, the plant engineering and the

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associated research and development activities are in full progress. A contract has been let for the construction of the reactor containment vessel and for the sodium heat exchangers. Site preparation, (grading, construction of roads, installation of a 69KV line and substation, etc.) is essentially complete. Quotes from potential vendors have been received on major items of plant equipment. Plant layout and structural design work by General Electric and Sargent & Lundy, the Architect-Engineer, are in an advanced stage and all the plant equipment has been sized.

A large number of calculations have also been performed to examine the conditions which would exist in the reactor under extreme test conditions. To analyze the performance of the core and coolant systems, computer programs, both digital and analog, have been developed which simulate the complete system, including fuel, piping, heat exchangers and pumps.

The preliminary safeguards report and the application for a construction permit have been submitted to the Atomic Energy Commission. The public hearing for the application was held in Fayetteville, Arkansas, during the week of June 29-July 2, 1965. It is anticipated that the construction permit will be granted shortly. It is expected that the facility will be complete and the initial test started about September 1967.

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(Continued from Page 9)

Following a visit and tour of the disaster area immediately after the hurricane by President Lyndon B. Johnson, he declared this a major disaster area, and teams of Federal agency workers were sent in to survey damage, render direct and indirect aid, and generally to help restore the populace and public facilities to normalcy.

The Federal Maritime Administration, headed by Nicholas Johnson, the Maritime administrator, rushed men into the area to assist in restoration of the port's facilities and movement of commerce. Johnson, who on several days accompanied the team in the port area, pronounced the port's recovery "a near miracle" and attributed it to excellent planning and preparation as well as fine teamwork by the port commission and all other port, government and civic interests.

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Meetings

Field Notes By Allen Johnson

The 1966 Annual Meeting of the Louisiana Engineering Society will be held in Baton Rouge July 22-23, it was announced by President Charles W. Stokes.

Executive Secretary Earl Martin, Jr. reported that the Board of Direction of L.E.S. has accepted a recommendation from the Constitution & By-Laws Committee that a fourth general meeting of the Society be inaugurated this administrative year. The meeting will be called a Winter Meeting and will be similar in scope to the Alexandria State Planning Conference. The New Orleans Chapter will be the host for the inaugural Winter Meeting, scheduled for Jan. 14 and 15, 1966.

Warren G. Moses recently announced his withdrawal from the firm of deLaureal & Moses, consulting engineers. Mr. Moses will continue the practice of consulting engineering at his office at 929 Howard Ave., New Orleans. His temporary office has been established at 707 Masonic Temple Bldg.

Maj. Gen. R. T. Sessums, United States Air Force Reserve and vice-president of Freeport Sulphur Company, has been named to a three-year term with the board of visitors of the Air Force University at Maxwell Air Force Base, Montgomery, Alabama.

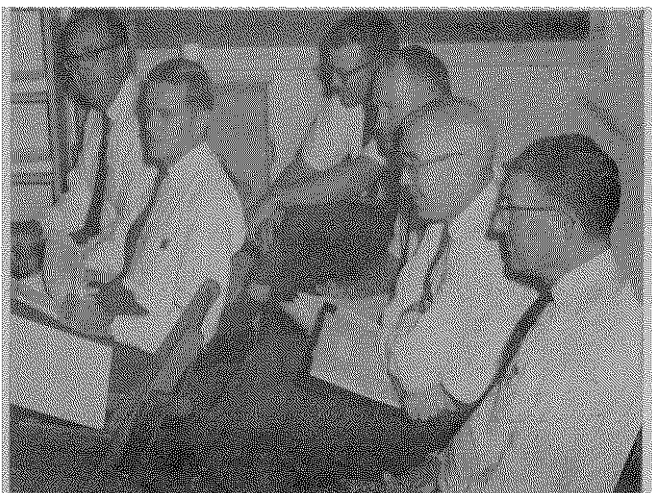
Sessums is also a past-president of the Louisiana Engineering Society.



Sandra Soileau, (above), is secretary to Earl M. Martin in the newly established offices of the Louisiana Engineering Society at 833 Howard Ave., New Orleans.



Shown at the first meeting of LES in the new executive offices, are (from left) Dan Cresap, Alexandria; John P. Fernandez, national director, New Orleans; Waldemar S. Nelson, national director, New Orleans; Louis Duclos, vice-president, Baton Rouge; Charles W. Stokes, president, Lake Charles; Edward J. McNamara, 2nd vice-president, New Orleans; and John F. Vogt Jr., secretary-treasurer, New Orleans.



Attending the Louisiana Engineering Society's meeting October 7 are (from left) Malcolm Hurstel, New Orleans; M. J. Gade, New Orleans; Eugene Sellers, Lafayette; Daniel D. Sandefur, Alexandria; J. J. Thigpen, Monroe; and Marion Bubenzer, Shreveport.

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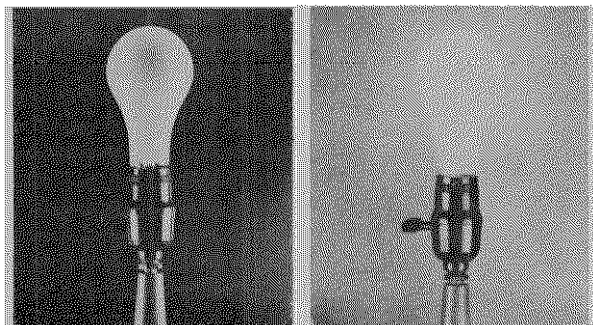
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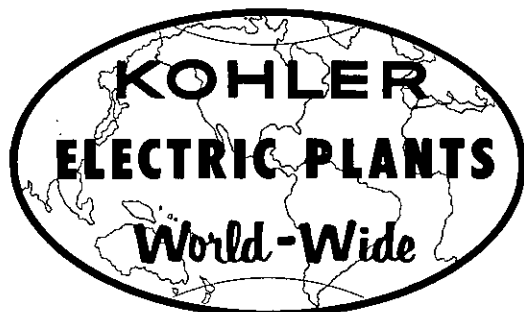
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NCSBEE Adopts Corporate Clause

The National Council of State Boards of Engineering Examiners approved a corporate practice section of the Model Law at its 44th annual meeting in Miami Beach, Florida.

The approved language adopted was developed by its Model Law Revision Committee following a hearing last March in Washington attended by NSPE and other national engineering societies.

It provides that engineers may practice for others through the corporate form, provided that one or more officers of the corporation is a registered engineer, and is designated as being responsible for the engineering activities and engineering decisions of the corporation; that all personnel of the corporation who act in its behalf as engineers are registered in the state in which the project is located; and that the corporation has been issued a certificate of authorization by the state registration board. The authorization certificate is not a license to practice, but requires the corporation to provide the registration board such information as names of officers and members of the board of directors and names of registered engineers who will be in responsible charge of engineering work of the corporation. A related change authorizes the registration board to revoke or suspend the certificate of authorization if the officers of directors of the corporation commit any act or have been guilty of any conduct which would authorize a revocation or suspension of the certificate of a registrant" (registered engineer).

An amendment adopted by the Council eliminated the direct reference authorizing corporations to practice engineering, but added the language, ". . . such corporation shall be authorized to contract for and collect fees for furnishing engineering services."

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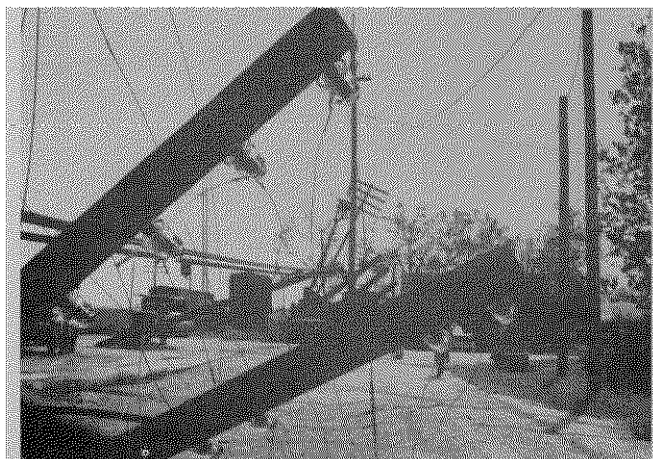
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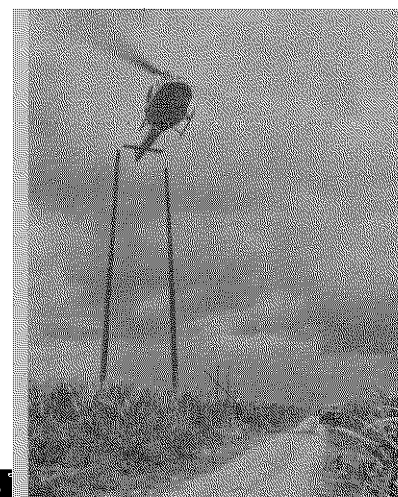
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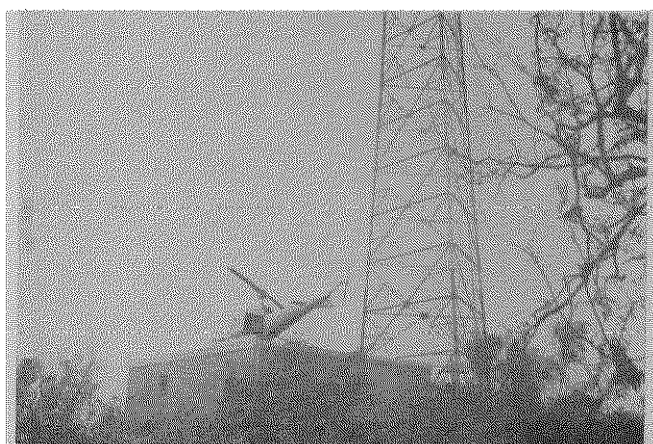
Power lines downed by Hurricane Betsy are shown in Goodhope, La. They were a common and dangerous sight in many areas.



Helicopters and ground crews both were used by Louisiana Power & Light Co. to repair power line poles damaged by high winds.



Welcoming telephone repair trucks which were airlifted to New Orleans is H. H. Hudson, Division Commercial Manager, New Orleans.



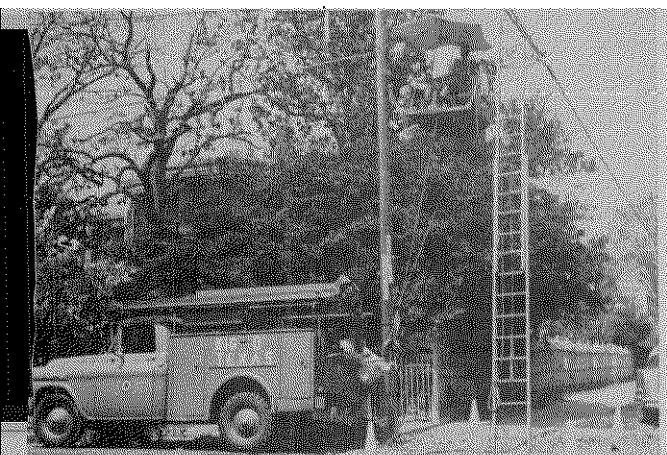
The only way to reach this Telephone Exchange building in Buras, La., after Hurricane Betsy hit the town was by helicopter.



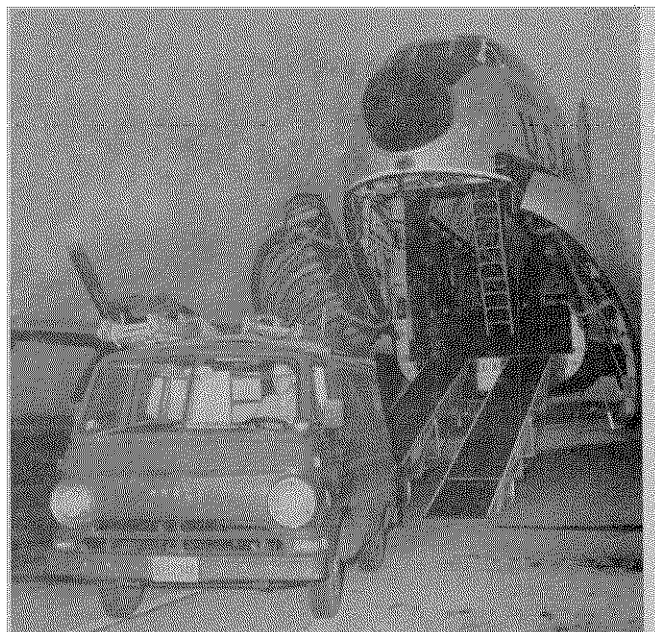
Louisiana Power and Light employees worked hard and long to restore service to many in the state who were without power.

KES

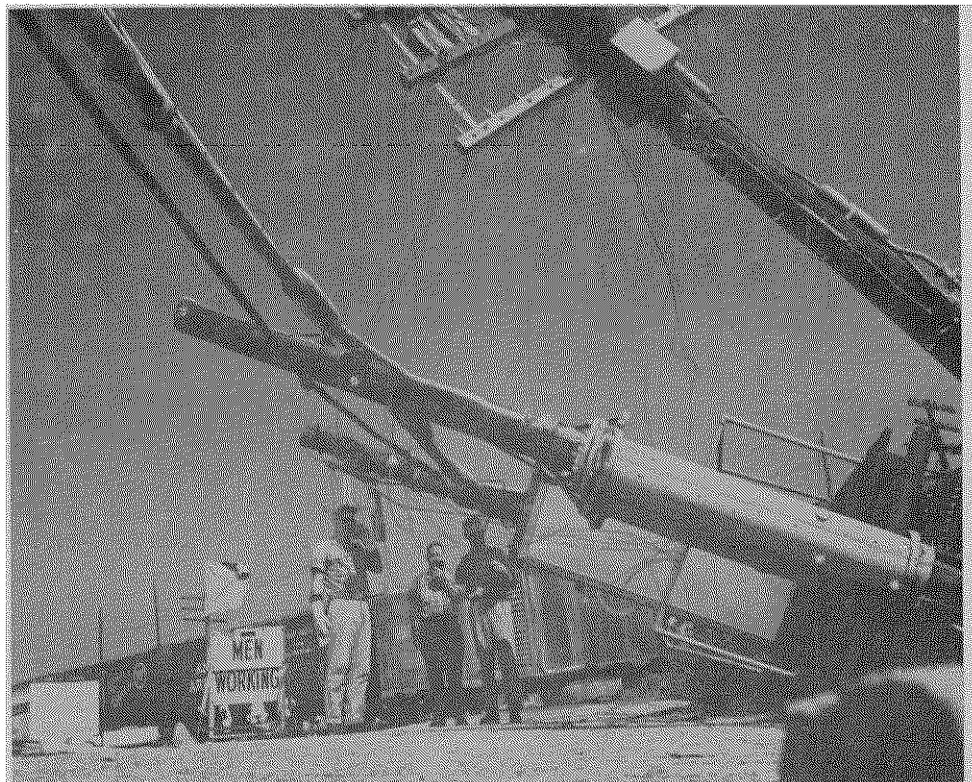
LOUISIANA COAST



The "Big D" Texas" restoration crew for Southern Bell Telephone and Telegraph Co. is shown repairing lines in the uptown section of New Orleans.



One of the many repair trucks airlifted to New Orleans for restoration purposes is from South Carolina.



Telephone repair crews worked in many dangerous areas where lines had snapped such as these in a New Orleans railroad yard.

How Does LES-NSPE Serve Engineers?

(The following was prepared by J. R. Whipple, editor of the Baton Rouge LES Newsletter, and is an excellent example of how to inform the engineering profession of the benefits of LES-NSPE membership.—Ed. note).

Before affiliation with the National Society of Professional Engineers the LES served Engineers in a general way. Activities concentrated on areas of general or career interest. Promotion and passage of the revised Engineer's Law of 1951 was probably the most outstanding result.

Since affiliation with NSPE, these areas of interest have been made more distinct. Technical meetings and technical papers have been handled almost exclusively by an expanding list of technical engineering societies. The LES-NSPE has concentrated heavily on improving the professional (or if you prefer, the career) aspects of engineering training, qualification, and work. This includes attention to laws and legislation, ethics, relations with government, etc.

In recent years both nationally in NSPE and locally in LES-NSPE, sub-groups have been formed for several different varieties of occupational status of Engineers.

These are called functional sections. Locally and in the state, a functional section for Professional Engineers in Private Practice (PEPP), or Consulting Engineers, has been active for 2 or 3 years. It has performed some important work on problems common to Private Practice Engineers of any technical specialty and on publishing a "Manual of Practice" which includes a fee schedule. Manuals of Practice can be purchased from Mr. Leo Odom. For a time this section was called Consulting Engineers Section. Some of the members preferred to conform to nationwide nomenclature.

Other functional sections are planned or being organized for "Engineers in Government," "Engineers in Industry," and "Engineers in Education." Presumably other sections could be organized to cover other occupational groups such as "Engineers in Contracting" or "Engineers in Sales." We hope to have articles on the types of functional section in future Newsletters.

LES-NSPE serves the occupational or professional interests of the Engineer with sub-groupings according to employment status but leaves technical matters largely to the technical engineering societies. Another group



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named the "Consulting Engineer's Council," which has sections in Louisiana serves a purpose similar to the PEPP functional section. There is some overlap in work done, and occasionally a feeling of competition. For the most part the two organizations work together and have partially over-lapping membership. Multiple organizations and over-lapping work have long been a problem in engineering activities. The developments outlined here represent progress out of confusion and have resulted in a great deal of constructive work.

Not all of us know that membership in the NSPE is in addition to and related to that in the LES and that it is worthwhile. Several publications of national interest are available such as the "American Engineer" magazine, "The Legislative Bulletin" published monthly, and "Private Practice News" published monthly. Several special publications are available. For private practice Engineers, these include "Manuals of Practice," "General Condition Forms," "Client Contract Forms," etc.

ASME TO MEET

The American Society of Mechanical Engineers will hold its 1965 Winter Annual Meeting November 7-11 at the Sherman Hotel, Chicago, Illinois.

Addressing the conference will be such speakers as Henry N. Muller, President, ASME; R. G. Folsom, President, Rensselaer Polytechnic Institute; H. L. Dryden, Deputy Administrator, NASA, and J. E. Keck, President, United Air Lines. Highlighting the conference will be the presentation of the Elmer A. Sperry Award to five leading engineers in the Boeing Company.

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"The former partners of Design Engineers announce that the partnership was dissolved effective July 27, 1965. William F. King, George A. Isaac, Jr., and Warrington B. Speer will continue the practice of consulting engineering under the name of Design Engineers, at 311 Board of Trade Annex Bldg., Telephone: JA 5-0224. James M. Todd will continue the practice of consulting engineering under the name of James M. Todd & Associates, 610 Poydras St. — Room 405, Telephone: 522-0179."

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State Board Exam Offered

The Louisiana State Board of Registration for Professional Engineers and Land Surveyors will offer to seniors in engineering scheduled for graduation in 1966, the opportunity to take the uniform Engineer-in-Training Examination in connection with their application for registration as Professional Engineers. This examination is being offered to applicants for registration in Louisiana and is being given simultaneously by most State Boards of Engineering Examiners. The results of the Louisiana examination will be recognized by the State Boards which have such a requirement.

The date for this examination has been set for Saturday December 4, 1965. It will be given in two parts. Part A will cover fundamental subjects such as mathematics, chemistry, thermodynamics, statics and fluid mechanics, and will be given from 8:00 A.M. to 12:00 Noon. Part B will cover engineering economy, physics, dynamics, electrical theory, mechanics of materials and economic analysis, and will be given from 1:00 P.M. to 5:00 P.M. Several problems on each subject will be offered, and the applicant will select problems from each group. Paper will be furnished by the Board. Textbooks, reference books, etc. may be used. No personal notes or published solutions of problems or other examinations are allowed.

The examination in Louisiana will be given at Louisiana State University, University of Southwestern Louisiana, Louisiana Polytechnic Institute, Tulane University and Southern University. The examination will be administered by Dr. Jesse Coates, Head of the Department

of Chemical Engineering at L.S.U.; Dr. F. W. zurBurg, Director of Research at U.S.L.; Dean B. T. Bogard, School of Engineering, Louisiana Tech.; Dr. F. W. Macdonald, Civil Engineering Department, Tulane University; and Dean H. L. Thurman of Southern University. Those who desire to take the examination should notify, by November 15, 1965, the person named above at the University where they wish to be examined. This deadline is necessary in order to allow the Board sufficient time in which to prepare copies of the examination by the scheduled date.

Those who desire to take the examination will be required to pay a fee of \$10.00 at the time the application is submitted. Those who pass the examination will receive a credit of \$10.00 applicable toward the registration fee of \$25.00, should they apply at a later date.

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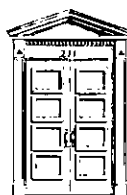
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LES Presents Case On State Pay Plan

At its October 4, 1965 meeting, the Board of Direction of the Louisiana Engineering Society adopted the following resolution recommending salary scale adjustments of Engineers in State Government:

WHEREAS the Louisiana Engineering Society is the Professional Society representing the engineers, including those working in state government, who are concerned with the public welfare and growth of our state, and

WHEREAS we express our concern over the loss of

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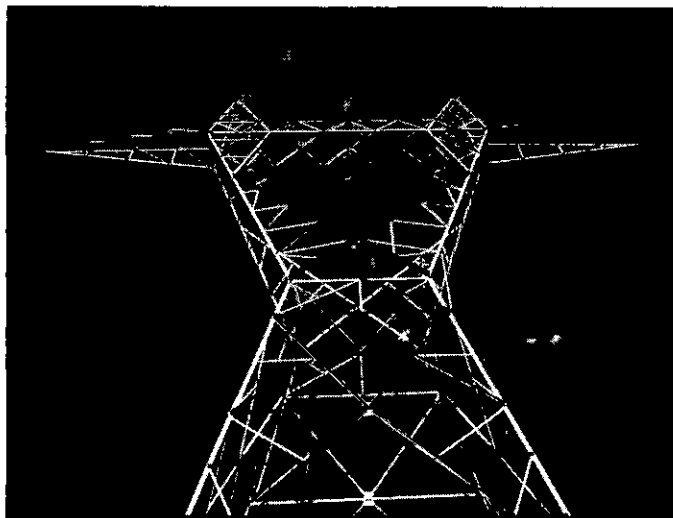
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State employed engineers through retirement and resignations of younger engineers seeking employment with a more equitable salary, and

WHEREAS we recognize the need to obtain and retain a capable staff of engineers to develop the highways, to develop flood and hurricane protection systems, to protect the purity of the State's water supply, to construct and maintain harbor facilities, to provide constant liaison with Federal engineers to coordinate and provide data in determining when, where and how federal funds are spent in Louisiana, and

WHEREAS we express our belief that an increase in the salaries of Professional Engineers in State Government is urgently needed to provide an equitable salary structure in keeping with the present economic situation, now

THEREFORE BE IT RESOLVED that the Louisiana Engineering Society recommends that the basis for this salary adjustment should be the adoption of a salary scale **Equal to** the Federal Scale for comparable positions as of August 1965, and that the salary range for the beginning State Engineer should be the equivalent of the salary range of a G.S.7 in Federal Civil Service; and that the salary range of a Chief Engineer in Louisiana should be the same as that of a Grade G.S.18 in Federal Civil Service; and that all grades for engineers in state service between these two named positions should be adjusted in accordance with their equivalent Federal Grades; and does hereby advise the Louisiana Civil Service Commission and the Louisiana Civil Service Department of this resolution.

Adopted by the Board of Direction of the Louisiana Engineering Society by unanimous vote of those present and representing a quorum, at New Orleans, Louisiana, October 7, 1965.

The resolution recommended by the Professional Engineers in Government Section of the Society was forwarded to the Civil Service Commission and Civil Service Director W. W. McDougall.

On October 26, a special LES committee headed by Leo M. Odom and including Hu B. Myers and A. D. Jackson appeared before a public hearing in Baton Rouge on the subject of pay increases for state employees.

Mr. Odom read the resolution for LES, in behalf of professional engineers in the State of Louisiana.

The Civil Service Commission, after hearing the presentation and comments by State Rep. Danny Ray Moore of Homer and Morley Hudson, Caddo Parish Republican, took the subject of pay increases under advisement.

State officials said they favor a proposed 1966 pay hike of nearly \$17 million for some 37,000 civil service workers because of job competition with private industry.

Several described their difficulty in attracting college graduates for state service.

The Louisiana Civil Service Commission took under

(Continued on Page 26)

Auxiliary Notes

By
Mrs. Jerry L. Dickson

Three presidents of an organization from the same family must be some kind of a record among the Women's Clubs of New Orleans. Such is the case this year when the attractive and vivacious Mrs. Thomas A. Fromherz was elected to the Presidency of the Woman's Auxiliary to the New Orleans Chapter of the Louisiana Engineering Society. She is following in the footsteps of her mother-in-law, Mrs. Alvin M. Fromherz, and her sister-in-law, Mrs. Frank C. Fromherz. As Carroll says, "It's a high goal to shoot toward"—because the senior Mrs. Fromherz is also a Charter Member and was one of the mainstays of the organization during its infancy. Founded in 1932, the Auxiliary has grown from an original group of 22 engineer's wives to its present complement of some 300 active members.

Carroll's goals are set for her. During the summer months a complete reorganization of the Auxiliaries in the State has been discussed and planned, and the resultant Ladies Advisory Committee of the L. E. S. will serve as a State Board for the Auxiliaries. Formed at the request of the Louisiana Engineering Society, the Ladies Advisory Committee will serve as liaison between the men's organization and the several Auxiliaries, as a focal point of information and assistance at the State level. Each of the five Auxiliaries in Louisiana will be seated on the Ladies Advisory Committee by one representative, who will probably be the President; and Carroll's labors of reorganization over the past four months will come to fruition this fall when the various Auxiliaries ratify the proposed Rules of Procedures at their opening meetings. At the organization's meeting, held in conjunction with the Annual Convention of the L. E. S. Mrs. Fromherz was elected to serve as the first

Chairman of the Ladies Advisory Committee. It is anticipated that Mrs. Jerry Marsh of Alexandria will serve as Vice-Chairman, and Mrs. William Mayer of Shreveport will serve as Secretary. The President or Representative from both Lake Charles and Lafayette will hold the remaining two seats on the Ladies Advisory Committee.

Aside from her State duties, Mrs. Fromherz feels her first responsibility is to further the aims in philanthropy for which the New Orleans Auxiliary was founded. Just recently, a check for \$1,000.00 was presented to Tulane University to be added to the Auxiliary's Fellowship Endowment Fund for the benefit of graduate students in engineering. This year, the Ford Foundation matched 50% of these funds, and the opening of the school year will see some \$13,500.00 as the total Auxiliary endowment—it is the interest which accrues from this sum which is given to the deserving graduate engineering student. Two more philanthropies are sponsored by the Auxiliary: The Selina Elizabeth Bres Gregory Founder's Scholarship is an annual gift of \$500.00 to a deserving undergraduate engineer student, and the Student Loan Fund is available for needy students who enjoy its use, interest free for one year, and who may repay the loan two years after receiving the degree for which the sum was borrowed.

Aside from her duties with the New Orleans Auxiliary, Mrs. Fromherz is an active member of the Junior League, where her volunteer work centers around the Junior

(Continued on Page 23)

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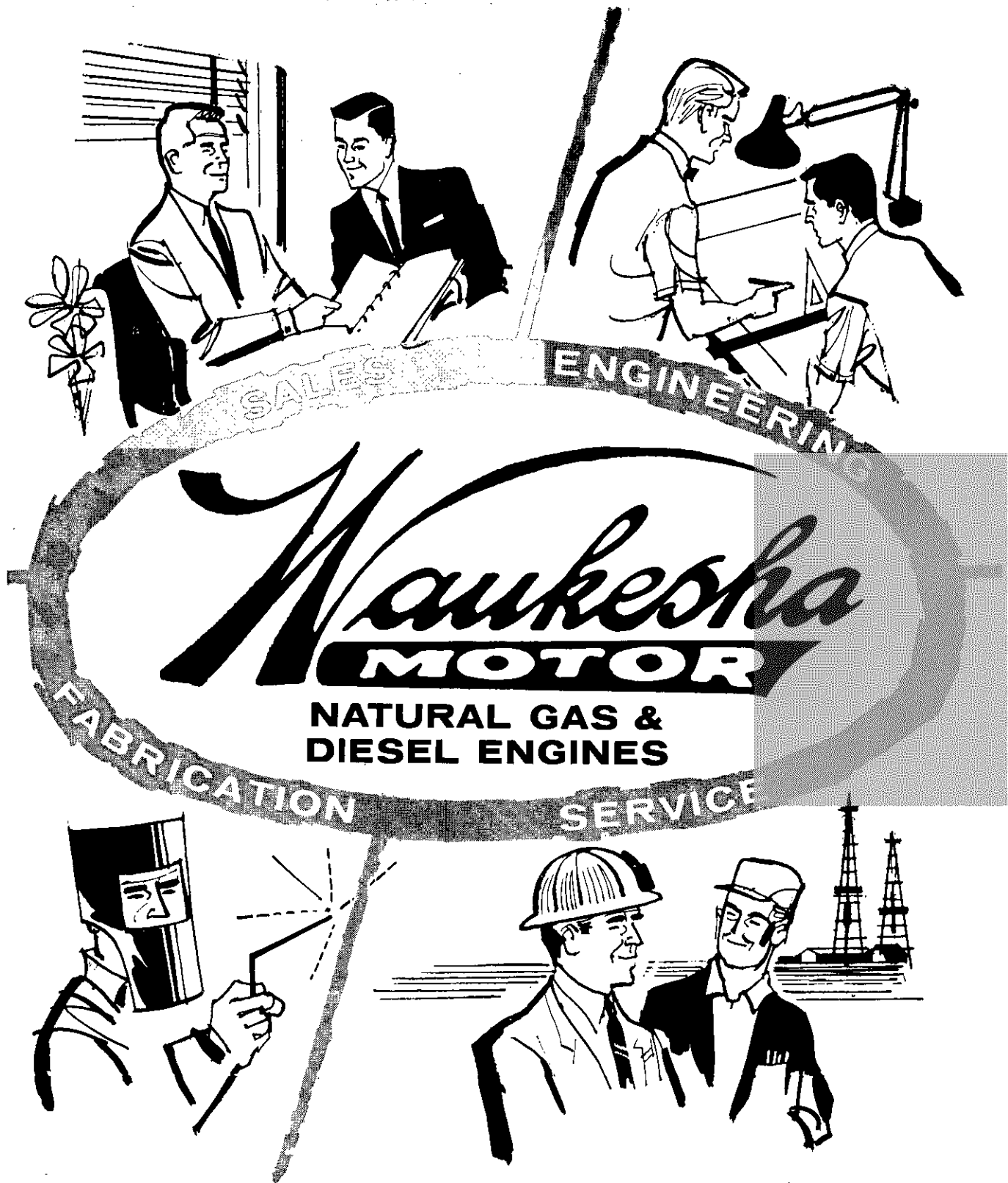
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NSPE Notes

Sen. Everett Dirksen (R. Ill.) has sponsored a bill backed by the American Bar Association and the American Patent Law Association to establish a government-wide policy regarding ownership of inventions arising from government-financed research.

The Dirksen bill (S. 2326) takes the same "flexible" approach as the pending McClellan bill (described in the June, 1965 Legislative Bulletin). It would give *primary ownership rights to the contractor rather than to the government.*

The Bar-backed proposal differs from the McClellan bill, however, in several material respects. It discards the McClellan bill provision requiring government ownership of all government-financed inventions in "fields which directly concern the public health, welfare or safety." Instead, *in situations where private ownership is deemed inconsistent with the public interest, it provides, in effect, for dedication of the invention rights to the public.*

It also provides for compulsory licensing of privately owned inventions where the developer without justifiable excuse fails to exploit the invention within three years after it is patented.

NSPE TESTIFIES ON FEDERAL PAY BILL

NSPE has gone to bat for increased pay for engineers in government in a statement to the Senate Post Office and Civil Service Committee.

Dean Donald E. Marlowe, Chairman of the Society's Legislative and Government Affairs Committee told the committee that Bureau of Labor Statistics figures show a considerable gap at present between salaries of federal engineers and those of engineers in the private economy, despite the comparability principle written into the Federal Salary Reform Act of 1962. He submitted data showing that the federal pay raise proposed by the Administration would improve this situation only slightly, and urged adoption of a more liberal measure approved by the House Post Office and Civil Service Committee.

The NSPE spokesman also recommended changes in existing federal law to empower the President to adjust salaries of categories of federal employees whenever recruitment or retention of persons in those categories was significantly handicapped due to inadequate salaries. Under the NSPE proposal, such adjustments could be made when when a gap of 10% or more existed between federal and private rates for a particular category. This would apply to most government engineers under present wage levels.

EJC Notes

Employers were urged today to examine carefully the military status of highly trained employees such as engineers and scientists. This warning came from the Engineering Manpower Commission of Engineers Joint Council, and the Scientific Manpower Commission. The current Vietnam crisis has already tightened up the regulations affecting both Selective Service registrants and men who have military reserve obligations. Recalling the Berlin and Korean crises, the Commissions warned that many employers found substantial numbers of engineers

and scientists suddenly withdrawing from their organizations to fulfill military obligations of which the employers had not been entirely aware. In many cases, civilian engineers and scientists perform essential tasks which are critical to the military effort. Any sudden and unplanned drain of these people could have a detrimental effect on the nation as a whole. This possibility can be minimized if employers keep the military status of their employees under careful review and, where the nature of their civilian work is critical, take appropriate action to avoid sudden and unplanned dislocations.

To assist employers in this process, the Engineering and Scientific Manpower Commissions have developed an inventory procedure which is incorporated in a booklet entitled *Employer's Inventory of Critical Manpower*. The booklet, a completely updated and expanded edition of one which was used with great success in 1961 and 1962, may be ordered in advance from either Commission at \$3.00 per copy prepaid.

(Continued from Page 21)

League Thrift Shop. It was natural, therefore, that she assisted in the collection and distribution of clothing donations needed in Betsy's aftermath. Mrs. Fromherz is also active on the Junior Symphony Committee, and will soon join many of her friends in collecting for the United Fund. Along with Church work, another important project for the distaff side of the Thomas Fromherz family is in connection with the Louise S. McGehee School, which Cindy and Lesley, the two Fromherz children attend; she assists at the Reception Desk and works with the Garden District Tours which are sponsored by the School's Mothers Club.

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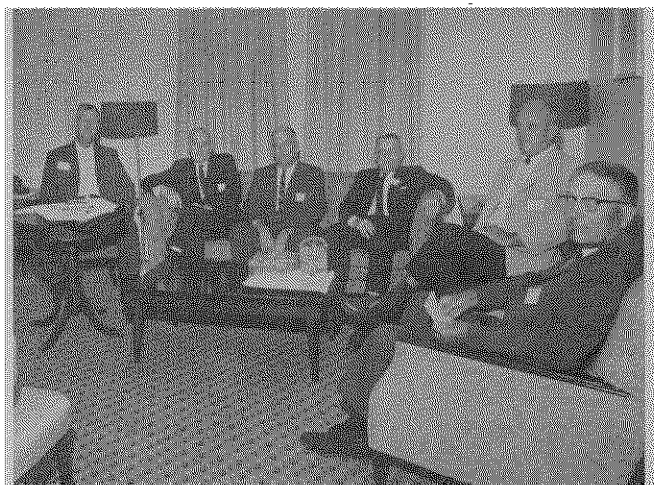
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The Ladies State Advisory Committee is shown meeting at the State Planning Conference in Alexandria. At the head of the table are Mrs. O. E. Barron Jr., New Orleans (left rear), and Mrs. Jerry Marsh, president of the Alexandria chapter (right rear).



Members of the Honors and Awards committee (left to right), Col. John T. Knight Jr., New Orleans; Marshall Ewing, Alexandria; Edward J. McNamara, New Orleans; O. E. Barron, New Orleans; Albert Ropscha, Lafayette; and Marion T. Bubbenzer, Alexandria, met at the State Planning Conference.



Attending the meeting of the Ethics and Professional Conduct Committee in Alexandria, are (left to right) Richard Smith, Warren Moses, Nash Ogden, and Lou Capozzoli.

Welcome to Professional Status

The following professional engineers were granted registration October 12, 1965 by The Louisiana State Board of Registration for Professional Engineers and Land Surveyors:

- Adam, Donald E.**, 5054 Abella Dr., Baton Rouge, La.
Alexander, Bobby L., 163 Central Ave., Long Beach, Miss.
Arnold, Paul R., 109 McVay St., Lake Charles, La.
Barns, Lewis W., 3510 Linkwood, Houston, Texas
Betzner, Paul L., 664 Westbrook Dr., Baton Rouge, La.
Brasher, John D., P. O. Box 2834, Louisville Sta., Monroe, La.
Bringol, Charles R., 2012 W. Irving Blvd. Apt. 203, Irving, Texas
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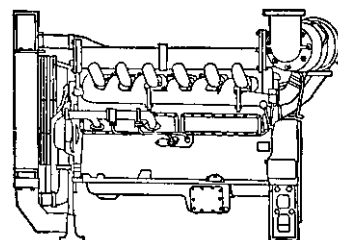
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LES Presents Case

(Continued from Page 20)

study the plan it is expected to approve and send to Gov. John McKeithen for his decision.

Secretary of State Wade O. Martin and legislative auditor J. B. Lancaster termed the new scale "an absolute minimum" in this day and age.

Civil service director McDougall recommended the new across-the-board scale with a twofold purpose, to establish \$1.25 hourly minimum for 40-hour weeks, and boost other salaries to make state pay more competitive. The average monthly increase would amount to \$35.

If the governor gives his nod, state agencies will figure in the new scale in preparation of their budgets for the 1966 Legislature. If the money is provided, it would go into effect next July 1, once the all clear by the commission, the governor, the Legislative Budget Committee and the Legislatur is granted.

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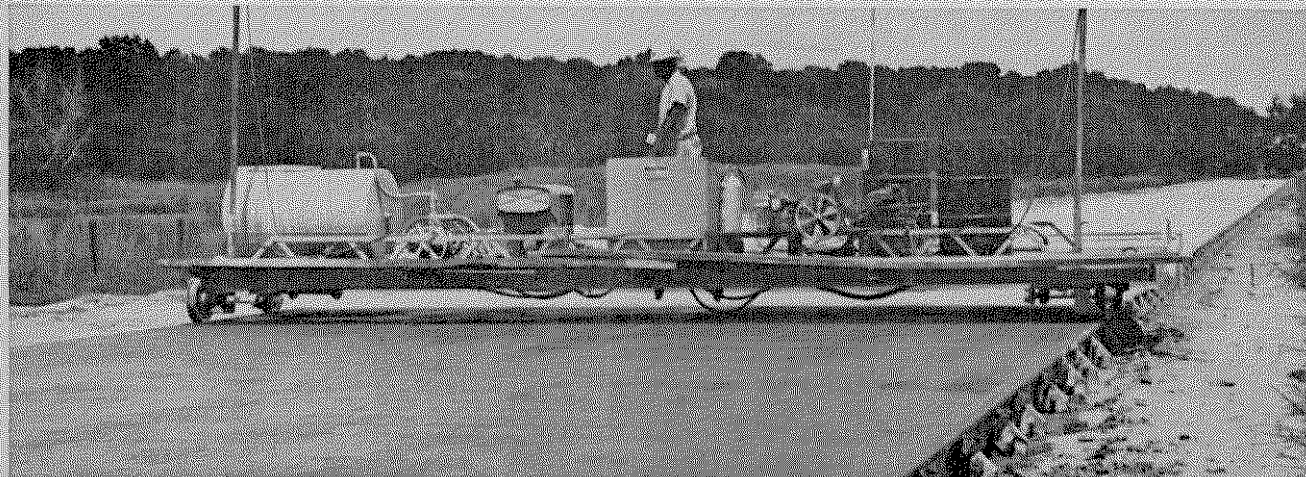
lower because fewer inspection hours are required.

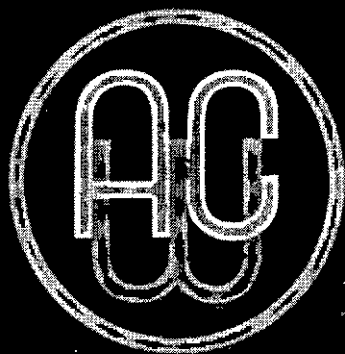
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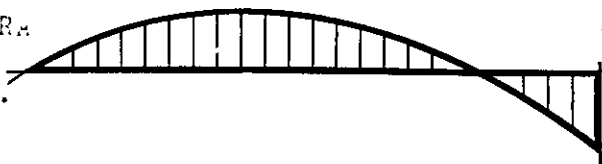
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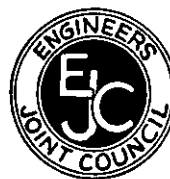
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ENGINEER

Vol. 51 No. 6
December, 1965





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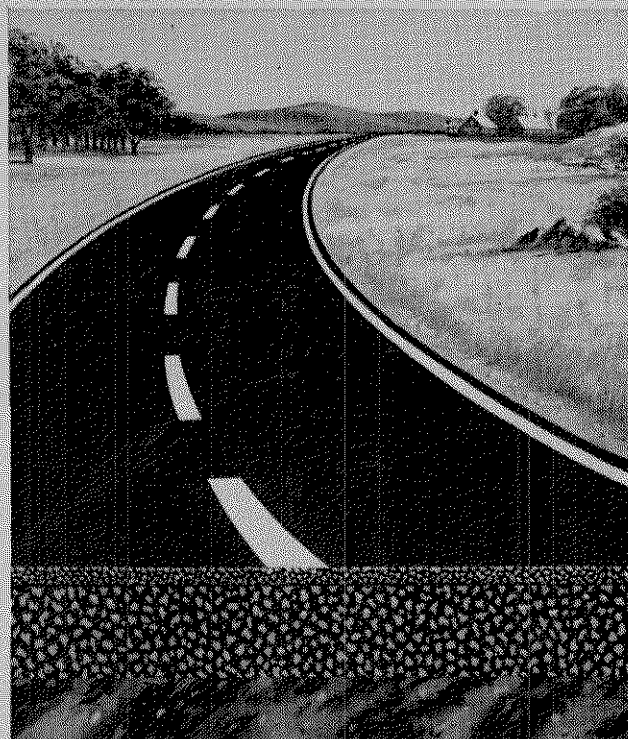
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DECEMBER, 1965

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OUR COVER—

Looking from the Slidell side toward Orleans Parish, the newly-opened I-10 Twin Span Bridges are shown in the upper center stretching across Lake Pontchartrain to Pt. aux Herbes. See story on page 20.

(Photo by Louisiana Dept. of Highways)

Merry Christmas
and Best Wishes
For The New Year
From
the Staff of the
Louisiana Engineering Society

December, 1965

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Oct. 31,
1965

W. K. Bankston,
Editor

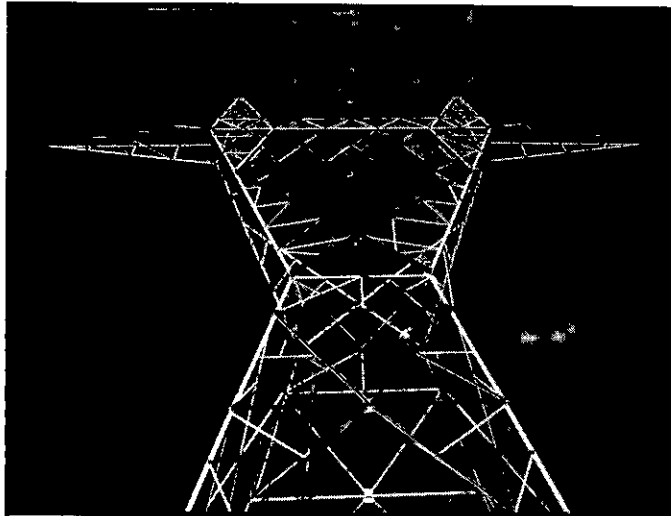
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Minutes Of The Board, LES

LOUISIANA ENGINEERING SOCIETY

833 Howard Avenue

New Orleans, Louisiana 70113

Board of Directors Meeting—Thursday October 7, 1965, 7:00 P.M.,

LES Offices—833 Howard Avenue—New Orleans, Louisiana

President Stokes called the meeting to order with the following members present: Messrs. Duclos, McNamara, Vogt, Nelson, Fernandez, Bubenzer, Knight, McCain, Carter, Sandefur, Capozzoli, Sellers, Thigpen, Cade. Also present were Messrs. Earl Martin, Executive Secretary, Allen Johnson, P. R. Counsel, Dan Cresap and Malcolm Hurstall.

Minutes of the previous meeting were accepted with minor corrections on a motion by Mr. Ed McNamara seconded by Mr. Mike Cade.

Mr. Martin read the resignations of Mr. David Bourgeois, W. L. Thompson and John L. Cotton; also the names of the deceased members who were Mr. Arthur Champeau of New Orleans, D. K. Taylor, Baton Rouge, J. P. Jeansonne, New Orleans, and Roy Robbins, New Orleans, Godfrey Marine, Lafayette, Paul Jahnce, New Orleans, F. Robert Mendow, New Orleans, and G. Hammett, New Orleans. The Secretary reported that Mr. Marcel J. Leumas was reinstated as a member after payment of dues. Mr. Martin asked for clarification on the matter of memorials which is to be handled by the Chapters and copies sent to the state office and the Louisiana Engineer.

Mr. Martin read a letter of appreciation from Mr. John T. Bentley, the recipient of the LES—La. Tech Scholarship Award.

The Secretary announced that 387 ballots had been received in the September membership election. Eight were spoiled however, and on an accepted total of 379 all candidates had been elected to the grades indicated on the ballot, copy of which is attached to these minutes. The quarterly financial report was read and accepted.

Mr. Duclos, the Finance Committee Chairman, stated that copies of the monthly budget breakdown had been forwarded to all board members and would be used as a guide in the operation of Society business.

The Executive Secretary gave a recap of the Annual Meeting in New Orleans. Mr. Duclos made a motion that a letter of commendation be written and sent to the committee and the host chapter; seconded by Mr. Nelson and passed. President Stokes asked Baton Rouge President Capozzoli to report on 1966 Annual Meeting. Dr. Capozzoli stated that the feeling of the Board was necessary to set definite dates and to choose which days of the week were preferable. Mr. Nelson made a motion that the 1966 Annual Meeting in Baton Rouge be held on the weekend of July 21-23 and to be on a Friday and Saturday, which was seconded by Mr. McNamara and passed.

President Stokes announced that all available Alexandria Planning Conference committee reports had been sent to the board members and after reading the financial report with additional expenditures, asked for comments and discussion. The Executive Secretary was instructed to follow up the activities listed in the reports and to write the Honors and Awards Committee letter to Mr. Todd, expressing Board appreciation of his interest and suggestion. Mr. Cade requested that a letter of commendation be written and sent to the Alexandria Chapter; seconded by Mr. Fernandez and passed.

Explanation of the NSPE Liability Insurance was made by Mr. Martin, and on a motion by Mr. Nelson seconded by Mr. Sellers, the Board approved joining in the coverage offered by NSPE, and that after receipt and study of the Policy, would see about further coverage of our own, if necessary.

John Fernandez, Chairman of the Constitution and By-Laws Committee reported on that Committee's meeting of September 30. The committee recommended the following:

1. A Winter meeting should be held during the second week of January similar in nature to the State Planning Conference held in Alexandria. Also tentative dates for three other major meetings were suggested: Officers Induction in May; Annual Meeting in July; and State Planning Conference in September. An invitation was offered by Mr. Cade for holding the 1966 Winter Meeting in New Orleans. On motion by Mr. Duclos seconded by Mr. Nelson this was agreed to.

2. Having been asked to act on an outline of chapter areas by parishes, the committee reported that the established method of defining the chapter areas was the same as that recommendation in all cases except for two of the 64 parishes, and that the Legislative and Membership Committees be notified of the adequacy of the existing divisions. On motion by Fernandez, seconded by McNamara it was agreed that a story be developed for the Louisiana Engineer explaining the method of describing chapter areas and including a definitive map.

3. Acceptance of the Lafayette Chapter Constitution and By-Laws with some minor changes. Mr. Duclos pointed out that the LES Constitution and By-Laws clearly states that the chapters should operate under By-Laws only. The committee was then asked to make up model By-Laws for use of the chapters, and that all chapters would be urged to conform. The Board requested that acceptance of the Lafayette Constitution and By-Laws be postponed, pending comparison with the model.

4. That revisions to the LES Constitution be held in abeyance until NSPE's proposed revisions are completed, plus the fact that LES Constitution was just completely rewritten.

5. That there are some parts of NSPE's proposed amendments need further study and recommendations. These were:

Membership Requirements—change by NSPE to accept our affiliate grade would increase the dues, further retarding LES growth in this grade, the opposite of national intention.

Functional Sections (Employment Division)—the committee believes that State Boards should retain control over the State Functional Section: NSPE's proposed revision provides for more vertical control direct from National.

Dues Collection—The committee believes that dues should be collected at the state level, not by National.

Present Status—The committee recommends: That LES should retain its right to act as it sees fit; that By-Law 7 which gives us the right to disassociate with NSPE at our discretion, our name and our present independence must be retained.

NSPE Director Waldemar Nelson gave the Board some of the reasons and thinking behind the NSPE's proposals, how the expected results would affect the profession, and the part the state societies will play in the re-organization.

Mr. J. B. Carter, chairman of the PEG Section requested approval by the board of a report prepared by his section for presentation to the Louisiana Civil Service Commission. Mr. Duclos moved that a resolution be prepared and presented to the Civil Service Director and Civil Service Commission indicating a recommended increase in salary scales and the reason for such an increase. Seconded by Mr. Sandefur and carried unanimously. Mr. Carter and Mr. Cresnap prepared a rough outline of what the resolution should contain. The Executive Secretary was instructed to prepare the resolution. Copy is attached hereto and forms a part of these minutes. Another motion by Mr. Duclos, seconded by Mr. Cain, that board members be invited to attend the Civil Service Commission hearing on October 26 with PEG representatives.

The Executive Secretary read a letter from Mr. Nash Ogden which included the report of his legislative committee in Alexandria and a suggested form of resolution in connection with the new "Construction Practices Acts". Mr. Sellers made a motion that a resolution of commendation on action taken on Senate Bills 79, 80 and 81 be prepared and sent to the Governor and the Legislature seconded by Mr. Sandefur and passed. Copy is attached hereto and forms a part of these minutes.

President Stokes asked the Executive Secretary to report on his meeting in St. Louis with other Executive Secretaries and NSPE officials. Mr. Martin stated that the report was furnished to all board members and the major comment was the strong opinions of some of the larger state societies in opposition to parts of the proposed changes. The same parts that LES committee found unfavorable.

Mr. Martin read a letter and a resolution prepared by the North Carolina Society expressing their opposition to the repeal of Section 14(b) of the Taft Hartley Act and suggested that LES adopt a similar resolution. Mr. Nelson moved that we write the resolution right now and receive the approval of those in attendance. The rewritten resolution was approved and the Executive Secretary was instructed to send it to the Louisiana Delegation. Copy is attached hereto and forms a part of these minutes.

John Vogt read a letter that he had received from Mr. Harold A. Levey requesting the Society to study the possibility of Group Liability Insurance. Mr. Fernandez commented that even Lloyds of London would not insure this risk. The Board requested that Mr. Levey be so informed.

Mr. Stokes asked that the other items listed on the Agenda be deferred to the next meeting, and asked for the results of the preference poll by the Executive Secretary. Mr. Martin said that the poll indicated the preference for Thursday or Tuesday in that order and the first or third week in that order. Based on this poll the next board meeting was scheduled for Thursday, November 4 here in New Orleans at 7:00 P.M. Mr. Capozzoli requested that we look into the possibility of holding the meeting at the Hilton Inn for the benefit of those coming from throughout the state. President Stokes so instructed the Executive Secretary and there being no further business the meeting was adjourned at 11:00 P.M.

John Vogt, Jr. P.E.,
Secretary-Treasurer

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Application Engineers to Southern Industry

Professional Engineers in Industry Give Goals of Functional Section

By MALCOLM L. HURSTELL

Chairman, Committee to Organize

Functional Section for Professional Engineers in Industry

A special task force committee has been formed by Mr. Charles W. Stokes, President of The Louisiana Engineering Society, to organize a Functional Section for state society members employed in industry. Such a functional section would afford engineers in industry in Louisiana a special opportunity to promote their professional status and recognition with backing from the state society. The section would be an arm of the parent organization and would supply that cohesive element which serves to bind industrially-employed society members into a strong and effective unit. It would act as a coordinating body for all state society activities affecting or of interest to engineers in industry. In addition, the section would provide an effective forum for discussion of problems common to their particular interests.

Active functional sections for professional engineers in industry have been organized in a number of state societies such as the Michigan Society of Professional Engineers. This section known as the Professional Engineers of Industry has declared its objectives as follows: (1)

"To promote the enhancement and betterment of professional recognition status conditions of employment and other matters of mutual welfare; to provide an effective forum for discussion of common-interest problems; to provide effective liaison with other similar type state or national functional sections; and to take such concerted action as will mutually benefit the professional engineer employed in industry, his employer and the public."

If it is proposed that the functional section to be organized for the Louisiana Engineering Society would have similar objectives, and would derive its basic authority from the parent organization. The section would generally function in accordance with a constitution and by-laws which will be consistent with the basic principles guiding the society.

This functional section for professional engineers in industry will offer these advantages: (2)

"1. More Manpower could efficiently be assigned to more projects using a "Task Force" concept.

2. These "Task Forces" could be set up and function anywhere in the state.

3. Capable engineers who might be reluctant to accept assignment to a committee, would be more inclined to participate in a specific "Task Force" project which might be concluded within a few months.

(1) Pg. 103—The Engineer in Industry in the 1960's—NSPE, 1961.

(2) Pg. 103—The Engineer in Industry in the 1960's—NSPE, 1961.

4. Closer contact among engineers in industry could be possible through a functional section periodic bulletin" in The Louisiana Engineer.

One of the objectives of the task force is to be the development of material for a pamphlet which could specifically support the professional objectives and co-operative activity necessary to better understanding of the engineer-employer relationships. This information would delineate the lack of compatibility between the engineers concept of unionism and their concept of professionalism. The National Society of Professional Engineers' Board of Directors has adopted the following policy statement on "Professional Responsibility vs. Collective Bargaining:"

Engineers' Board of Directors has adopted the following policy statement on "Professional Responsibility vs. Collective Bargaining:"

Collective bargaining for professional engineers is in conflict with the basic principles of a professional individual.

The individual responsibility and independent judgment required of a professional engineer are incompatible with the regimentation fundamentally inherent in unionization.

Collective bargaining divides the members of the profession into hostile groups and promotes discord among members of the same profession.

Constructive relations between professional engineers and management, and the full development of professional engineers can best be accomplished through programs in cooperation with all elements of the engineering profession.

More than twenty years of experience and experimentation demonstrate conclusively that the individual engineer and the engineering profession are best served through reliance upon the professional concept of solidarity in service to the public welfare and avoidance of collective bargaining."

The task force has begun its work on preparation of the pamphlet and hopes to make it available to all members of the state society by January 1, 1966.

Recently, I attended the national conference sponsored by the Professional Engineers in Industry section of the National Society of Professional Engineers in Oklahoma City. There were discussions on the engineer's part in management, the problems of communications, and the development of a professional attitude in engineers.

Industrial Engineer Described

Dr. Lee E. Danielson, professor of industrial relations at the graduate school of business administration, University of Michigan, opened the first session with an outline of the characteristics of engineers in industry. He pointed out that in general the industries know little about their scientific and engineering manpower and are concerned with the development of products rather than of talent. Engineers, on the other hand, see them-

selves as individual, independent, logical, and imaginative people, hungry for recognition and also for financial reward. He said that engineers are not always suited for management, but are aspiring for managerial positions as a means to overcome the lack of freedom to use their ideas.

Engineers should be, and in a very large number of cases actually are considered part of management or on the management team, stated Dwight J. Goodman, P.E., assistant chief at the engineering support facility, ARO, Inc., Tullahoma, Tennessee. Pointing to the recent expansion of research activities and technology, he observed that industry will be looking even more to the engineer for its leaders in the future.

The engineer as a professional employee was observed by R. E. Williams, P.E., staff engineer at Vickers, Inc., a division of the Sperry Rand Corporation. He expressed the belief that the engineer in industry has to reckon with certain facts, namely that he is not a professional rendering an individual service. He is unlike the doctor, the lawyer, or the consulting engineer in that he cannot match them for personal service to the public, nor does he assume the same risks that another individual professional would make in his decisions. However, by definition of problems, by interpretation, solutions, and by the end design, engineers can and do influence which company assets are employed to achieve desired results, foster profitable business and economic growth, and at least indirectly, contribute to the well-being of society, he said.

Engineers Are Managers

Engineers are managers, was the conclusion reached by Roger B. Charlesworth, P.E., works manager of the Western Electric Company Oklahoma City Works. Mr. Charlesworth, who delivered the Conference Luncheon Address, said that by the very nature of their work "... our professional engineers are, in fact, very important members of the management team. In addition," he said, "to state what is roughly the converse—to a greater and greater extent we are seeing that managers, particularly at the higher levels, are engineers."

Discussions of the second session of the meeting made it clear that with all the technological advances in communications equipment, the great problems in man-to-man communications have remained.

Robert J. Downey, corporate director of personnel administration, North American Aviation, Inc., said that for all our instantaneous data links and stereophonic

sounds, we still have trouble making our thoughts clear to other people. Compared with other fields, communications in industry are fairly good, Mr. Downey feels, but nevertheless upward communication between engineers and management is often hampered by language that management does not fully understand.

The urgent need for meaningful communications was the topic discussed by Dr. Norman E. Stander, director of psychological services, Westinghouse Electric Corporation. He stressed the fact that language is ambiguous and that no word has any other meaning or intent than that which is perceived by the listener. There is little doubt, Dr. Stander said, that the confusion which stems from using language imprecisely results from the tendency to evaluate or understand what has been said in terms of the sum total of one's own past experiences which in turn are a function of an individual's habits, prejudices, abilities, education, or expectation.

To accomplish effective communications employers must create a climate in which those communications can flourish, said Mr. L. D. Chipman, superintendent of personnel relations, Western Electric Company. Once such a climate is created, he said, a host of personal and mechanical techniques and communication methods can be applied with good results. He cited line supervision, printed literature, magazines and manuals, seminars, conferences and surveys as some of the methods of effective communications.

Communications Problem

Another communications problem, that of how much should be told and why, was discussed by Charles F. Savage, P.E., manager of placement and professional relations, General Electric Company. To Mr. Savage the answer was "simple and direct: just enough to accomplish the objectives." Once the objective is identified the mechanism can be tailored to accomplish the objective.

The engineering profession has too often taken an unreal attitude toward the world of practical politics, said William L. Hughes, head of the school of electrical engineering, Oklahoma State University, in his Banquet Address. Not only should an engineer take interest in politics but on occasion he should participate in them, he stated. He urged engineers to enter the political arena in order to learn its rough and tumble ways, and also to help the other politicians to better understand the decisions they make. "Some of us must develop the interest and stomach to be politicians and be proud of it, if we expect to have any real influence on the future," professor Hughes concluded.

Harold A. Mosher, P.E., director of the engineering division, Eastman Kodak Company, opened the third session by outlining how engineers in industry can be motivated for greater creativity and productive effort. He cited a number of established theories from which can be concluded that for engineers the source of motivation lies in recognition, respect, self-fulfillment, responsibility, and trust.

Management's role in developing an attitude of professionalism in engineers was explained by Dr. Paul Patinka, research leader at the Engineering Research Center, Western Electric Company, Inc. He saw professional attitude in engineers in terms of the application of sound technical principles in line with ethical standards; recognition of the responsibility to provide the

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client or employer with the type of services that approaches an increasing standard of excellence; and in the general good behavior and conduct of the professional in dealings with his client, associates, and peers.

Engineering Societies Aid

Sound managerial policies are one of the keys to developing a professional attitude in engineering personnel, commented William E. Keppler, director of package and industrial engineering, Merck Sharp & Dohme. Developing a professional attitude in engineers does not require any extra-special effort on the part of management, he said, but it does require good management, and the companies who do not take the initiative to provide this commodity will suffer at the hands of their competitors.

Engineering societies are the most potent ally to industry in its efforts to recruit, effectively utilize, and furnish career satisfaction to what is usually considered its most valuable group of employees, said Gerald W. McCullough, P.E., vice president for engineering, Phillips Petroleum Company. Companies not only should give special recognition to the employees that make special contributions to a technical or professional society, he said, but should at the same time give publicity to the society in order to strengthen or improve the image of the engineering society within the company.

The complete Proceedings of the Third Annual PEI Conference will be available at \$5.00 a copy from NSPE-PEI, 2029 K Street, N.W., Washington, D. C. 20006. Expected date of publication is December 1965.

More than 50 industrial concerns sent representatives to the conference.

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WHAT ENGINEERS WOULD STUDY

Reprinted from *Engineer*, Vol. VI, No. 2, published by the Engineers Joint Council

What'll you have? Courses in management practices, communication skills, probability and statistics?

These are the subjects most heavily demanded by engineers in two independent surveys of their preferences for continuing professional studies.

One survey was conducted jointly by the American Society of Engineering Education and the Engineering College Administration Council. It consisted of 4,057 engineers in 144 companies. The participants had received their Bachelor's degrees during the years 1955 through 1957.

The other study, under the auspices of the Pennsylvania State University, focused on engineers employed in Pennsylvania only. The sample consisted of 2,090 engineers representing 171 companies. Each participant had received a Bachelor's degree five or more years ago.

In the ASEE study which was conducted by the society's Relations with Industry Division, 65 per cent of the respondents said they needed additional studies in management practices, 64 per cent chose technical writing, and 60 per cent selected probability and statistics. In the over all results, nine of the first fifteen subjects selected were nontechnical.

"No one should jump to the conclusion that the fundamentals of engineering are unimportant simply because the younger engineers in industry want training in management tools and communication skills," the report said. "The young professional engineer indicated a need for both technical and nontechnical education. A major problem is to determine when such training shall be provided and by whom."

The Pennsylvania study group divided its subjects into seven broad categories. In the communication skills, where the selection was heaviest, rapid reading scored highest with an 80 per cent demand; next came effective communications with 78 per cent.

Probability and statistics led the list of subjects in the basic sciences with an 80 per cent demand; engineering economy scored highest in the engineering sciences category. Job evaluation topped the list of managerial skills selected. Economics was the most frequently checked subject in the social sciences and humanities. Automation ranked highest in the category of engineering analysis, design, and systems.

Finally, in leisure skills, community and public relations ranked highest.

About 6 percent of the sample in the Pennsylvania study were studying another degree; 35 per cent, on the other hand, had not participated in any educational activity whatsoever during the prior four years. "I do not have the time," was the reason most frequently given.

Responses were equally split between those who wanted advanced credit courses and non-credit courses if either were available locally.

In a question on how engineers keep up-to-date, 50 per cent said they use professional journals, 35 per cent cited manufacturer's literature, 28 per cent said technical

In the ASEE study, the most frequently selected technical subject for each engineering discipline was:

Aeronautical	Vector analysis
Chemical	Probability and statistics
Civil	Computer uses
Electrical	Electronics systems (circuit design)
Industrial	Probability and statistics
Mechanical	Heat transfer
Metallurgical	Probability and statistics
Engineering physics	Probability and statistics

books and reports. Professional society meetings scored lowest with a 13 per cent response.

The participants were also asked to select the media they preferred for updating other than by formal class-work. The choices were divided equally three ways among correspondence courses, educational television and programmed instruction.

"A comparison between undergraduate degrees and current work indicates that only a relatively few engineers are working in an industrial capacity which corresponds to their main engineering field of undergraduate study," the Pennsylvania report concludes. "This," it continues, "has important implications for those concerned with problems of continuing engineering education."

According to Drs. Samuel S. Dubin, a psychologist, and H. LeRoy Marlow, a management educator, who conducted the study for the Pennsylvania State University, "Engineers do not want college credit courses. What they really want are informational courses and seminars, meetings, and communications which will help them improve their professional skills. Engineers are now forced to rely heavily on scientific and technical journals for updating."

"Ocean Engineering"

The House has passed an amended version of legislation approved earlier by the Senate aimed at coordinating and expanding the nation's "ocean engineering" programs.

The House bill directs the President to appoint a 15-member Commission on Marine Science, Engineering and Resources, with representation from government, industry, universities, and laboratories. The Commission would conduct an 18-month study of the nation's needs for ocean resources, and the engineering means of obtaining them, then recommend the federal structure required for an effective national oceanographic program.

The bill previously approved by the Senate authorizes such a commission, but would leave it to the President to decide whether it was needed. Conferees have not been appointed to adjust the differences between the two versions, so final action on the legislation will not take place until next year.

Resolution Passed Opposing 14b Repeal

WHEREAS the Louisiana Engineering Society is made up of many professional engineers who are concerned with the present and future economy and growth of our State, and

WHEREAS we recognize the dangers in the encroachment of the Federal Government into the affairs of private enterprise, and into the freedom of an employer to employ competent personnel and to compensate such personnel on the basis of individual ability and incentive, and

WHEREAS we believe in the freedom of choice of employees in the system of free enterprise, without the necessity of payment of tribute to ensure their employment, with faith in the principle of supply and demand for competent labor, and

WHEREAS we express our belief and opinion that the repeal of Section 14(b) of the Taft-Hartley Act would be inconsistent with the principles set forth by our forefathers in the establishment of our Nation, in that it would deny to a State the right to control its own affairs not inconsistent with our National Constitution and

WHEREAS, it is our belief and opinion that the repeal of Section 14(b) of the Taft-Hartley Act would have a serious adverse effect upon the growing business and industrial economy of our State, now

THEREFORE BE IT RESOLVED that the Louisiana Engineering Society does hereby express its opposition to the repeal of Section 14(b) of the Taft-Hartley Act, and does hereby advise the Louisiana Delegation to the United States Congress of this resolution.

Adopted by the Board of Direction of Louisiana Engineering Society, by unanimous vote of those present and representing a quorum at New Orleans, Louisiana, October 7, 1965.

L.E.S. EMPLOYMENT COMMITTEE PROFESSIONAL ENGINEERS SEEKING EMPLOYMENT

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Winter Meeting Set

Winter is here, and it brings with it the first annual Winter Meeting of the Louisiana Engineering Society, to be held January 14th and 15th at the Monteleone Hotel, New Orleans. Hosting the inaugural meeting will be the New Orleans Chapter. Charles W. Stokes, P.E., Lake Charles, LES President will preside.

A main feature of the meeting will be reports of Functional Sections, followed by discussion and comments on proposed NSPE revisions.

It is expected that this will prove to be a highly useful and interesting annual event, leading to closer year-round coordination in the Society, according to M. J. Cade, New Orleans Chapter president.

The suggestion to institute this meeting was presented to the Board of Direction by the Constitution and By-Laws Committee, whose idea was to hold it at about the same time as the old Annual Meeting and to conduct it similarly to the Alexandria Planning Conference held in August.

Members of the Board of Direction discussed and approved the suggestion, and preparatory plans and arrangements have been made.

The primary purpose of this event is to provide the Functional Sections and Standing Committees an additional opportunity to meet and report on activities discussed at Alexandria, and to provide the opportunity of planning for the balance of the administrative year.

Earl M. Martin, Jr., LES Executive Secretary, has announced that hotel reservations should be made by writing directly to The Monteleone Hotel, 214 Rue Royale, New Orleans, La.

Martin stated that his office will be pleased to assist in the preparation of reports, committee agenda, or any committee activity.

Following is the advance program for the LES 1966 Winter Meeting:

Friday, January 14, 1965

9:00 A.M.—Board of Direction Meeting.

1:00 P.M.—Welcome by Charles W. Stokes, P. F., LES President.

1:30 P. M.—Functional (PEPP) Professional Engineers in Private Practice, to Sections (PEG) Professional Engineers in State Government.

4:00 P. M.—Meeting (PEI) Professional Engineers in Industry.

4:00 P. M.—Reports of Functional Section Meetings to be followed by "Discussion and Comments on Proposed 5:30 P. M. NSPE Revisions.

6:30 P. M.—Cocktail Party —Host: New Orleans Chapter.

Saturday, January 15, 1965

8:00 A. M.—Coffee and Doughnuts.

8:30 A. M.—Services and facilities available from State Headquarters.

9:00 A. M.—Committee Meetings.

11:30 A. M.—Reports of Committee Meetings.

12:30 P. M.—Luncheon. LES Business—Legislature, Engineers Week, Membership development.

Professional Engineers in Private Practice Has Growing Functional Section

By JOHN I. McCAIN, P.E.

The first Functional Section in Louisiana Engineering Society and the one most fully developed at present is the Section for Engineers in Private Practice.

Others active at present are "Engineers in Education", "Engineers in Government", and "Engineers in Industry". The original efforts toward organization date back as far as 1963.

The first problem was to define "What is a Functional Section?" This is a pertinent question for this discussion.

A Functional Section is an organization within an organization. It takes a detailed interest in the career activities of a group representing one occupational status such as "Engineers in Government". It attempts to define the needs of this group and to find solutions to the most critical of these needs.

The influence of the membership and Board of Direction of LES can be brought to bear on the very urgent problems. It serves a group selected by type of job rather than by place of residence.

It brings together a fairly large group having common career interests.

For instance, members of the PEPP Section can concentrate on discussion and possible action on fee rates, relations with clients, government competition, free engineering, etc., which are of direct concern to Engineers in Private Practice.

Some but not all of personalities active during the early stages of organization were Messrs. Alvin Fromherz, Al Williamson, Al Meyers, John McCain, J. R. Whipple, Frank Walk, Lee Odom, D. X. Ellett, Ernest Livingston, A. J. Szabo, and Chris Demopoulos.

One of the current studies in progress is preparation of recommendations for consideration by the LES Board of Direction on suggested procedures for state government agencies in the employment of Private Practice Engineers. This might include suggestions as to the employment of Engineering Consultants resident in the state in preference to out-of-state firms, when available and competent for the work at hand. It might include recommendations against such practices as "competitive bidding" and in favor of more ethical suggested procedures.

Membership in the Functional Section for PEPP is available to members of LES who are registered professional engineers and who are principals or employees in private practice engineer offices (Consulting Engineers).

At present no formal separate membership fee is required and expenses have been met partly by occasional voluntary contributions from members.

In time it will probably be necessary to have special membership fees or regular contributions from members of this activity. Members of the Louisiana Functional Section of PEPP automatically receive two specialized monthly publications from the National NSPE, "Private Practice News" and "Legislative Bulletin".

Several specialized publications are available on order

including working documents such as "Conditions to the General Contract" and sample Engineer-Client contract forms.

The "Manuals of Practice" for Louisiana Engineers are available for sale by PEPP Section representatives in Lake Charles, Lafayette, Alexandria, Shreveport, Monroe, and New Orleans. Distribution of copies is handled by Al Williamson, Secretary to the Board of Direction of PEPP at telephone number 924-3661, Baton Rouge, Louisiana.

Application for PEPP Membership

A. B. Williamson, P.E.

Secretary

Professional Engineers in Private Practice Section

Louisiana Engineering Society

5217 Government Street

Baton Rouge, Louisiana 70185

I am a member in good standing of the Louisiana Engineering Society registered as a Professional Engineer in the State of Louisiana,

(Check appropriate statement)

- ☐ Engaged in the private practice of engineering
☐ Employed by an engineer or engineers in private practice

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Public Service

Announces New Electric Power Generating Unit

Another new electric power generating unit, providing more power for a rapidly expanding Louisiana, has been announced by Louisiana Power & Light Company.

Rated at 560,000 kilowatts, the new steam-electric generating unit will be built at the Company's Little Gypsy Station, 25 miles upriver from New Orleans in St. Charles Parish.

W. O. Turner, chairman of the board and chief executive officer for LP&L, in making the announcement, said that the new facility will cost from \$35 to \$40 million. Engineering studies are already underway for the new plant, with construction scheduled for early 1966 and completion by November 1968.

The proposed unit is one of six large generating units now under construction, or soon to be constructed, in the Middle South System. Middle South Utilities, Inc., includes the operating companies of Arkansas Power & Light Company, Mississippi Power & Light Company, New Orleans Public Service Inc., and Louisiana Power & Light Company.

"Present construction of generating facilities as well as those planned for the immediate future in the Middle South System totals more than 3,200,000 kilowatts, thereby giving the Middle South System in 1970 a total generating capability of 7,300,000 kilowatts," Turner said.

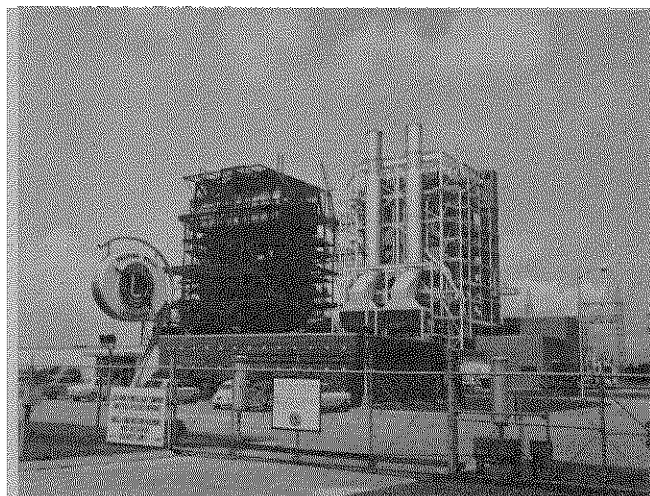
"This means that the Middle South companies are building as much steam-electric generating capability in the next five years as the member companies have constructed during the past 40 years. We believe this is indicative of excellent economic growth as well as the companies' faith in the continued growth of this area," he commented.

"The decision to build this large unit," Turner said, "is in keeping with LP&L's policy to insure an adequate and dependable source of low-cost power for a growing Louisiana. Financing for this project will be through funds obtained from its own operations and in the open market and without government subsidy. It will be a tax-producing venture, and not a government-financed, tax-consuming project.

"The size of this unit also reflects planning for the greatest possible efficiency. The 550,000-kilowatt unit incorporates far greater efficiency and lower cost per kilowatt than smaller out-dated generating units such as those of a capacity of 100,000 kilowatts and less."

LP&L presently is building a new generating unit at Little Gypsy, 25 miles upriver from New Orleans in St. Charles Parish. It is rated at 430,000 kilowatts, and will bring the total capability of that station to 677,000 kilowatts. It is scheduled for completion by the end of this year.

The Little Gypsy No. 2 unit, fully automated, is expected to be even more efficient than the No. 1 unit at Little Gypsy, which was the world's first steam-electric generating facility capable of fully automatic operation. Little Gypsy No. 1 was cited by the Federal Power Commission as the most efficient gas-fired generating unit in the nation in 1963, the most recent year covered by the FPC report issued last December.



THIS IS Louisiana Power & Light Company's Little Gypsy Steam-Electric Generating Station at Montz, near Norco, in St. Charles Parish. A third unit, rated at 560,000 kilowatts, has been announced for Little Gypsy. The No. 1 unit, at right, has a capability of 247,000 kilowatts; and the No. 2 unit, at left, which is being completed at the end of this year, has a capability of 430,000 kilowatts.

Turner also explained that Little Gypsy No. 2 and the No. 3 unit will bring LP&L's total generating capability to 1,918,700 kilowatts. This more than doubles the Company's power-producing capability at the end of 1964.

The 560,000-kilowatt unit, Turner said, will have a steam generator approximately as tall as a 17-story building. Its steam system, which drives the turbine for turning the generator, will be operated at super critical pressure (3,500 pounds per square inch). This type of system, he said eliminates the need for a steam drum, one of the largest and heaviest part of present-day steam generators. The unit's steam system also is more efficient than present system, and makes possible the construction of a simpler turbine.

The unit also will have an electronic computer, which will perform monitoring and results computations as well as some control functions.

NACE Sponsors Corrosion Course

The Shreveport Section of the National Association of Corrosion Engineers is sponsoring a short course in Corrosion at Centenary College January 26-27.

The purpose of this twelfth course is to present corrosion fundamentals and corrosion control practices for pipeline, distribution and production facilities. The course is designed to benefit anyone whose work requires a practical knowledge of corrosion and its prevention.

The registration fee will be \$17.50 which includes lunch for both days and a banquet. Tickets will be available to those who wish to attend only the banquet at \$5.00.

General Chairman of the program is John W. Graves. Courses will be held in Fundamentals, Pipeline and Distribution, and Production. An open floor discussion will follow the talks Thursday afternoon.

Bargain Bulk Cargo - Industrial Sustenance

The following account dealing with an interesting aspect of creative engineering, appeared in the "Consultant" of the Waldemar S. Nelson and Co., Inc.—ed. note.

Much has been written about the sprawling industrial complex along the Mississippi River between New Orleans and Baton Rouge. The rare but fortunate blend of abundant raw materials, deep water navigation and ample supplies of fresh water has made this one of the most spectacular industrial centers of the world. In 1962, for example, the eleven parishes along the banks of this industrial magnet between the above cities accounted for more plant investment dollars than the rest of the state combined. No more superlatives need be added to those already bestowed upon this gleaming ribbon of refineries and plants that brighten for many miles the dark and somber waters of the Mississippi. Instead we would discuss a somewhat neglected component of this massive industrial machine—the bulk cargo shipments and handling facilities that sustain it.

Because neither vessels nor dock structures are as physically striking as the immense plants they nourish, the vital part they play in this intense, intricate and rapidly expanding industrial activity is often overlooked. Our design of various bulk handling and storage facilities has caused us to examine in some detail the economic aspects of this industrial waterborne traffic. The design of a bulk terminal on the Mississippi for the Nitrogen Division of Allied Chemical Corporation has naturally intensified our interest. We also gained a degree of insight into the occasionally subtle economics of such traffic by the research entailed in the preparation of the LOUISIANA INTRACOASTAL SEAWAY economic and engineering feasibility study for the Louisiana State Department of Public Works.

Although the enormous tonnage that moves by barge and vessel along the Mississippi has received considerable comment, the economic relationship between this traffic and the plants that generate it has not received the attention it merits. The essence of this relationship is simple enough—this industrial complex is almost totally dependent upon water transport for delivery of raw materials to the plants and shipment of finished products of cargo involved, the fact that most of it is suitable for shipment in bulk and the relatively low cost of water transport all combine to cement the dependence of these plants upon the Mississippi and connecting waterways. Water transport has proven to be the most practical and economic means of large scale, low cost movement of industrial materials.

It is equally clear that industrial dock facilities, because of the large quantities of cargo they handle, are an extremely important economic factor in these traffic operations. The degree of efficiency with which they function heavily influences transportation costs in an area of industry highly sensitive to such costs.

We should stress at this point that the savings realized by these industries in their waterborne movement of materials in bulk form is of great economic moment not only to the companies directly affected but to the consumer and national economy as well. Transportation costs, it should be remembered, are invariably borne by

the commodity transported, not by the shipper.

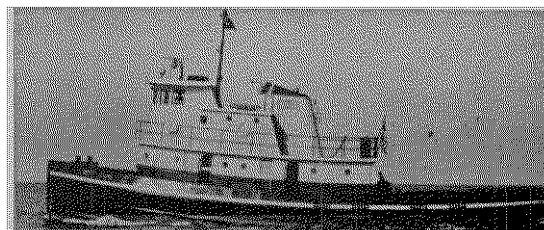
THE LOW COST LIFELINE

The navigational and geographical advantages the Mississippi River offers to industry are virtually incomparable. The river provides low cost access to the largest market in the United States, the Mississippi Valley, as well as to foreign markets. This geographical significance was realized by Thomas Jefferson, has been expounded upon ever since and needs no further amplification here. The importance of its navigational advantages to industry will bear some discussion, however.

The generous dimensions of the channel and the deep water access it provides to the Gulf of Mexico has made "Life on the Mississippi" prosperous and pleasant to industry. Many plants, for example, use imported raw materials in their operations. Imported bauxite is used in the manufacture of aluminum. Since the Mississippi can accommodate deep draft bulk carriers, this cargo can be shipped from Jamaica or other foreign sources directly to the consuming plants without the necessity of costly transferral to barge or rail carrier. Movement of cargo in one carrier for the entire distance is an understandable goal of all plant traffic managers because of the obvious savings inherent in such shipments.

Deep water access to the Gulf is a necessity to the many petroleum and petrochemical plants along the lower Mississippi, and together with their tendency to

(Continued on Page 17)



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WELCOME TO PROFESSIONAL STATUS

Listed below are professional engineers who were granted registration November 9, 1965 by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors:

Armstrong, Philip E., Baton Rouge
Baker, John D., Dallas, Tex.
Barrett, Barrie P., Borger, Tex.
Campbell, John D., Houston, Tex.
Cheney, Donald E., Eau Claire, Wis.
Clanton, George W., Lake Charles
Combs, Okey H., Jr., New Orleans
Dampier, Amos M., Baton Rouge
Daspit, Kenneth J., Baton Rouge
DeBettignies, Charles E., Albuquerque, N. M.
DeCamp, Lamont D., Arcadia, Calif.
Dengel, John G., New Iberia
Doyle, James R., Novato, Calif.
Dyer, Donald B., Whittier, Calif.
Estevez, Mario V., New Orleans
Foval, Donald R., New Orleans
Garcia, Moises III, Baton Rouge
Hail, Orven D., Shreveport
Hain, Paul L., East Lansing, Mich.
Hall, William K., Jr., Dallas, Tex.
Harris, Robert S., Dallas, Tex.
Hazell, Richard T., Morgan City
Healy, John M., Springfield, Ill.
Ice, John R., Metairie
Janney, William L., Lake Charles
Keenan, Richard W., Worcester, Mass.
Leeman, Sam P., Dallas, Tex.
Morris, Edwin H., Birmingham, Ala.
Park, Donald H., Baton Rouge
Pyle, Joe W., Slidell
Reynolds, Charles P., New Orleans
Richardson, Asahel D., Glendale, Calif.
Rustad, Howard C., Rolling Hills, Calif.
Sentz, Arthur L., Dallas, Tex.
Smith, Byron D., New Orleans
Smith, Joseph T., Bay St. Louis, Miss.
Spengeman, Donald T., Massapeque, N. Y.
Stewart, James R., Jr., Shreveport
Vitolins, Juris, New Orleans
Wallace, Robert H., Birmingham, Ala.

Engineer Serves Company During Hurricane Betsy

To his friends and co-workers, G. J. Westcott, Assistant Engineer for Southern Bell Telephone Company in the Metairie District, exemplifies the "Spirit of Service."

On the night of Hurricane Betsy, Westcott, who lives at 6726 Virgilian Street in Pines Village, took his wife and daughter to his sister's house on St. Roch Avenue.

By daylight Friday morning, however, water had risen at his sister's home until the automobiles were covered.

Realizing that they would have to evacuate again, Westcott borrowed a boat and moved his family and his sister to the schoolhouse.

From the school, Westcott returned, walking and wading, to his own house on Virgilian Street, a distance of 4 1/3 miles. As he feared, the house and his other automobile were under water.

Making his way back to the school, Westcott decided to try to get to his office. When he finally managed to wade to a drier part of town, he stopped at a filling station and changed into some dry clothes he had salvaged before leaving his sister's house.

At the corner of Tulane Avenue and Salcedo Street, he flagged a telephone truck and got a lift to his office on Bonabel Boulevard.

The time was 1:00 p.m.

He had walked and waded since daylight that morning and had covered approximately 13 miles.

Westcott worked late into the night, not knowing how his mother, who lived in the eastern section of the city had fared.

However, he maintained a cheerful attitude and performed valuable assistance restoring New Orleans' telephone service.



G. J. WESCOTT

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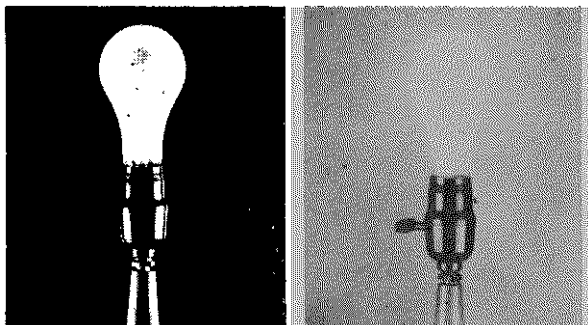
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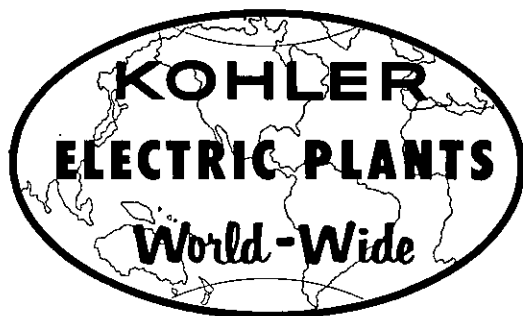
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(Continued from Page 15)

locate near raw material sources, are the primary reasons for the existence of this petroleum and petrochemical complex along the river. These plants must use deep draft, ocean going vessels for shipment of liquid bulk products to their markets on the eastern seaboard and elsewhere. Because the Mississippi can accommodate such vessels this liquid bulk can be shipped the entire distance by super tankers of up to 40,000 tons. The savings to be realized through such high tonnage shipments by single carrier are significant.

The width, depth and alignment of the Mississippi are also important to barge traffic. Aside from the rather obvious benefit of permitting the conformation of very large tows, another, more subtle one exists. Studies by the Corps of Engineers have revealed that the width and depth of a channel has a decided effect upon the speed with which a tow can navigate economically, without undue consumption of fuel. Water resistance to tow passage is high in shallow, narrow channels but decreases as channel dimensions enlarge. The lower Mississippi is "deep water" and consequently has minimum resistance to vessel or tow passage. Since time is literally money to shippers, navigational speeds are an important consideration.

It can be seen that the Mississippi, as a low cost life line to raw materials and markets is indispensable to its industrial offspring. And unless conditions change radically it seems safe to say this is one offspring that will never be weaned.

HIGH TONNAGE = LOW COST PER TON/MILE

Since most of the materials moving to and from these plants are shipped in bulk form it is of obvious importance that maximum advantage be taken of this low cost means of shipment. Economic shipment of bulk materials is primarily a question of selecting the most appropriate carrier for a particular movement. Naturally there is an extremely wide assortment of carriers from which a traffic manager can choose. When making his selection he considers trip distance, tonnage and route, whether it be by inland waterway or river or sea. He must also consider the harbor depth at the terminal point of the voyage.

Whenever possible he will ship in the highest tonnages feasible, although distance and demand will govern him in this respect. Since transportation savings in high tonnage shipments by costs are figured by the ton/mile, the large carriers are proportionate to the distance involved. Thus when distance is short and cargo small but demand frequent and steady, the traffic manager would no doubt schedule shipments by small carrier so as to keep a steady flow of material to the consuming plant in accordance with demand rather than attempt to save pennies by scheduling infrequent, high tonnage shipments. Aside from the fact that the savings over such a short distance would indeed be pennies, the additional storage costs incurred by having a perpetually heavy surplus of materials on hand would be a policy of "penny wise, pound foolish" to coin an old phrase.

The development of deep draft, high tonnage barges is proving to be of substantial importance to shippers although the value of these vessels has scarcely begun to manifest itself in river traffic. These barges of 10,-

000 to 20,000 ton capacity offer the shipper an economical alternative to using gigantic tows or the smaller, three or four barge tows which are frequently seen on the Mississippi but are more common on the Intracoastal Waterway. The large tows, some of which exceed 40,000 tons, are used to a great extent because of their low ton/mile cost. Ordinarily, however the industrial shipper will find that his barge load is but a portion of the entire tow and thus must wait while other barges are released and additional barges added to the tow. If he is not the sole shipper the contract might allow him to escape additional expense because of such delays, but this does not alleviate the necessity for uninterrupted movement of vital industrial materials. Smaller tows, such as would meet his cargo needs, are relatively inefficient and expensive. The three barge, 7680 ton tows so common on the Intracoastal Waterway carry liquid bulk for about 1.93 miles per ton/mile although their cost is cheaper on the river. Dry bulk for about 1.77 mills per ton/mile, the difference in cost being due to the more complex barges required for liquid bulk. On the Mississippi the cost for both would be approximately .5 mill cheaper.

A 16,000 ton barge with limited seagoing capacity, draft 24', powered by a 3200 hp tug, would rent for about 1,000 dollars a day. This amounts to a ton-mile cost of about .5 mill. Six of the smaller barges would be required to carry that amount of tonnage and cost of such a tow would approximate 3 mills per ton/mile. The transportation cost via the large barge is identical to the ton/mile cost of a 22,500 ton tanker and is less when the barge is dropped off at the terminal point, freeing the tug and ending its charges. The tanker charges of course continue while it is being unloaded.

On long voyages, such as the 3000 mile trek to eastern seaboard refineries and markets the problems of the traffic manager become somewhat simpler. Assume that he has 45,000 tons of liquid bulk cargo ready for such a shipment. Typical tanker size is akin to the 22,500 ton ship mentioned earlier. This tanker would carry his cargo at the nominal rate of .5 mill per ton/mile. Also available is a 45,000 ton tanker. Both ships navigate at 17 knots. After rapid calculation, the decision of the traffic manager is a clear and easy one. The super tanker, because of its high tonnage capacity, carries the cargo for .3 mill per ton/mile. The difference might seem slight, but over such a distance it isn't. The two smaller tankers would move one ton of cargo the entire distance for 1.50 each while the larger one does for slightly less than \$1.00 per ton. Total trip cost, if the two smaller vessels were used, would be \$67,500. Super tanker cost would be only \$40,500, a tremendous saving of \$20,000. In view of the economy inherent in such large shipments, the trend to build more and larger super tankers and bulk carriers is understandable to say the least.

Navigational benefits and savings have also resulted from industry inspired innovations such as the shipment of sulphur in liquid form. We are familiar with this particular advancement since our firm assisted Freeport Sulphur Company in the design of the barges and storage tanks which make possible liquid bulk shipments of sulphur. Sulphur in the Louisiana coastal marshes and

offshore deposits is brought to the surface in a molten state when used industrially. Previously, after mining, the sulphur was allowed to solidify and was shipped and stored in that form. Sulphur in this state can become contaminated if in open storage for a substantial period and considerable loss of the material can occur. Yet the worst feature of this form of shipment and storage was that the consumer had to go to the trouble and expense of buying the necessary equipment and converting the sulphur back to its molten state when ready to use it. Consequently an insulated, heated barge was developed which maintained the sulphur in its molten state from the time it was mined until it reached the insulated heated storage tanks or was piped directly into the consuming plant for immediate use. Thus progressive industrial interests have considerably reduced manufacturing costs of a wide variety of products by simplifying processes and lowering transport costs of this universally used industrial commodity.

BULK TERMINALS AND TIME

Shipping and handling innovations and carefully selective use of bulk carriers is only part of this endless cost battle, however. Fast and efficient cargo handling is also essential. Transportation costs, it should be remembered, are calculated from the start of vessel loading to the finish of unloading. Thus slow or inefficient cargo handling raises shipping costs just as if the vessel were completely idle. Delay in the handling of cargo is an unnecessary as it is expensive. Since the shipper is paying for the amount of time the vessel is devoted to his use, time is literally money to him.

(Continued on Page 23)

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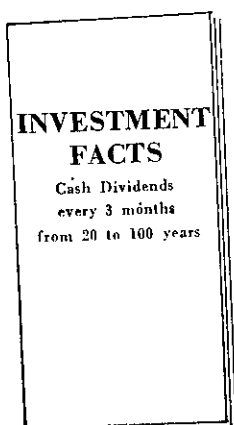
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Appointments **Field Notes** By Allen Johnson

The appointment of Ty F. Scogins of Pasadena, California, as TIDEWATER OIL CO.'s corporate manager of personnel and public relations has been announced by George F. Getty II, TIDEWATER president.

In his new position, Scogins will be responsible for development and administration of personnel and public relations policies and programs for TIDEWATER's domestic and international operations, Getty said.

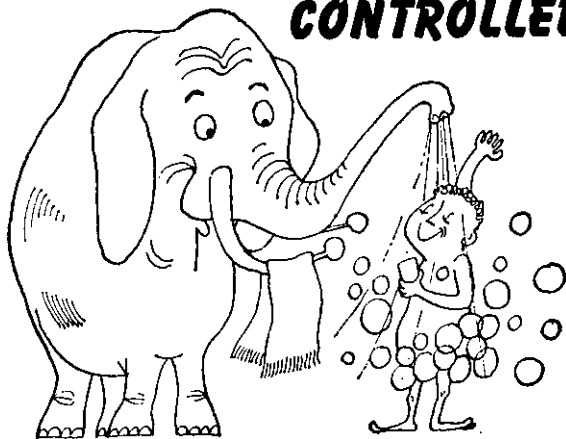
Active in business, professional and civic affairs, Scogins is a member of the American Petroleum Institute and its advisory committee on public relations, and the Western Oil & Gas Association's public relations committee.

Dr. Louis J. Capozzoli, Jr. recently announced the culmination of nine years of practice of Soil Mechanics and Foundation Engineering in Baton Rouge by forming his own firm under the name of Louis Capozzoli & Associates.

Some of the foundation projects handled by Dr. Capozzoli's firm are the 21-story Louisiana National Bank Building in Baton Rouge, Levee design for Cargill, Inc. in Minneapolis, Minnesota, and a new Sugar Mill on Abaco Island in the Bahamas.

Dr. Capozzoli is now the President of the Baton Rouge Chapter of the Louisiana Engineering Society and is on the State Board of Directors.

WATER PRESSURE CONTROLLED



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N. O. - Slidell Bridge

The longest bridge built to date on the nation's 41,000-mile interstate highway system will be opened for traffic this month.

The 5.4-mile long New Orleans-Slidell twin span bridge stretching generally northeasterly from Point aux Herbes in Orleans Parish across Lake Pontchartrain to Slidell, a 9.9-mile stretch of I-10 to Slidell and I-59 from Slidell to Pearl River will be opened.

Edward N. Lennox, state highway board member, will serve as master of ceremonies at the opening. Making short addresses will be Lyman G. Youngs, division engineer with the Bureau of Public Roads, Mayor Frank N. Cusimano of Slidell and New Orleans City Councilman President Joseph V. DiRosa.

The invocation will be said by Dr. Carl F. Lueg, district superintendent of the Louisiana Conference of the Methodist Church, and the Rt. Rev. Arthur T. Screen, pastor of St. Pius X Church, will say benediction. Mrs. Lennox will cut the ribbon for the official opening.

A. L. Stewart, state highway director, said the ceremonies will be held on the east lanes of the bridge, the New Orleans to Slidell lanes.

The Twin Span bridge structure was built by Brown & Root of Houston at \$14.8 million and 9.9 miles of highway approaches on the St. Tammany Parish side were built by W. R. Aldrich & Co. of Baton Rouge at \$8.9 million.

Stewart said the ramps onto the bridge on the New Orleans side were part of a 7.8 mile project from the bridge to the downtown area of New Orleans. This project is now about half finished.

James C. McGrew, now assistant district engineer for the bridge, as did Daniel F. Kimbrel of Kenner, James C. Moore of Pearl River was project engineer for the 9.9 miles of I-10-59 dedicated in St. Tammany Parish.



NEW OFFICERS of the Society of Tulane Engineers include (from left): George D. Moate, second vice-president, 1951 Tulane mechanical engineering graduate; Nester B. Knoepler, president, 1940 Tulane chemical engineering graduate; Claude J. Kelly, Jr., assistant treasurer; Dewitt L. Morris, first vice-president, 1937 mechanical and electrical engineering graduate; and Jay W. Oppenheim, director and publication chairman. Others not pictured are John E. Coles, secretary; James A. Evans, assistant treasurer; Frank S. Foster, Jr., treasurer; and G. Elmer May, director. Officers were elected at the annual meeting of the society on Homecoming Day (October 30) at Tulane.

Christmas Auxiliary Notes Tea By

Dec. 2, 1965

Jeanne M. Dickson

The members of the Women's Auxiliary to the New Orleans Chapter of the Louisiana Engineering Society will gather on Tuesday, December 14th, 1965 at 1:30 o'clock for their gala Christmas tea and program which is held annually at the University Center on the Tulane University campus. A program will be presented by the Baptist Seminary Choir for members and their many guests.

Receiving with Mrs. Thomas A. Fromherz, president, will be the other officers of the group—Mmes. John A. Haase III, John P. Fernandez, Joseph Pezod, Edward McNamara, E. Landry Murphy, and Frank Birdsong.

Alternating in pouring will be previous past presidents, Mmes. Otha E. Barron, Jr., Roy G. Cappel, Lee H. Johnson, Frank W. Macdonald, Frank C. Fromherz, and Waldemar S. Nelson.

Decorations on the sherry table and at the tea service will be carried out in a gold theme, with matching candles used in the candelabra.

Mrs. Thomas A. Fromherz will entertain the members of her Board of the Women's Auxiliary of the New Orleans Chapter of the Louisiana Engineering Society at coffee, followed by a meeting, at the home of Mrs. Frank Fromherz on Pine St. The 10:00 a. m. meeting scheduled for Dec. 2, (Thursday), 1965.

The following Board members will be present: Mrs. John A. Haase III, Mrs. John P. Fernandez, Mrs. Daniel H. Vliet, Mrs. Joseph Pezold, Mrs. Edward J. McNamara, Mrs. E. Landry Murphy, Mrs. Frank Birdsong, Mrs. Ronald P. Cressy, Mrs. Jeffery Collins, Mrs. Bernard Ruckstuhl, Mrs. William Herbet, Mrs. Francis Favallora, Mrs. S. G. Davis, Mrs. Jerry L. Dickson, Mrs. Roy G. Cappel, Mrs. F. Frank Fromherz, Mrs. G. J. Groh, and Mrs. Otha E. Barran, Jr.

Dupuy Speeds G. S. R. I.

Orleans Levee Board President Milton E. Dupuy has begun negotiations to speed start of the Gulf South Research Institute's planned lakefront life sciences building.

The \$1.25 million facility, on 50 acres of former Camp Leroy Johnson land, will act as GSRI headquarters.

GSRI will have facilities in Baton Rouge and New Iberia.

Dupuy has been conferring with leaders and attorneys of both GSRI and the State Science Foundation.

He said he expects that technical and legal details will be settled and construction to start "in the very near future."

The science foundation was created by the Legislature as a sponsor of GSRI, a private non-profit corporation which will offer major research facilities to Louisiana industry.

A year ago, the Levee Board leased the 150-acre tract to LSU for 99 years at \$1 a year, with LSU specifying that land not needed by GSRI would revert to LSU.

Last week, the LSU Board of Supervisors agreed to release 50 acres for GSRI use.

MIT Using New School

For the first time since the inauguration of the program in 1917, the Massachusetts Institute of Technology School of Chemical Engineering Practice has selected a field station outside of an operating plant. A practice school has been established at Scientific Design Company, Inc. to specialize in process design, evaluation and economics in contrast to the formerly exclusive program of plant technology, operations and improvement problems.

Frequent changes in field stations for the practice school have been made over the years to keep in harmony with the objective of providing maximum educational experience for the student. In this case, Dr. Edwin R. Gilliland, Head of the Chemical Engineering Department, recognized the need for the type of school that could inject an element of economic reality into the estimation of plant capital cost, a subject of increasing importance. Because of Scientific Design's outstanding success in the development and application of technology in the organic chemical field, M.I.T. has recognized this organization as a desirable environment for preparation of graduate students for realistic participation in this highly competitive field of chemical plant design and process development.

The practice school is a unique and distinguishing feature of the M.I.T. Chemical Engineering curriculum and

(Continued on Page 24)

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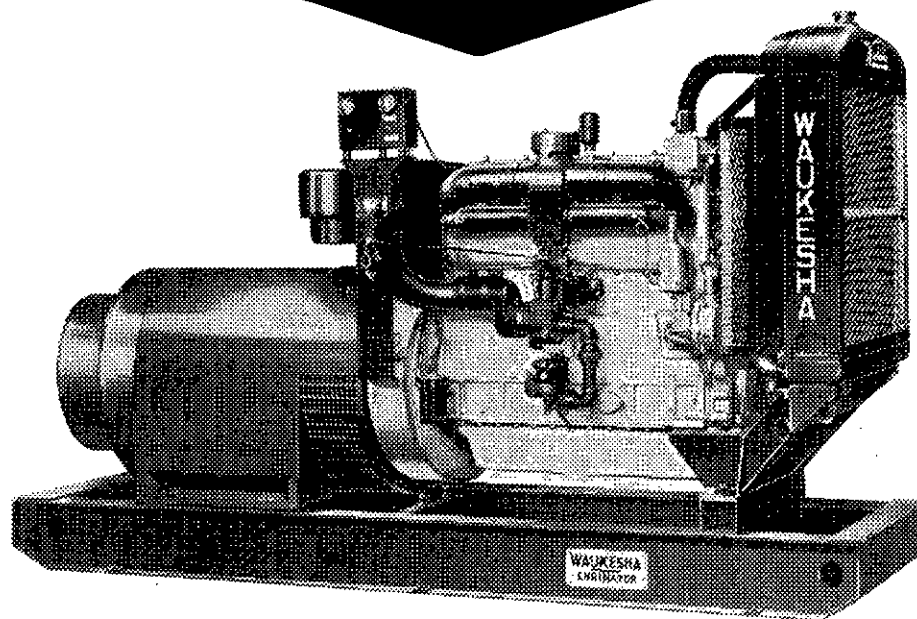
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(Continued from Page 18)

It has been estimated that handling costs of general cargo account for at least 50% of total shipping costs while bulk handling costs should never be more than 20% and frequently is less, depending on the efficiency of the handling facility. The primary design objective in bulk terminal engineering is the fast turn-around-time of the ships and barges which means swift, efficient cargo handling and ample wharf space. Naturally loading and unloading equipment and wharf size must be in proportion to cargo tonnage expectations. If annual tonnage is not expected to be high and single cargoes are anticipated to arrive and depart in fairly small amounts, then certainly the investment in a terminal should be kept within modest limits. Conversely if high tonnage is projected then cramped wharf space and slow handling equipment represent false economy at its worst and ultimately become very costly.

Many plants along the river, unable to locate near public terminals, have constructed their own facilities and tailored them to their specific industrial needs. The Allied Bulk Terminal is such an installation. Design has been completed and construction is underway, with completion scheduled in June of 1966.

Because of the large cargo volume anticipated, the Allied Terminal will be one of the large private dock facilities on the river. This tonnage will consist of liquid and dry bulk carried by barge or ship. The Terminal will perform both loading and unloading operations and can accomplish both simultaneously due to the size of the wharf and the location of handling equipment.

Barges and ships will be accommodated on the river side of the wharf while barges only will be handled on the opposite side. Due to the complexity of this operation it was essential in the design to avoid congestion on the wharf and operational conflicts so that the primary design consideration—fast turn-around-time could be realized.

Dry bulk unloading will be accomplished with a travelling tower with a capacity of 1500 tons per hour. It will travel on rails measuring 600' long which run horizontally along the 805' wharf. Incoming bulk will consist mostly of phosphate rock and will be shipped by vessel and the large, sea going barges mentioned earlier. Outgoing dry bulk will be comprised solely of the fertilizer product and will initially be loaded with a 300 tph fixed loader. Plans call for an additional 600 tph hour travelling loader (shown on rendering) after plant operations are well underway. Incoming bulk is dropped from the hopper on to conveyors where it moves to the transfer tower and then to the desired location in the plant.

Liquid bulk facilities include one intake for liquid sulphur exclusively and four discharge hose stations two on either side of the wharf. They are placed so as to make possible the loading of two vessels or barges on either side of the wharf simultaneously.

The Allied Terminal is the latest in a series of such designs by this firm for such clients as Standard Oil Company of Kentucky at Pascagoula, Miss., the Port of New Orleans and Freeport Sulphur Company. The firm looks forward to applying its experience in the field of engineering to equally challenging assignments.

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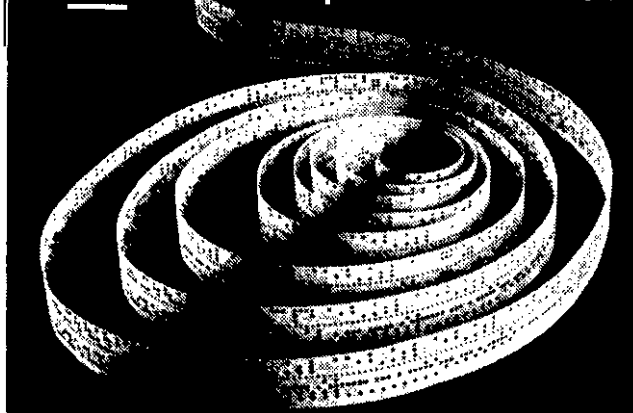
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LES Members Honored

Two L. E. S. members from the Dock Board were honored at a luncheon at the Royal Orleans Hotel.

Presented large silver trays were W. T. Hogg and A. R. Boelte.

Hogg, who ended 43 years with the board, was chief engineer, a post which he has held for the past 12 years.

Boelte, chief of the design division of the engineering department for the past 16 years, has been an employee of the board for 42 years.

Also honored at the luncheon were other Dock Board employees who had been associated with the organization for long periods of time.

Capt. James R. Ayers Jr., Dock Board president, told the honorees, "Your years with the port have been eventful ones, and throughout that period the port has continued to grow not only in sizes but also in standing, prestige and importance in our state, our community and throughout the world. Your work as an important part of our port team has greatly helped make this fine achievement possible."

MIT...

(Continued from Page 21)

is headed by Dr. Wolf Vieth. It differs from the usual industry cooperative programs, in that the student devotes his time wholly to education, works on a wider variety of problems of shorter duration, and is supervised by M.I.T. faculty members who are in residence at the practice school. At Scientific Design, Dr. John Valbert, Assistant Professor of Chemical Engineering at M.I.T., is in full time charge. SD provides all facilities, and company personnel act as advisors, give help when needed, and assist in selecting suitable industrial problems.

Attendance during this practice school semester consists of 18 graduate students alternating between two field stations; one at American Cyanamid in Bound Brook, New Jersey, the other at Scientific Design in New York City. Three students at a time come to SD for a 3 to 6 week period. The group is kept small because of the intensive nature of the work. The students are given commercial process evaluation problems, and have direct working contact with company personnel.

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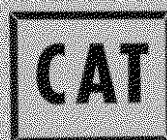
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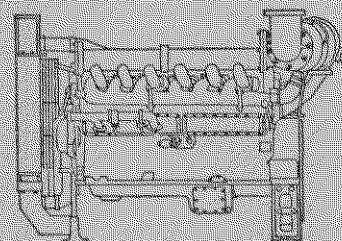
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Federal Pay Boost Approved

The Senate approved a limited pay boost for federal employees after the Administration had reportedly threatened a veto of a more liberal House-passed measure.

The Senate bill chopped the House bill's proposed 4% raise to 3.6% and eliminated entirely a second stage increase which would have provided an additional 3 to 8% next year.

A new provision in the bill as approved will give federal employees who lose their jobs through reductions-in-force, closing of installations, or abolishment of their positions, severance pay up to one year's salary, depending on the employee's age and length of service.

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Memorials

Godfrey L. Marine

With deep regret and expressions of sorrow, the Lafayette Chapter of the Louisiana Engineering Society records the death, on August 14, 1965, of our friend and associate, Godfrey L. Marine.

WHEREAS, the Lafayette Chapter of the Louisiana Engineering Society, through the death of Godfrey L. Marine, has lost one of its outstanding members, and

WHEREAS, he devoted his time and efforts to his profession and the Society, and

WHEREAS, his sound judgment and wise counsel contributed largely to the stature and success of the Society, and

WHEREAS, he gave generously in help and assistance to those in the profession who had not yet made their mark, and

WHEREAS, his decisions regarding the work of others was always prompted by fairness and equity, and

WHEREAS, all of us who were connected with him will always bear his indelible mark,

NOW THEREFORE, we, the members of the Lafayette Chapter of the Louisiana Engineering Society, extend our sincere condolences to the members of the family of the late Godfrey L. Marine, and express the privilege and the pride of having worked with him and the deep loss we have sustained in his death.

UNANIMOUSLY RESOLVED at Lafayette, Louisiana, this 28th day of September, 1965.

Eugene M. Sellers
Sylvan J. Richard

NASA Renews Mason-Rust Contract

The National Aeronautics and Space Administration has exercised a one-year renewal option with the firm of Mason-Rust for continued provision of support services at NASA's Michoud Assembly Facility.

The new \$13,121,252-extension of Mason-Rust's basic cost-plus-award-fee contract was awarded by Michoud's parent organization, the Marshall Space Flight Center, Huntsville, Ala. This extension, to become effective January 1, 1966, will continue in force through December 31, 1966.

Since its initial selection by NASA in December, 1961, Mason-Rust has furnished common services to both Government and contractor elements operating at the main Michoud complex in New Orleans and at its Computation Office in nearby Slidell, La.

Support services under this contract include transportation and Michoud port operations, security and safety, fire protection, photography, medical, food, supply, messenger and mail, communications, custodial, plant maintenance and repair, engineering, reproduction and documentation.

Aid-to-Higher-Education

House-Senate conferees reached a compromise on a federal aid-to-higher-education bill which authorizes \$2.5 billion over a three-year period for a wide range of assistance to colleges, teachers, and students.

One of the measure's chief features is the first federal undergraduate scholarship program to be enacted by Congress. Under the bill, "educational opportunity grants" ranging from \$200 to \$1,000 would be available to needy students through their college or university. Funds totaling \$70 million for the first year, \$140 million for the second, and \$210 million for the third, would be allocated among the states on the basis of their total college enrollment.

Other provisions authorize funds to help colleges deal with rural, urban and suburban problems, to strengthen college libraries, to provide additional classroom construction, to strengthen developing institutions, to establish a National Teachers Corps for work in low-income areas, and to provide interest subsidies and loan guarantees for students from families with adjusted family incomes up to \$15,000 per year.

Okay Cash Awards

• Congress has approved legislation (Public Law 89-198) authorizing a cash award program for members of the Armed Forces. Under the program, "cash awards of up to \$25,000 will be made to military personnel for suggestions, inventions, or scientific achievements which contribute to the efficiency of Government operations."

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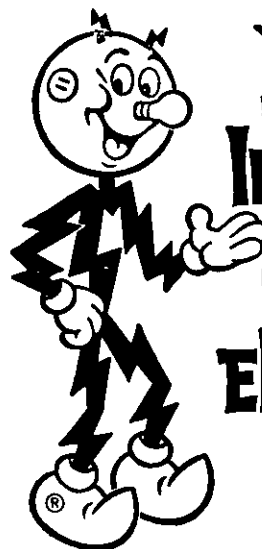
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