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# TSPE Policy On Employment Conditions

THE Board of Directors of the Texas Society of Professional Engineers voted May 7 to repeat its policy on employment conditions as stated on the cover of the TEXAS PROFESSIONAL ENGINEER'S March-April 1944 issue.

The statement of policy follows:

- "The Texas Society of Professional Engineers resolves to solve employment problems of professional engineers and engineers in training by means of a strong professional organization without the formation of bargaining groups.
- "The TSPE has legal counsel available without cost to any professional engineer or engineer in training in need of such services in connection with his or her employment problems.
- "The TSPE will vigorously promote universal use of its adopted schedule of fees and salaries to the end that every engineer shall receive adequate compensation for his services."

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These are postwar necessities

Will you, as Engineer or Architect, make Corporate Surety bonds also a necessity?

Public Bodies must require bonds by statute.

You should do likewise with Private Work

#### BECAUSE

- 1. Responsible Contractors will gladly furnish bond.
- 2. If trouble comes, the Contractor without character will favor projects on which they have given Surety Bond and use funds from those not bonded to bolster bonded jobs.
- 3. On bonded projects Surety Company will (for its own protection) see that bills are paid and construction facilitated.
- 4. If disputes arise Surety Company will insist on speedy and amicable settlement to prevent costly delays and claims.

#### THESE ARE PROVEN TRUTHS.

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Houston, Texas

# A&M Launches Aeronautic Research

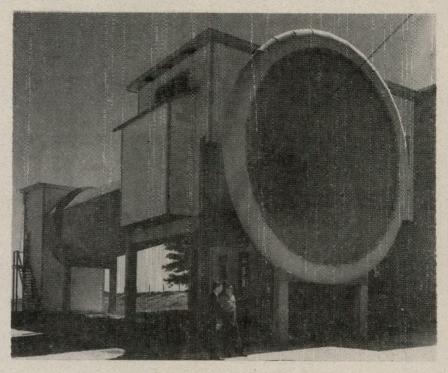
A VIATION seems destined to play a large part in the present trend toward the industrialization of the Southwest. Military aviation has, since its inception, centered mainly in Texas where all-year flying weather has enabled a "round-the-calendar" program of flight training. Until just before the war the flight phase of aviation was the only air activity in this part of the country.

It became apparent, of course, prior to our entry into the war, that the Air Forces would play one of the major parts in the global war which appeared unavoidable. The expansion of our aircraft industry became a "must" in our National defense.

As a part of this expansion, several units of the aircraft industry moved to the Southwest and in particular. so far as Texas was concerned, to the Dallas-Fort Worth area. Two large plants for the production of military aircraft in large numbers were constructed. The demand for workers to man these plants brought to that area thousands of unskilled workers whose only experience was that common to a large agricultural area. These people were rapidly trained in various aircraft skills and in a few months military aircraft began to roll off the assembly lines. In addition to these large government-built plants several smaller companies previously engaged in the manufacture of light aircraft adapted their plants and made expansions to enable them to contribute their part to the production of military aircraft.

#### **Permanent Industries**

Contrary to the belief of many uninformed citizens of the Southwest, many of these plants were to become permanent industries in Texas. The Fort Worth Division of the Consolidated Vultee Aircraft Corporation has continued in the field of development of experimental aircraft for the military services. Contracts with these services have assured the Southwest of the permanent operation of this plant. The manufacture of privately-owned airplanes has assumed a major part in the permanent postwar industrialization of the Dallas-Fort Worth area. Backlogs of orders totaling millions of dollars are held by some four or five aircraft companies in this region. It has thus



Largest wind-tunnel in the Southwest is this 90-foot piece of concrete, part of Texas A&M College's new aerodynamics research laboratory. Intake "bell", shown in foreground, is 22 feet in diameter, and the test chamber, located just behind the bell, is seven feet high and ten feet wide. Advanced research will be done here and facilities will be available to engineers of Southwest aircraft manufacturers.—Photo by Howard Berry.

become evident that the sircraft industry brought to Texas to meet war needs has developed into a sound, permanent peacetime industry and is destined to play a real part in our efforts to industrialize the Southwest.

The introduction of industries into a new area entails certain other parallel developments in supplementary activities, at least two of which are discussed here. First, industrial zation of any area requires the procurement of necessary technically-trained personnel. These workers should of course come from the area immediately served by the local regional industries. At least two types of training are indicated. The first of these is better known today as the Technical Institute Program of Training It is the purpose of such an institute to provide training in the various skills required in the industries. These skills may involve the various mechanical trades, laboratory technicians, and similar categories requiring from a few months to one or two years of specialized training. The second type of training can be typified by that

provided by engineering schools. It is the purpose of these schools to provide the professional technical leadership needed in any industrial movement. It is the practicing professional engineer who must be responsible for the technical growth and the application of new techniques and new equipment for the benefit of the citizens in the area served by the industries. In addition to this, it has always been the function of engineering schools to provide basic research which might eventually be expressed in terms of new and beneficial devices and also in the operation of testing facilities for the industries.

#### Research Is Essential

The effective industrialization of any area requires the provision of adequate research and development of testing facilities for the use of the industries in that area. There are many advantages to be gained through operation of such facilities by engineering schools are responsible for providing

the trained engineering personnel required by the industrial development and if this personnel is to do the job adequately, the teaching staffs must keep abreast of modern developments. It is doubtful whether this can be done unless provision is made whereby engineering staffs may participate in research and development projects. It would appear therefore to be one of the responsibilities of tax-supported technical schools to provide and operate such facilities that must obviously be supported by public funds.

#### **Experts Employed**

The aeronautical laboratories at Texas A. and M. College are the outgrowth of this line of reasoning. The college administration must be given credit for the anticipation of such needs, as the Southwest contemplated bringing in industries other than agriculture to their area. References made herein are concerned in particular with the development of the aircraft industry as a part of a more general industrialization program. In anticipation of this development, President Gibb Gilchrist, then dean of the School of Engineering, initiated the organization of the Department of Aeronautical Engineering at Texas A. and M. Dr. H. W. Barlow, now dean of the School of Engineering, was brought from the University of Minnesota in September, 1940, to head the newly-organized department. Included in this initial action were plans for the development of laboratory facilities adequate to meet the needs of this industry, new to Texas. The wind tunnel laboratory was considered the most important and therefore was selected as the first project. The responsibility for the aerodynamic design of the new wind tunnel was placed in the hands of R. M. Pinkerton who came to Texas A. and M. in the fall of 1941 from the Langley Field Laboratory of the National Advisory Committee for Aeronautics where he had been engaged in aerodynamic research for 12 years.

The project was presented to the Texas Legislature in 1943 and an appropriation of \$60,000 for the next biennium was granted for construction of the initial stage of the new Aerodynamics Laboratory. W. E. Simpson, consulting engineer from San Antonio, was employed to design the structure and draft plans and specifications for construction of

the new laboratory. College supervision of the project was handled under direction of R. E. Spence, manager of the construction program. Inspection trips to the laboratory at Langley Field, Massachusetts Institute of Technology, California Institute of Technology, and company laboratories in the Los Angeles area were made by those individuals in order for them to familiarize themselves with modern wind tunnel structures. It was then decided to build an Eiffel-type wind tunnel comprising an entrance cone, a 7 x 10-foot test section, and an exit cone of approximately 70 feet in length. The main body of the wind tunnel was constructed of reinforced concrete since that material was less critical and it was believed that such construction would tend to eliminate excessive vibration troubles. The necessary laboratory building to house the office, computing room, observation room, and shop facilities required in the operation of the wind tunnel was constructed. This unit was completed in June 1945 and paved the way for development of aeronautical laboratories needed in the Southwest. Continuation of the project was guaranteed by the Legislature in 1945 with a further appropriation of \$45,-000. These funds will be used to purchase and install a drive motor and fan, and for construction of the power line from the campus power plant to the college airport where the new aerodynamic laboratory is located.

#### Will Aid Industry

This laboratory with the installation of the 900-hp. drive motor will provide a wind velocity through the 7 x 10-foot test section of approximately 150 mph. The type of testing and research that can be done in the present tunnel is, of course. limited by lack of a modern 6-component wind tunnel balance. Such equipment is necessary for measurement of all the forces involved in the flight and control of aircraft. In spite of this handicap, there are many essential investigations which can be and will be conducted either for aircraft industries or through contracts with governmental research agencies. As a typical example of such studies. reference is made to the problem of cooling of modern aircraft. In an effort to reduce external resistances. the airplanes of today are being made

#### Our Front Cover

At Independence, Texas, stand these ruins of main building of Female Department on original campus of Baylor University, chartered by Republic of Texas in 1845. Institution was moved to present location at Waco in 1886.

Original campus is now Baylor University State Park.— Photo thanks to Magnolia Petroleum, Company.

progressively cleaner. Inherent in this cleanup program is the complete enclosure of the aircraft power plant. The problem of efficiently providing adequate air for the cooling of the engine becomes an increasingly important and difficult problem. Problems of this nature can best be handled in a wind tunnel where precise control of the flow can be made and pressure measurements of various kinds either around the surface of the body or by means of pressure survey measurements in the wake of the body will provide the data needed for analysis of the cooling effectiveness. Even the basic forces on airplane surfaces can largely be determined by pressure distribution measurements.

Plans for future developments of the wind tunnel laboratory will enable a more complete provision of modern facilities required for continued development of more efficient and satisfactory aircraft. Several developments are contemplated and preliminary design estimates have been made so that as soon as additional funds are made available, development of the laboratory can proceed without undue delay. One of the first additional stages will be completion of the tunnel as a return type. This construction will no doubt be of steel and will permit continued recirculation of air within the tunnel.

It is believed that the provision of this laboratory and the continued development of such facilities will make a very real contribution toward bringing into Texas some of the advantages of large industrialization as a parallel activity to the agricultural industries of this area.

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#### MEMBERSHIP QUALIFICATIONS, TEXAS SOCIETY OF PROFESSIONAL ENGINEERS

A Member shall be a legally registered Professional Engineer in the State of Texas. This classification shall compose the active membership. Every member of the T.S.P.E. is a member of the National Society of Professional Engineers.

A Junior Member shall be a graduate of an engineering school recognized by the Texas State Board of Registration for Professional

Membership Application should be mailed to Chapter of applicant's choice.

# "Wassamatta You!"

Several years ago, while standing on the corner of Nogalitos and South Flores Streets in San Antonio, Texas, I observed two native Latin-American voters in Model-T Fords, free-wheeling in opposite directions, their heads cocked outside the windshields, collided with quite a bang. After the crash when both Model-T's had settled back on the asphalt pavement and regained equilibrium, one of the native voters yelled out, "Wassamatta you?" Whereupon the other native voter screamed in reply, "Wassamatta me! Wassamatta you; you, wassamatta?"

Now your Executive Board assigned the Chapter Activities Committee the responsibility of inaugurating definite plans which will acquaint you, a member of this Society, with your members of the State Legislature. This assignment reminds me of Longfellow's "Courtship of Miles Standish," wherein Miles persuades John Alden to propose to Miss Priscilla Mullins for him; and she replies, "Speak for yourself, John."

Probably the best plan to inaugurate, now that the dogwood has bloomed and the candidates are busily readying themselves to take the stump, is the plan whereby each individual engineer takes upon himself the sacred duty of meeting the various candidates, familiarizing himself with their backgrounds, their ability, their attitude toward the Society, and then to participate actively in the elections by voting.

Get the right man in office this year. If you fail, don't come to the officers of your Society and holler, "Wassamatta you?" For I feel certain that they will reply, "Wassamatta me! Wassamatta you; you, wassamatta?

Olof Philippi, Chairman, Chapter Activities Committee.

#### 公

# Membership Totals 1,446

Records of State Headquarters show the following TSPE membership on May 29, 1946:

CHAPTER	MEMBERSHIP	
	5-29-46	Percentage of eligible engineers
Bexar	. 113	40.8
Brazos	. 39	46.0
Central Texas	49	33.6
El Paso	25	48.1
Fort Worth	124*	23.8
North Texas	. 252	31.9
Nueces	79*	32.6
Panhandle		57.3
Permian Basin	19	
Sabine	120	52.4
San Jacinto	. 315	25.6
Tom Green	19	
Travis		76.6
Lubbock Area	15*	
TOTAL	.1446	

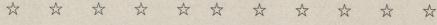
\*Decrease in chapter membership due to transfer of members from one chapter to another.

# Have You Paid Your Dues?

Section 2, Article IX of the Constitution reads as follows: "On June 1, the Texas Society shall notify any member who has not paid his dues, (and also his Chapter), that he will be dropped unless his dues are paid before July 1."

Section 4, Article VI of the By-Laws reads as follows: "A Member or Junior Member who has been dropped for non-payment of dues shall not be reinstated until one-quarter of one year's dues in arrears and current annual dues have been paid."

Please pay now, if you have not already done so, and let us include your name in the annual roster which will be published in July.



# Exum Optimistic Over Outlook For State-Employed Engineers

SIXTEEN state directors attended an executive board meeting in Austin May 7 and four sent proxies to consider a lengthy agenda of important TSPE matters.

President James P. Exum reported a charter had been presented to the Brazos Chapter, told of the State President's Conference in Columbus, Ohio, March 29-30, and expressed optimism over TSPE efforts to persuade the Texas Board of Control to consider favorably TSPE salary and fee recommendations. He told of conferences held recently in Dallas to seek ways and means of procuring salary increases for state-employed engineers.

National Director Robert Coltharp urged directors to favor increasing dues in state and national societies. He submitted a resolution which was adopted by the board favoring increasing the national dues to at least \$10 in 1947 to finance activities of the National Society. He reported on the charter presentation to the Nevada Society on April 26.

Trigg Twichell told of enthusiastic interest shown at a preliminary meeting in San Angelo where plans are under way to organize a chapter.

The directors also heard reports of plans to organize chapters in the Midland-Odessa area and in Tyler.

A contribution of \$25 was voted to support the NCSBEE.

No action was taken on a proposal to employ a legislative representative, in view of the impending employment of a full-time executive secretary.

Alexis McCormick, chairman of the Legislative Committee, discussed plans of his committee to support the state employes' retirement amendment. The directors passed a motion for TSPE to sponsor legislation aimed at increasing salary scales of state employed engineers and authorized that \$500 be raised to support this activity.

The special committee on appointment of an executive secretary announced it hoped to make a definite recommendation before June 1.

The directors received a progress report of the Fees and Salaries Committee wherein revisions to the schedule of minimum fees and salaries were recommended.

A lively discussion followed the registration committee's motion, made by W. A. McCracken, that TSPE seek a "Declaratory Judgment" to test certain aspects of the registration law. After numerous amendments to the committee's motion, the body voted to request the committee to submit specific cases of violation for the executive board's consideration.

J. Neils Thompson, chairman of membership committee, reported on plans to coordinate a Texas campaign with a national drive and said every TSPE member would be asked to aid the drive through his local chapter. A brochure of the plans is to be developed and distributed.

The Public Relations Committee requested additional time to formulate and present to the Society a publicity program.

The Chapter Activities Committee report, presented by Chairman O. A. Philippi, told of plans to acquaint TSPE members with members of the State Legislature. He said all chapters had been given a suggested program.

A somewhat heated discussion followed the report of a special committee on airports, resulting in the board's adoption of a motion disfavoring a permanent committee on airports, expressing interest in the professional engineering aspects of the nation's airport program, and urging the League of Municipalities to form an Airport Committee to collect and distribute information on the impending Airport program in Texas.

A discussion of union activities in Houston prompted a reconsideration of TSPE policy toward unionization, with special emphasis on sub-professional groups.

The meeting lasted more than five hours.



#### New Jersey Accepts Texas Membership Urive Challenge!

"Beat Texas. Pitch in right now... Help to pass the 2000member GOAL. For 1946, NJSPE needs... 100% renewals, 100% new members. EVERY MEMBER GET A MEMBER."

-from the New Jersey Engineer.

Texas Engineers, What are you going to do about it?

At a recent meeting of state society presidents in Ohio, Texas President Jim Exum challenged the president of the New Jersey society to a membership drive,

How enthusiastically the New Jersey engineers accepted the challenge is shown in the above advertisement which was printed in the New Jersey Engineer, society publication of that state.

It's now up to every Texas engineer to show the folks up in New Jersey that Texas doesn't wind up in second place any time two states are concerned.

Stuff some application blanks in your pocket and get going, fellows. Let's build Texas membership up to 2,000 before the New Jersey fellows have time to put out another issue of their magazine!

# The Engineer and Public Relations

By HARRY C. WITHERS, Managing Editor, Dallas News

WHENEVER I come into the presence of men educated in science I am beset by an inferiority complex which makes the occasion embarrassing to me.

Probably because I am unable to draw a straight line or drive a nail without bending it, I have a profound admiration for the

fellow who can plot curves and tangents or calculate strains and stresses with exactitude.

My wholesome respect for engineers dates back to my boyhood when I heard a song with the line, "Oh, the engineers have hairy ears", etc.

I am in some doubt as to what the term engineer means.

Webster is not much help to a layman looking for a specific definition. An engineer, he says, is one who designs; also a plotter; also one who manages or runs an engine; engine driver.

Engineering, Webster says, was originally the art of managing engines. In its modern and extended sense it is the art and science by which the properties of matter and the sources of power in nature are made useful to man in structures, machines and manufactured products.

#### Importance Stressed

When that definition is applied your profession becomes responsible for the physical progress of civilization.

Unless the properties of matter and the sources of power in nature are made useful the human race can no longer exist except as savages.

Thus the welfare of mankind is more closely held by you than by any other single group.

Webster lists 57 varieties of engineering. I am sure there are some he overlooked. So it would be unfair to bracket you with Mr. Heinz's products. You may be plotters, but you are not pickles.

Texas, through the bill providing for the registration of professional engineers, recognizes only 14 classifications. No doubt all the varieties listed by Webster are practiced by those within the 14 classifications recognized by the Texas law.

Certainly Texas does not seem to be short of engineers. I understand the number registered now exceeds 5,000. Five major schools of engineering in Texas are turning out new graduates every year. The University of Texas, I understand, graduates about 150 a year. Graduates from these Texas schools are recognized everywhere in the United States.

Without these men trained to utilize the properties of matter and the powers of nature the rest of us would be unable to sustain life at a comfortable level.

We would have no decent homes in which to live, no modern transportation. Our cities would be without water, lights, sanitation. The land you have made fruitful would be arid desert. The communities in which we live would become veritable pestholes.

Within my lifetime you have developed numerous facilities for comfortable living—the telephone, the electric light, the automobile, the radio, the airplane, artificial refrigeration, air-conditioning—even the atomic bomb.

Many of these devices are credited to scientists or inventors, as distinguished from engineers, but the basic calculations and the development of their ideas depended upon an engineering background and their practical utilization by the public required the knowledge and skill of a professional engineer.

Not only have you brought conveniences and comforts into the daily lives of all the people, but you have contributed largely to the spread of culture.

#### Public Should Know

Without the things you have developed and applied to public use opportunities for the masses to obtain and enjoy the finer things of life would be seriously circumscribed. Culture would be restricted to provincial limits almost completely.

It was suggested that I discuss public relations, to point out how you should get over to the public what your profession means to the comfort and welfare of the people. I don't know what you are doing in that respect, but if you do not have a public relations program you are one of the very few important groups that do not.

Occasionally I see copies of THE TEXAS PROFESSIONAL ENGINEER. They are intended to keep your members informed about what is going on in your profession. In that respect I am sure they are doing an admirable job.

They do not reach the general public with which I assume you wish to build good relations. Perhaps you need a good public relations expert who knows how to tell your story to the public.

Probably the first medium you think of using is the daily newspaper. Let me warn you that in these days of newsprint shortage your story will have to be newsworthy and important to rate space in a daily newspaper.

But if you make real news available to the daily newspapers they will find space for it on the basis of its reader interest. They do it for every other profession.

Certain self-centered professions which have not felt the need for good public relations find themselves in trouble now.

The medical profession thought itself above the influence of public opinion and is now in a serious fight against socialization and government control.

Industry and business regarded the details of their operations as none of the public's concern and you know very well what government has done to them.

Like you, these groups have been meeting among themselves to discuss their troubles, but have failed to take the public into their confidence.

In a recent issue of TEXAS PRO-FESSIONAL ENGINEER I read that your organization was opposed to the Magnuson and Kilgore bills. If you had reported that fact to the daily press while it was still news and shown briefly why you thought such measures are opposed to the public interest the newspapers would have made known your position to the public.

If your reasons were valid you could have gone to your congressmen with stronger public backing that would have relieved you of any charge of selfish interest.

I think whatever you do to promote public relations must be done with the thought of the public welfare ahead of your own special interests.

As the chief designers of the facilities essential to the comforts and conveniences of the public your obligation to protect the public welfare transcends your special interests.

#### Huge Task Ahead

The herculean task of rebuilding a war-torn world, of reconverting the machinery of war into the machinery of peace presents to you not only an opportunity but a responsibility.

Whether you shall be permitted freely to accept that opportunity and fully discharge that responsibility may depend in large measure upon your good relations with the public.

I am sure you realize that under the queer philosophies which now control this government we have arrived at the forks of the road.

We must choose between the fork that will lead us to the recovery of our economic freedom or the one that will take us farther toward regimentation, socialization and complete government control.

If we take the first fork we can restore an economy of free enterprise which will permit the maximum production of goods and services. We will recapture the incentive to initiate, to improvise, to take risks.

If we take the second fork our free enterprise system will wither and die, free markets will be undermined, profits will disappear. We will be enslaved in an economic system in which Washington will direct us when to reap and to sow, when to build or destroy, when to spend or save, when to work and play.

Surely you do not need for me to cite illustrations of the present-day trend. It is more than a battle between capital and labor. It is a worldwide war against capitalism.

Its formula is planned socialism the world over. Its strategy is to attack free enterprise on every front by strangling markets and eliminating profits. High taxes and support of co-operative movements, free of taxes, are its weapons.

This war has won in virtually every important country except the United States. Its philosophy was imposed by dictators in Germany,

Russia, Italy and Japan. France adopted it without dictatorship before the war and England espoused it just as the war was ending.

Look where they are now. The United States is the only solvent nation in the world. It is solvent because of its competitive capitalism. Neither Britain nor Russia could have come out of the war as victors without the endless flow of goods from America.

Other nations are promising their people all the good things of life. Our people have them. Other nations say that in a certain period of years we will bring you abundance. We have that abundance now and can multiply it many times over if we don't rob capitalism and know-how of their incentive. Why should we follow other nations along the strange paths of certain distress?

#### Capital at Fault, Too

I am not defending everything capital has done. No doubt it has committed many crimes for which it should be punished. There should be reasonable regulation to prevent repetition of such crimes. We must not let greed and special interest take command of our economy again, whether by capital or labor.

We need a new kind of capitalism in which public interest is the controlling factor; a capitalism in which the individual is a free agent but without the right to ride roughshod over the rights of others; a capitalism in which the individual is free to work at any job that is available to him.

What I am trying to say is that we need a system in which man is more important than the machine; in which the supremacy of the individual is recognized; in which no man is a slave and no man a master; in which he is owned neither by the government nor by his employer; in which he is free to exercise his talents and collect rewards commensurate with his ability.

But we don't want to substitute socialism for capitalism. We don't want to exchange individual freedom for regimentation. We don't want government competing with us in business. We don't want government saying we have to join a union before we can work for a living.

It seems to me our faces are turned in that direction. I can think of no

group that has more at stake than the professional engineers.

If you are to prosper you must be free to think and plan and build. You must determine whether you prefer to wear the harness of government regimentation or to operate in an atmosphere of free economy in which the rewards will accrue to each individual according to his worth.

If you make the latter choice you must get down off the fence. You must help make vocal the great passion for individual freedom which exists in the breasts of the great majority of Americans.

#### **Voting Important**

Most of these Americans, like you, are too busy with their own affairs to take an active part in government. Less than half of them vote in a national election; less than one-third in a state election and quite often less than one-fourth in a local election.

The result is government by default, not government by the majority. If the trend is not reversed we may expect a government not representative of the people, but subject to the will of whatever pressure group seems to be the most powerful. We are not far from that now.

This is a campaign year. The future course of America will be decided by the sort of Congressmen we elect this year. The sort of state and local government we have will depend upon the candidates you elect.

If you elect to have government by default, let the consequences be upon your own heads. They may not be happy.

I hope that as individuals and as a group you will do what you should to keep America free, progressive and prosperous.

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#### New TSPE Chapter Forming at Lubbock

Formation of a new chapter at Lubbock is occupying the minds of TSPE members in that area. H. N. Roberts has been named temporary chairman, aided by nine members already in the area.

An organization meeting will be called in the near future.

Two other chapters in Texas are in the process of formation to add to the existing 11 whose membership now exceeds 1400.

#### Blau Is Topnotch Research Consultant



HE never attended high school, but the president of San Jacinto Chapter has a string of college degrees.

Dr. L. W. Blau, topnotch research consultant for Humble Oil Company, born in Graben. Baden, Germany in 1894, came to the United States in 1909, and eight years later settled down to farming and ranching in the Texas Panhandle. In 1925 he received his first college degree from West Texas State Teachers' College. He later became an instructor at the University of Texas where he received his M.A. and Ph. D. degrees.

Dr. Blau has been a guiding light in TSPE activities for years. His opinions are highly regarded by all who work on projects of the Society.

He obtained more than 50 patents on gravitational, electrical, seismic and gecchemical methods of prospecting and on electrical well-logging. Author of numerous articles in professional journals, he is a Fellow in the American Association for Advancement of Science and the Texas Academy of Science He is a member and past president of the Society of Exploration Geophysicists and belongs to American Physical Society, Amercan Association of Petroleum Geologists. Mathematics Association of America, American Petroleum Institute, and for three years has been chairman of the API Georhysics Committee. Dr. Blau is also active in a dozen local scientific and social organizations.

# Ohio Engineer Registration Law Upheld In Injunction Test Case

THE validity of the engineers' registration law in Ohio was upheld in the Ohio courts recently when the OSPE sponsored an injunction suit against a firm allegedly permitting unregistered engineers to do engineering work.

The individual defendants were all perpetually enjoined from calling themselves engineers. The corporation was perpetually enjoined from permitting persons to do engineering work (excepting in the case of sub-professional work under the supervision of a registered engineer). The firm was further enjoined from calling anyone in its employ by any title implying that he is an engineer unless he is a registered professional engineer.

The injunction should absolutely preclude the individual defendants

from holding themselves out as engineers unless qualified by registration. It should also insure that the company will undertake engineering work only when done under supervision of registered engineers and restrain its advertising to within such bounds as the Board of Registration may determine to be proper conduct for all engineers.

The suit, filed in the name of William C. Kammerer, plaintiff, shows the engineers have a weapon which they themselves can use to enforce the law protecting their profession, without having to wait on any public officer. At the same time it does not impair the use of criminal penalties by the prosecutor, should he desire to exercise his authority under that part of the law.

#### 

#### Permian Basin Chapter Forming At Odessa

Nineteen engineers and junior engineers were present May 18 at Odessa to plan organization of TSPE chapter. Among them were T. J. Kelly, M. E. Spry, B. J. McDaniel, E. L. Killingsworth, J. H. Parmelly, C. J. Anderson, Ira R. Titus, O. C. Hallmark, S. C. Dougherty, G. T. Orenbaum, Lamar Cunningham, R. H. Spiller, M. R. Estes, K. E. Esmond, Harold G. Talbot, Fred P. Armstrong.

Robert Coltharp, national director, cutlined the history of the National Society of Professional Engineers and its member state organizations.

The local members of TSPE formed a temporary chapter organization, electing Jack Spry as chairman and James H. Parmelly as secretary. This temporary organization received and elected eleven applications:

The organization was named the "Permian Basin Chapter" with head-quarters at Odessa, and will include the following counties: Gaines, Dawson, Borden, Andrews, Martin, Howard, Loving, Winkler, Ector, Midland, Glasscock, Ward, Crane, Upton, Reagan, Reeves, Pecos and Terrell.

The temporary officers were authorized to petition for a charter.

#### Reading Heads Panhandle Chapter At Amarillo



PRESIDENT of the Panhandle Chapter at Amarillo is G. K. Reading, Texas Highway Department senior resident engineer. He has been building Texas highways since 1922, principally in the Amarillo area.

President Reading was one of the principal ramrods in getting the Panhandle Chapter organized and has been one of TSPE's biggest boosters ever since.

# 'Chief' Dowell, Hydro-Electric Engineer, Is Travis Mainspring



THE mainspring of Travis Chapter for 1946, is personable, energetic C. L. Dowell.

After serving as an aviator in the

first World War, "Chief" Dowell was graduated from Rice Institute in 1921 with a Mechanical Engineering degree. From 1921 until 1939, he was engaged in the design, construction, and operation of steam-Diesel and hydro-electric power plants and water systems, with the Central Power and Light Company. From 1939 until the present time, he has been associated with the Lower Colorado River Authority at Austin. He operates the LCRA hydro-electric plants and correlates rainfall and stream flow data for reservoir operations, power irrigation, and flood control.

Dowell is a member of the Capitol Area Waterworks Association, The American Waterworks Association, Scottish Rite Masons and Ben Hur Shrine.

He has two daughters, Jane, now attending the University of Texas, and Mary Patricia, in Austin High School.

#### 

# W. E. Street, Educator-Author, Is Leader of Brazos Chapter

PRESIDENT of Brazos Chapter is William E. Street, active in a number of engineering and educational organizations. To him goes a good share of the credit for organizing Brazos Chapter.

Head of Texas A&M College's Department of Engineering Drawing, member of the Society for Promotion of Engineering Education, American Society of University Professors, and the Texas Academy of Science, President Street has worked hard and long to improve engineering education and the professional status of engineers.

He is the author of a number of books, bulletins, papers and addresses of wide circulation in educational and technical circles.

Before going to A&M in 1941 he had held a similar position in Texas Technological College from which he had previously received his B.S. and Master's degrees.

A member of several national committees of the Society for Promotion



of Engineering Education, his work in the field of engineering drawing has been given nation-wide recogni-

#### Faltinson Is Nueces Chapter Wheelhorse



WHEELHORSE of any organization, particularly a newly-established one, is generally the secretary, to whose lot falls not only his own duties, but every other chore not proved the definite responsibility of someone else. Capably and enthusiastically filling this post for the first two years of Nueces Chapter's existence, Roy Faltinson was recently awarded a well-deserved vacation from the secretary's labors by being elected president for 1946.

Roy is well known to the engineering profession throughout the state through his work with the Texas Highway Department since 1929. He served as assistant engineer of road design at the Austin office until 1939 when he went to Corpus Christi as assistant district engineer.

Highway maintenance has been Roy's responsibility there. Among innumerable other calls on his time, Roy is frequently consulted in connection with highway planning by local or civic agencies in all the counties of his district. However, with all the "headaches" of his job, Roy cheerfully takes the time and trouble necessary to meet many emergency needs of Nueces Chapter in addition to his routine duties.

Roy is a Texan by adoption. His birthplace was Conrby, Iowa, and he studied engineering at Iowa State College at Ames. He was with the Alabama Highway Department five years before coming to Texas.

# Death Takes Henry C. Porter, Highway Research Engineer



Henry Cyrus Porter, research engineer in the Texas Highway Department, died at his home in Austin May 31, after an illness of several weeks.

He was born in Rockdale, Texas, Sept. 3, 1386, was educated in the Rockdale Public Schools and at the University of Texas, where he completed his engineering education in 1912. Fe worked on construction of the White Rock dam for the City of Dallas, 1909 to 1911, and served as Kingsville city engineer until May, 1917, when he enlisted in the first Officers Training Camp at Leon Springs Commissioned a first lieutenant in the Corps of Engineers, he was assigned to the 315th Engineers of the 90th Division, serving as company commander, regimental supply officer and regimental adjutant. He

had charge of operation of railroads in the 90th Division Area of the Army of Occupation in Germany. He was discharged a captain in August 1919 and returned to Kingsville as Kleberg County Highway Engineer. In May 1922 he was appointed division engineer of the State Highway Department and remained with the Department until his death, serving as division engineer, engineer of road design, and resident engineer on several large construction programs. Since June 1932, he was engaged in soil research work that gained national recognition. Mr. Porter was recently awarded a certificate and badge for 25 years service with the Texas Highway Department.

He was a member of the American Society of Civil Engineers, the Texas Society of Professional Engineers, and for several years served as a member of the Department of Soils Investigation of the Highway Research Board. He was also a member of the Phi Gamma Delta Fraternity.

Mr. Porter is survived by his widow, Grace Bludworth Porter, and his son, Louis Henry Porter, medical student of the University of Texas.

Henry Porter set a high standard for TSPE members of all ages. Not only did he give vocal support to the program of the Society; he gave active personal support. The most recent example of this was his work in behalf of the Travis Chapter drive for funds for the full-time paid secretary of TSPE. That Travis Chapter nearly doubled its quota is largely due to his efforts. He worked hard for the benefit of the profession at a time in life when he knew he could reap no personal benefit from his contribution.

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#### M. V. Greer Named Traffic Engineer



M. V. Green has recently returned to the Highway Department after nearly four years leave of absence for service in the Armed Forces. He has been appointed to the position of Traffic Engineer, attached to the Maintenance Division, and will rebuild an organization to resume the work of the Traffic Division that was discontinued during the war. Before the war, he was employed by the Department for approximately 13 years, the last two years in the position of Assistant Traffic Engineer.

Mr. Greer was commissioned in the Army in May, 1942, and after spending a short time in training at Camp Claiborne, was assigned as first lieutenant to the 331st Engineers. He served twenty-eight months with that unit in Alaska, Canada, and the Aleutian Islands. On his return to the states, he attended the Officers Mechanical Equipment School at Fort Belvoir, then was assigned as Traffic Engineer to Oak Eidge in the Mannattan Engineer District, where he completed his military service.

#### Seven More Added To Brazos Roster

Seven new members were enrolled in Brazes Chapter at a May meeting in Bryan.

The chapter now lists as members 56 percent of the eligible engineers in the area, making it the second largest chapter, on a percentage basis, in Texas, although it is the youngest chapter.

#### Aeronautical Wind **Tunnel** Explained

Central Texas Chapter members heard a discussion of the Texas A&M Wind Tunnel following a dinner April 15 in Waco. T. R. Spence, who was in charge of the tunnel construction and Professor Pinkerton of the A&M Aeronautical Engineering Department, illustrated their presentation with drawings, diagrams, and photographic slides. C. H. Leighton, construction supervisor on the tunnel, explained certain engineering problems involved in the field work.

The chapter approved applications for membership from Byron Reese, T. K. Lagow, R. J. Potts and A. D. January.

#### \* \* \*

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#### Travis Entertains Doctors, Candidates

On May 16 the Travis Chapter held a barbecue, having as guests the doctors and the candidates for the Legislature from the Travis Chapter area. Instead of conducting the usual order of business, speeches were heard from the doctors and legislative candidates. Among the physicians present were Dr. Charles Hardwicke, and Dr. Henry Hilgartner, president and vicepresident, respectively, of the Travis County Medical Society. Candidates for the Legislature present were William George Richards, C. V. Lansberry, Lee Satterwhite, George Calhoun, Obie Jones, and Dr. Joe Love.

Travis Chapter plans another barbecue in the near future, with lawyers as guests.

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#### Unity, Cooperation Importance Stressed

Unity and cooperation were advanced as means by which engineers may secure due recognition, improvement of economic status and protection from union organization when 44 members and guests of the Bexar Chapter heard J. T. L. McNew talk on "Engineers as Prophets of Progress."

McNew, vice president for engineering at Texas A&M College, was introduced by program chairman F. S. Maddox at the May 6 dinner meeting of the chapter.

The talk stimulated a discussion by members on dangers now facing the profession from union rackets.

Three new applications for membership and one for reinstatement received action.

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# Engineer Council Is Organized

Organization of an engineering council to serve in the Sabine Chapter territory is in the making with R. B. Cruise named chairman of a special committee to discuss the proposition and to plan for its presentation to other engineering bodies for approval. Assisting Cruise on the committee are: H. Marlow, G. R. Morgan, H. K. Rupp, H. A. Barr, R. C. Debney, F. W. Fleming, C. T. Warren, Jr., R. E. Killmer, D. S. Kaufman and Mr. Traube.

#### West Texas Highway Builder Is Dead



Earl Beavers, 45, veteran West Texas highway builder, died in San Angelo May 1, following an illness of nearly six months. A senior resident engineer with the Texas Highway Department, he had followed his profession for 27 years in the West Texas area, most of which was at San Angelo.

A native of Arkansas he came to Texas with his family when he was two years old. In 1920 he married Miss Elizabeth Anne Webb, who survives him. He leaves also a daughter, Ann Ross; his parents, Mr. and Mrs. J. E. Beavers, two brothers, V. L. and Marvin G. Beavers of San Antonio and two sisters, Mrs. Pete Sellers and Mrs. John Stephenson, both of San Antonio.

The day before his death the state highway commission at College Station announced a meritorious service award in recognition of his long tenure with the state highway department. The award was announced at the annual highway short course which he had consistently attended until this year.

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#### Sabine Chapter Publishes Paper

The first monthly issue of the SA-BINE ENGINEER came off the press in April. It is a four-column newspaper with four pages of pictures, copy and advertisements published by the Sabine Chapter at Beaumont.

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#### North Texas Studies Parking Problem

As city planners everywhere concentrate on building more and better expressways to carry traffic into downtown areas, North Texas Chapter has been wondering what will be done with the vehicles when they do get to town.

A resolution submitted to Dallas officials urged creation of an automobile parking authority with power to establish adequate parking facilities.

Legislation empowering a city to create a parking authority will be necessary. Such legislation has been passed in several other states, including Minnesota and California.

"Traffic conditions in the downtown sections are becoming more intolerable, and downtown business is being threatened with decentralization," the resolution said.

"The present traffic conditions and inconveniences are only an indication of worse conditions which are near at hand. Having developed a modern city plan with a special regard for tringing traffic into the central business district with more facility, it is of the utmost importance that provisions be made for the relief of traffic congestion."

#### North Texas Chapter Hears Dallas Editor

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North Texas Chapter members heard a talk on public relations by Harry C. Withers, managing editor of the Dallas Morning News, at the chapter meeting May 13. Seventy members were present.

Secretary George E. Smith, Jr., reported 27 new members had been added to the North Texas Chapter since the last meeting and 40 since January 1.

Past President A. F. Mitchell, member of the State Registration Board, urged engineers to familiarize themselves with the engineering license law.

T. C. Forrest told of a meeting in Waco May 8 called to study unionization of professional engineers. It was pointed out that the C.I.O. in Houston had organized there with 15 charter members and that 15 more engineers had joined the group subsequently. He said the strength of the union should not be minimized and urged immediate action to solve the problem of engineers' unionization.

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#### 'Know-Legislators' Plan Under Way

Chairman O. A. Philippi of the Chapter Activities Committee made a report to the State Executive Board May 7 on a plan put in motion to make all TSPE members better acquainted with State Senators and Representatives.

In line with this plan, he announced Travis Chapter had invited all candidates for the State Legislature to its May 16 barbecue. The San Jacinto Chapter has invited members of the Legislature to its meetings and has retained a State Senator to represent the chapter in revising Houston's building code.

Philippi said all chapter secretaries have been asked to furnish his committee with copies of chapter bulletins to aid it in serving as a clearing house on chapter activities.

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#### Army Commends Maj. Walter Youngs

Major Walter C. Youngs, Jr., has received the Army Commendation Ribbon for outstanding service in connection with development of the atomic bomb. Major Youngs, who is now stationed at Oak Ridge, Tenn., served at the Clinton Engineer Works of the Manhattan district from May, 1943, until August, 1945. Well known in TSPE circles, he is a former senior resident engineer with the Texas Highway Department.

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#### Hicks Allen Given Corpus Christi Post

Lt. Col. Hicks H. Allen has been appointed Corpus Christi's Director of Public Works, reporting to his new job early in May. He returned several months ago from active duty with the Corps of Engineers in the China-Burma-India Theater. He was formerly assistant district engineer with the state highway department at Dallas.

\* \* \*

#### Magazine Reviews UT Engineering

The past, present and future of the University of Texas College of Engineering are reviewed and discussed in a historical issue of the Journal of Architecture, Engineering and Industry, published in April.

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#### Atomic Age Discussed By Five Scientists

Five widely-known Houston scientists, all holders of Ph. D. degrees, temporarily laid aside the problems of their own specialized fields May 8 to take a sweeping glance at the social order of the atomic age.

The occasion was the inauguration of a forum sponsored by the Houston Engineers Club to discuss in lay language the implications of science for organized society in a complex day.

Some 150 engineers met at the club's headquarters to hear papers and join in a running fire of questions directed at the speakers.

Before adjourning the group went on record as opposed to a proposal to unionize professional engineers.

Dr. J. Brian Eby, consulting geological engineer, who only a few months ago concluded an inspection tour of conquered Germany, saw oil—and not the atom bomb—as the prize for which the United States, Britain and Russia are contending. Serving as a backdrop to the epochal diplomatic struggle is the age-old desire of Russia to chart a corridor to the warm waters of the Mediterranean, he said.

Dr. Andrew McMahon, consulting physicist, who spent two years on the atom bomb project, saw release of atomic energy to industry as a definite possibility within the next two decades. He did not visualize an atomic-powered auto within the near-future.

Dr. L. W. Blau, research consultant for Humble Oil Company and local president of TSPE, presided over the meeting. He turned an acid tongue loose on the proposal to unionize engineers.

Economic trends were reviewed by Dr. Charles F. Hiller, director of the School of Arts and Sciences at the University of Houston. He warned against release of price controls at this time.



#### Yeager Heads Sabine

George A. Yeager, first vice president of Sabine Chapter, has assumed leadership of the organization in the absence of C. R. Eisler, president, who is in foreign service for the Texas Company.

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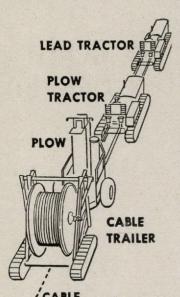
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This cable is part of the Bell System postwar construction program which aims at achieving prewar speed of long distance service.

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#### Abrams Is Named Military College Head



A North Texas Chapter member has been named president of Texas Military College at Terrel. He is Lt. Col. B. B. Abrams, recently released from army duty.

Abrams served as head of T.M.C.'s engineering department for six years and was City Engineer for the city of Terrell for two years. A 1935 graduate of The Citadel, he is a member of the American Institute of Mining and Metallurgical Engineers and has been an active TSPE member since 1938.

As reserve officer when war came, Abrams entered active army luty in the Corps of Engineers, later completed a tour of duty in the office of the Chief of Ordnance. He served as aide-de-camp to Major General J. S. Hatcher in the Mediterranean and European Theaters. Later he was detailed to the general staff in Washington and assigned to the Legislative and Liaison Division in the office of the chief of staff.

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#### On City Charter Work

Ben F. Shipley and W. C. Holland, Beaumont members of TSPE, have been elected to positions on a city charter commission to study drafting of a new form of government in Beaumont.

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#### Civic Responsibility

We are told that we must tell the public about the engineers.

We engineers are proud of our accomplishments, and we are justly proud of them.

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We have dug out of the ground more minerals since 1900 than were dug out in human history before 1900, and this is true of the world, not only of the United States. We have used these minerals to build the wheels of industry and to drive them.

Telling only a small part of the story, we have built over 30 million automobiles, more than 25 million telephones, over 20 million radio sets, and it is said that no city on earth is more than 60 hours' flying time from any other.

Yet we feel constrained to tell the public about the engineers!

Suppose that 100 years ago the engineering developments of the previous century had been removed; the operation would have been painful but not fatal. Imagine that today the accomplishments of the past century were taken away. Imagine that 200,000 scientists and engineers and their books were to vanish today: 140,000,000 people would freeze or starve to death.

But the burden is on us to tell the public about the engineers.

On the other side of the ledger, as far as society is concerned, we have learned how to knock down, burn, destroy in a few seconds what other engineers required years to build, and the whole world is worse off, and we have mortgaged the future of our grandchildren.

While it is quite apparent that progress in the applied sciences has not been matched with corresponding progress in applied ethics or morals or in applied religion, it is not so apparent that the application of engineering logic to social problems

might not have prevented the destruction of life and property and social values of the past five years.

However, engineers do not sit in the councils of statesmen; engineers were not sufficiently prominent at the San Francisco Conference to merit newspaper mention.

We have only ourselves to blame; we are wrapped up in our work, we are indifferent to the impact of our work on society, and we fail to discharge our civic responsibilities.

Writers and speakers urge the application of the scientific method to the social, that is the economic, political, religious, field: no other group is better versed in the use of the scientific method than scientists and engineers. They must now take a hand in the social field, or the white race may vanish from the earth.

-An Engineer.

#### Eight Texas Civil **Engineers Honored**

Eight Texas civil engineers were honored early in May at Waco with life memberships in the American Society of Civil Engineers during the spring meeting of the Society's Texas

In recognition of completing more than 35 years membership in the American Society of Civil Engineers the Society elected to life membership C. D. Ashbrook, San Antonio; C. M. Davis, Fort Worth; L. R. Ferguson, Dallas; J. Z. George, Dallas; S. L. McGlathery, Galveston; A. J. McKenzie, San Antonio; W. C. Mundt, Port Arthur; and Charles Schultz, Richmond.

Some 200 engineers from all parts of Texas attended the two-day meeting which included business sessions, lectures on current problems, and social functions. Visiting engineers were conducted on inspection tours of the General Tire Plant and the Owens-Illinois Glass Factory at Waco. 公公公

#### **Electron Conference** Scheduled at A. & M.

A three-week conference on electron and ion ballistics will be held June 24 to July 6 at Texas A&M College.

Lectures on various electronic devices will be given by such authorities as Dr. Ladislaw Marton of Stanford University and Dr. John A. Hipple of Westinghouse Research Laboratories.

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#### Two New State Societies Chartered

Two new state societies are being formed in Nevada and Michigan.

Representing NSPE, National Director Robert Coltharp of Austin presented the charter to the Nevada Society of Professional Engineers in late April.

The Michigan Society of Professional Engineers held its charter night meeting early in May. Its charter was presented by National Director C. George Krueger of Trenton, N. J.

#### Collins Returns From Naval Service

Lt. (j.g.) Howard W. Collins USNR, a member of Sabine Chapter since December 1943, has returned from service with the United States Navy. He was Island Commander of Makin Island in the Pacific just before his return. He returns to his position with The Texas Company as a member of the Engineering Department at Port Arthur.

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