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Convention Is Climax as---

# TSPE Reviews Its Greatest Year

WITH its program dedicated to the promotion of the engineering profession in the interest of public welfare and to the improvement of professional engineering standards, the Tenth Annual Meeting of the Texas Society of Professional Engineers, held in Houston January 14 and 15, was the high point of a year of progress under the direction of past President Elgin B. Robertson. The meeting was marked by a program of professional and civic interest and by an increasing indication that the business of the Society is being handled in an active manner by its Board of Directors and various active committees.

After the convention was called to order, Dr. L. W. Blau, president of San Jacinto chapter, introduced Elliott A. Johnson, Houston city commissioner, who welcomed the delegates to the convention. Mr. Johnson stressed the importance of the engineers' participation in the civic life of the community and mentioned particularly the efforts of San Jacinto Chapter in support of revision of Houston's building code.

Following the address of welcome, the convention entered into the first of its business sessions, and the roll call of delegates indicated representatives were present from 10 of the 11 local chapters of the State Society. The morning business session was concluded with the report of the executive secretary; a report which indicated the tremendous amount of work incident to the operations of the State Headquarters.

## Public Works Plans Told

The first formal address of the convention was delivered by Col. D. W. Griffiths, District Engineer, U. S. Engineer Office, Galveston, who explained the program of the Corps of Engineers relating to its civil functions, and outlined briefly the plans for navigation improvement and flood control to be handled by the Galveston District. Col. Griffiths expressed the opinion that local, district and state governmental agencies should obtain the services of qualified engineers in the preparation of their projects before submission to the Corps of Engineers for consideration in order to facilitate consideration by the Corps and to insure a sounder ex-

penditure of public funds for improvements.

"State Affairs" was the subject of the convention's second address delivered by Weaver H. Baker, chairman of the state board of control, who outlined the functions of the state government, citing particularly the tremendous tax income of the state and urging a more general interest on the part of citizens in the expenditure of these funds and the type of men elected to policy-making positions in our state government. Political freedom is a matter of immediate concern to all individuals, Baker said, and urged the engineers to participate more generally in the affairs of their communities and of their government.

## TSPE Work Outlined

The convention held a joint luncheon with members of the Houston Engineers' Club. Purposes and activities of the Texas Society of Professional Engineers were outlined by past President Elgin B. Robertson. His talk on "The Texas Society of Professional Engineers" was in the nature of an annual report and included recommendations for the future of our society. Robertson invited attention to the well established position of the legal and medical professions and pointed to this as a possible goal for the professional engineers. He cited the need for cooperative effort on the part of all branches of the engineering profession and called for the acceptance of responsibility by recognized leaders of the profession. He urged that no member accept assignment on TSPE committees unless he is willing and ready to exert his best efforts in the interest of the Society. The luncheon session was presided over by Joe Dannenbaum of Houston, chairman of the local arrangements committee for the convention.

Bertram E. Giesecke, president of the Texas Society of Architects and a

member of TSPE, opened the first day's afternoon session with an address on "Engineers as an Architect Sees Them." Mr. Giesecke stressed the mutual interest of the two professions and urged that engineers and architects get together for the solution of their problems. He urged that professional groups be practical in their public relations and that they take an active interest in governmental affairs and the men elected to conduct them.

## Bar Head Talks

Max H. Jacobs, public relations counsel of Houston, using "Publicity as a Professional Tool" for his subject, urged the professional engineer to tell the public of his problems and about his accomplishments. He, too, declared that as professional men and as citizens the engineers had definite responsibilities in connection with their government and the general life of their communities, and he predicted that if the engineers would undertake these responsibilities they would gain the sought-after recognition.

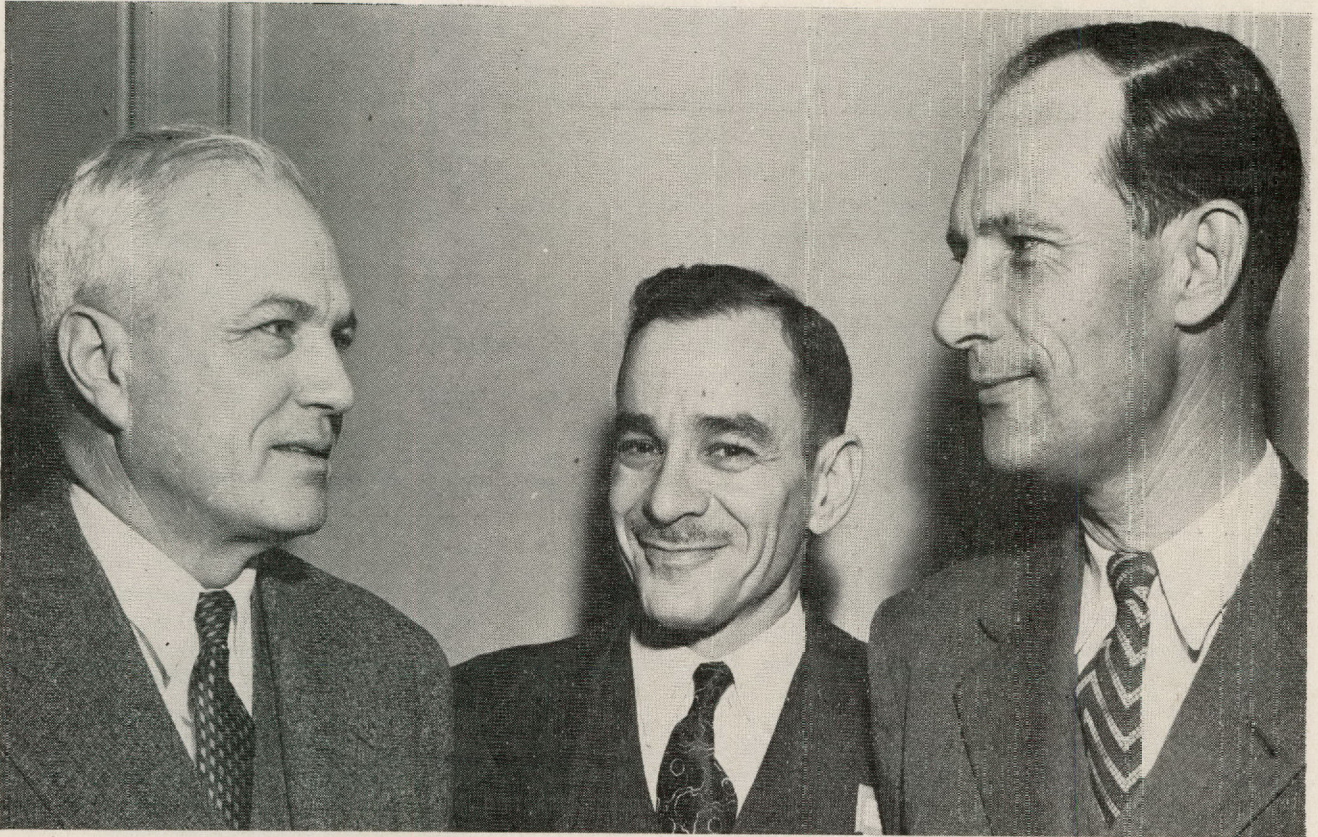
High point of the convention was reached at the annual banquet where more than 200 persons heard an address by D. A. Simmons, President of the American Bar Association, on "The Engineer's Responsibility as a Citizen." His address is published elsewhere in this issue.

During the course of the banquet, honorary memberships were conferred on Dr. E. P. Schoch of the University of Texas and Dr. F. C. Bolton of Texas A. & M. College. Presentation of the honorary memberships was made by President Elgin B. Robertson, and Dr. L. W. Blau, President of the San Jacinto chapter, acted as toastmaster of the banquet.

The forepart of the January 15 morning session was consumed by a continuation of reports of committees, high-lighted by the lengthy written reports of the Advisory Committee and the Fees and Salaries Committee.

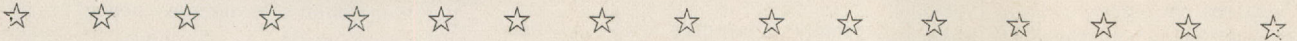
James Noel, Assistant Attorney General of Texas, gave the convention an explanation of the functioning of the Attorney-General's Department and answered some questions

# Leaders Meet At Convention



Elgin B. Robertson of Dallas, president of the Texas Society of Professional Engineers in 1945, its greatest year of progress, turned over the 1946 reins of leadership to James P. Exum of Austin at the recent convention

at Houston. Robertson (left) is shown in photo chatting with Exum (right) and Joe Dannenbaum of Houston, local arrangements chairman for the convention.



from the floor relating to the Engineer's Registration Act and the law covering the State bar.

The concluding luncheon of the convention was held at noon Jan. 15 and those in attendance heard a discussion of "The Broader Aspects of Education" by Dean W. R. Woolrich of the University of Texas College of Engineering. Dean Woolrich stressed the need for a broadening of engineering education and declared the future of our country and the world depend upon the technical education of many thousands of young persons in our schools and colleges. Dean Woolrich was introduced by Major Chas. P. McKnight of San Jacinto Chapter, who prior to his entry into the Armed Service was a member of the State board of directors. Major McKnight expressed gratification at being back in TSPE harness and noted the marked difference in Society activities as indicated by the convention this year and meet-

ings of the Society prior to his departure for the European Theater of Operations.

Perhaps precedent was established for future conventions by the first address of the afternoon session on Tuesday. The Rev. J. Lawrence Plumley, Pastor of St. Mark's Episcopal Church, Houston, was the speaker, discussing "The Spiritual Responsibilities of the Engineer." The Rev. Plumley declared that the world is out of balance in the relation between the spiritual and moral development of man and his material development. He urged the engineers to consider the need for a closer alliance between the affairs of the church and the everyday life of the men and women who compose our communities. He called for engineers to lead the way to proper thinking so that scientific advancement could be used for the betterment of mankind rather than its destruction.

The program of the convention was concluded Tuesday afternoon by a talk delivered by James P. Exum, the new President of TSPE, who told of the Society's plans for 1946 and urged the cooperation of all members of TSPE in adding new members and participating actively in affairs of the Society. The new president stressed the fact that he would appoint no one to a committee unless he had received prior assurance that the person so selected could and would serve in the best interest of the Society.

The final business session of the convention was concerned with the formal election and installation of officers and new members of the Board of Directors. Two resolutions were adopted, one condemning the preparation of preliminary estimates and reports without charge to the client, and the other demanding elimination of the practice of engineer bidding against engineer to secure contracts.

## TSPE Honors Educators---

# Schoch, Bolton Made Members

DR. E. P. SCHOCH and Dr. F. C. Bolton were awarded Honorary Memberships in the Texas Society of Professional Engineers at the annual meeting held in Houston, January 14-15. W. B. Tuttle, Homer Leonard, and the late T. U. Taylor, are recipients of previous Honorary Memberships.

The accomplishments of Dr. Schoch, a licensed chemical engineer, and of Dean Bolton, a licensed electrical engineer, are many. Their contributions to the advancement of the engineering science are nationally recognized, a record partly recorded by them in text books, in technical publications, and in the minds of their many associates and former students.

A review of Dr. Schoch's biography is also a review of Texas' development, a history of the University of Texas, and the advancement of chemistry.

He arrived in this country with his parents from Berlin, Germany, at the age of 10. His parents had become American citizens but had returned to Germany before his birth. His longest period of elementary schooling was three years in Germany. He attended elementary school one year in Boerne, Texas, and entered San Antonio high school at the age of 19. In five years he had completed his high school work and had taken a degree from the University of Texas. He holds the honor of being the first person to receive an engineering degree from that university. He received his M.A. degree from the University of Texas in 1894, and Ph.D. from the University of Chicago in 1902.

Dr. Schoch accepted a position as city engineer for San Antonio in 1894. A few years later he became associated with the University of Texas and rose from instructor to Professor of Physical Chemistry in 1912.

As Director of the Bureau of Industrial Chemistry, his research work is outstanding. His accomplishments include the development of a new process for producing wall plaster, a process for extracting potassium salts from aqueous mixtures, a process of obtaining illuminating gas



Dean F. C. Bolton (left) of Texas A. & M. college and Dr. E. P. Schoch (right) of University of Texas receive certificates of honorary membership in TSPE from Elgin Robertson, 1945 president of society.

from lignite, and many other worthwhile contributions to the development of science. Now at the age of 74, he is completing experiments begun in 1929 to develop new products including rubber and plastics from methane, a gaseous hydrocarbon which is the chief ingredient of natural gas.

Dr. Schoch's interest in advancing the professional and ethical standards of engineers is an inspiration to those with whom he is associated.

Dr. Bolton was born at Pontotoc, Miss., March 24, 1883, was educated at Mississippi A. & M. College from which he received the degree of B.S. in E.E. in 1905. He received the degree of M.S. from Ohio State University and an L.L.D. from Austin College in 1932. He has done graduate work at the University of Wisconsin, Cornell University and the University of Chicago. Dr. Bolton was instructor and subsequently associate professor of physics and electrical engineering at Mississippi A.

& M. College from 1905 to 1909. In 1909 he moved to Texas A. & M. College as head of the Department of Electrical Engineering and remained at this post until 1932 when he became Dean of the College of Engineering. Dr. Bolton was vice president of the A. I. E. E. from 1938 to 1940. At the present time he is executive vice president of Texas A. & M.

Both Dr. Schoch and Dr. Bolton have guided the training of thousands of engineers during their long years of teaching.

### ☆☆☆ Captain Returns From Military Service

Capt. Robert W. (Bob) Kotzebue, member of the North Texas Chapter, is at present on terminal leave from the army and has entered the air conditioning contracting and engineering business in San Antonio, under the firm name of Bell-Kotzebue Co., 1505 East Houston street.

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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 Engineers.

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

# NSPE Appeals for Funds

All members of TSPE have received a personal communication from Ritchie Lawrie, Jr., President of NSPE, telling of the program which our National Board of Directors has adopted. Beginning in 1947 the program will be entirely financed by dues which are then to be increased. The National Society is appealing to each member for contributions for the financial support of the program in 1946 in order to effectuate the program nearly a year earlier.

This call arrives as our own campaign for funds to launch operations with a full-time executive secretary nears successful completion. The same valid objections to our own method of providing funds apply to the plan of the National Board of Directors; and the same reasons which justified our own method also justify the request of the National Society.

I am making a contribution to aid in having the program of the National Society become effective at the earliest possible date. Each member of TSPE is urged (and we are all members of the National Society) to contribute. We must have a strong parent organization to coordinate and implement the efforts of the many State Societies.

In 1947 and thereafter it is intended that both the State Society and the National Society will be adequately financed by dues alone.

Your check should be made payable to National Society of Professional Engineers and be mailed to the Society at National Press Building, Washington, D. C.

—James P. Exum, President, TSPE.



# Membership Rises to 1216

The records of our State Headquarters show the following TSPE membership on January 30, 1946.

CHAPTER	Membership in Good Standing	
	1-30-46	11-23-45
Bexar .....	101	97
Brazos .....	22	21
Central Texas .....	39	42
El Paso .....	25	24
Fort Worth .....	128	121
North Texas .....	202	176
Nueces .....	74	65
Panhandle .....	50	51
Sabine .....	106	103
San Jacinto .....	267	261
Travis .....	185	183
(Lubbock Area) .....	17	15
<b>Total .....</b>	<b>1216</b>	<b>1159</b>

Decrease in chapter membership due to transfer of members.



# Our Front Cover

Typical of the many interesting vistas along fine highways in the wide open spaces of West Texas is skyline view on U. S. Highway 290 near Sheffield.—Photo furnished by Texas Good Roads Association.

# Engineers, This Is Your Society!

By JAMES P. EXUM, President, TSPE

(A talk delivered at the TSPE annual meeting in Houston)

**T**HIS is your Society; a dynamic, living, growing organization justly proud of its 1200 members and 11 active local chapters. Here it is, pulsing with power, filled with enthusiasm and imbued with an overwhelming ambition to advance the welfare of the engineering profession. Here is something that should be a challenge to your curiosity. You should want to know where it came from and what it has done. You should want to know what it plans to accomplish in the near future and, finally, what it hopes to be when its ambitions shall have been fulfilled.

Do you remember back in 1936 and 1937 when the Society boasted of two Chapters, Bexar and Travis, with a total membership of 80? Do you recall how Bexar and Travis Chapters grew? . . . 109 members in 1938, 180 in 1939—then came the organization of Sabine Chapter in 1940 to become the third Chapter and to help increase the membership to 333. San Jacinto and North Texas Chapters joined the ranks in 1941 and the membership was 482. The five Chapters had a healthy growth to 601 in 1942 and 693 in 1943. In 1944, Nueces, Fort Worth and Central Texas Chapters were organized and membership touched 900. Nineteen hundred forty-five welcomed the organization of Panhandle, El Paso and Brazos Chapters and, for the first time, it required four figures to record the membership of 1200.

## Much Accomplished

During this period of development and growth the efforts of the organization began to bear fruit. You often hear engineers say, "Well, when they begin to do something, I'll join." Some of you doubt that TSPE has accomplished anything. You are not up to date with your information, if that is what you believe. The record of accomplishment is long and distinguished.

The earliest accomplishment of TSPE was the modest contribution of effort and financial assistance which it made toward securing adoption of the Engineering Registration Act. From this small role in 1937, its activities were broadened gradually with increase in membership and financial ability.

In 1939, the 46th Legislature proposed legislation to abolish the Board of Water Engineers and the Reclamation department. The Society opposed these changes and was successful in retaining the Board of Water Engineers.

## Legislative Work

In 1941, the 47th Legislature proposed a general reduction in salaries paid to engineers, proposed to combine engineering boards with other boards of no relation, proposed Architects HB 630 and proposed diversion of surplus funds in the Engineering Registration Fund to the General Fund. Your Society opposed each of these proposals and not one was put into effect.

By 1943, the strength and resources of the Society had grown to the point where it was possible to sponsor constructive legislation. The Society sponsored the legislation which provides for the Lambert Coordinate System of Land Surveys, and was successful in securing its enactment.

The scope of activity was extended even further during the session of the 49th Legislature. Here the Society sponsored the State Retirement Act, secured emergency funds for the Board of Registration and sponsored increased appropriations for the activities of the Board of Water Engineers.

## Fee-Salary Schedule

Probably the most outstanding and far-reaching accomplishment has been the adoption and publication of a Schedule of Minimum Engineering Fees and Salaries. This schedule was first adopted in 1942 and was revised and republished in 1944. This schedule has received wide acceptance among employers of engineers and is used extensively and profitably by many consulting engineers.

## Magazine Grows

Since 1942 your Society has published a magazine distributed to the

entire membership. The first issue was a four-page number without cover or illustrations. The November-December 1945 issue, the latest, is a 24-page number with cover in color, well-illustrated and chuck-full of advertising. The magazine has been self-supporting since its inception and during 1945 returned a net profit of \$350.00.

All of these things have been and are important. The total benefits to the profession and to you are substantial. Probably the most substantial accomplishment, however, is the establishment of a means of effecting such meetings as this one. It is of inestimable value to the profession that opportunity is afforded for discussion of affairs and problems affecting the profession. It means something too, that through your Society engineers meet at 11 different points throughout the State and from four to 10 times per year in each of these places for the purpose of at least talking about the advancement of the profession.

The recitation of these accomplishments should convince you that your Society is a going concern, worthy of your support and capable of returning benefits in proportion to its size and resources.

## Your Help Needed

We have an organization, we have increased membership and resources. What shall we do with them? Will they be used to further the interests of the engineer? It all depends on you!

Are you willing to devote a part of your time to society affairs? Will you do your part in the membership drive, will you help with the chapter activities, will you actively serve when appointed to committees? In other words, are you ready to be a real Society member? If you are, and if you do, your Society has now a golden opportunity to make some really worth-while contributions to the welfare of the engineer.

We have the opportunity during the coming year to influence the outcome of several important events. This fall, the voters will record their wishes in regard to HJR 10 and HJR 49. Both measures propose constitutional amendments; HJR 10 provides

a retirement plan for state employees and HJR 49 fixes the distribution of the gasoline tax at present levels and prohibits diversion of these funds to other purposes. It is obvious why these amendments should be favored by engineers. HJR 10 favors state employees. The state is the state's largest employer of engineers. HJR 49 would guarantee the continuation of the highway construction program. The highway construction field furnishes employment directly and indirectly to more engineers than any other industry.

Early this year the State Board of Control will propose its recommendations to the Legislature on salaries to be paid engineering positions during the next biennium. The Fees & Salaries Committee should be alert to render valuable assistance here.

We should also remember that this is an election year.

With 1947 coming up as a legislative year, the Society's legislative plans should be perfected in 1946.

We should anticipate the appointments to be made to important boards and state departments and be ready with the Society's recommendations.

With organization, timely and intelligent action and financial resources, the Society can have considerable influence in matters pertaining to elections, legislation, appropriations and appointments. Successful action would reap untold benefit to the profession.

### Strengthen Chapters

If we are to be effective, we should examine the state of the essential factors, organization, action and resources. We should perfect our organization as rapidly and effectively as possible. We should determine that quick and effective action will come from each responsible committee and from the executive board. The factors or restraints which prevent action should be removed.

Our resources consist of membership, finances and publicity. Full employment of our resources would require that we utilize to the maximum advantage the talents of the individual member and seek to increase that membership. The responsibility for this lies principally with the local chapter; and, in the chapter, the membership and chapter activities committees are responsible. We should seek to strengthen these com-

mittees and improve their efficiency. We need better coordination between the activities of the State Society and the local chapters. Chapter committees should be guided by and coordinated with state committees of like nature. Increase of membership is closely related to increase in number of local chapters. The State Society should continue with its program for the organization of new chapters.

### More Funds Needed

We must be adequately financed. Our only source of income is from membership dues. Our income can be increased in two ways, through increased membership and increased dues.

If we are to operate on a reasonable basis, it has been estimated that we should provide an annual budget of from \$15,000 to \$30,000. Our present dues and membership provide an income of \$4,400. It has been estimated, perhaps over-conservatively, that a membership of 2,200 is the maximum we can expect to attain within the immediate future. With 2,200 membership and present dues, our income would be \$8,800. It is manifest that the Society needs an increase in dues if the desired budget is to be provided. An increase of dues from the present \$4.00 to \$8.00 would provide an income of \$8,800, based on present membership and \$17,600 from a membership of 2,200. The National Society has already made an upward revision in dues. Effective Jan. 1, 1947, the National dues will be increased from the present \$4.00 to \$10.00. If the State Society's dues are increased to \$8.00, the total National, State and Chapter dues would be \$20.00. You must be prepared to provide your Society with adequate finances.

### Magazine Aid Asked

Publicity properly used can be a valuable resource. We should see to it that effective use is made of the local press and other sources of publicity to forward and publicize our objectives. We should see to it that all needed support is given to the magazine. Your magazine is now operated on a voluntary basis and probably will be for some time to come. The Chairman of the Publications committee has a real job on his hands. He deserves your unstinted support in furnishing copy and ad-

vertising. This publication is doing a magnificent job and is one of our most valuable assets.

To summarize, here is our position as we see it today. In the past, the Society has shown a steady growth in membership and resources since the day it was organized. With increased membership and resources, the Society has gained the efficiency and ability to extend operations into broader fields. We now have a larger membership and greater resources than ever before, consequently our accomplishments should be greater than ever.

During the immediate future we will have the opportunity to do the following:

**To be instrumental in the adoption of two important amendments to the State Constitution.**

**To furnish authoritative and forcible recommendations pertaining to salaries for State engineering positions.**

**To advocate appointment of engineers to public boards and commissions.**

**To make friends with many important public officials before they are elected.**

**To increase the Society's membership and resources.**

**To aid in the enforcement of the Engineering registration act, and**

**To otherwise advance the welfare of the engineering profession.**

We are indeed fortunate to have these opportunities coincident with the ability to use them to advantage. If we take full advantage of our opportunities, we will have carried the Society a long step forward. Each step forward brings closer the attainment of your Society's objectives.

Each step forward increases your Society's ability to advance the welfare of the engineering profession, to secure compensation for engineering services commensurate with the required skill and responsibility, to gain public recognition and credit for the work of engineers.

With courageous action, unity of purpose, zealous endeavor and unselfish devotion to duty, the next step forward will be a long one. It is your Society—with your full support, it must succeed!



# The Engineer's Responsibility As A Citizen

By D. A. SIMMONS, Houston, Texas  
President, American Bar Association, 1944-45,

(An Address delivered at the tenth annual banquet of the Texas Society of Professional Engineers.)

WHAT is the engineer's responsibility as a citizen? Briefly, it is the same as that of every other citizen: to take an active and intelligent part in community, state, national, and now, world-wide affairs. In real estate law we have a quaint doctrine, that comes down from an old English case, called, "The Rule in Shelley's Case." In a law school examination one of the students was asked, what was the Rule in Shelley's Case, and he answered, the rule in Shelley's case is the same as in anybody else's case; equality before the law is the rule in Texas. Well, that is the same rule that applies in the matter of the engineer's responsibility as a citizen.

Whether the engineers generally have assumed that responsibility could only be determined by a careful check, one by one. Certainly some of the outstanding citizens of this country are, and always have been, engineers. Our first president, who earned the appellation, "Father of his Country," started in life as a civil engineer. He was the only man in our history who so impressed himself upon his fellows that, in being twice elected president of the United States, he received every vote in the electoral college.

The 30th president, yet living, was a distinguished mining engineer. His record of public and professional service was outstanding, and he by no means either caused or contributed to the world-wide depression which unfortunately occurred during his tenure of office. Although I belong to the opposite political party, I have the feeling that we treated him like the Hebrews treated the goat, in Leviticus XVI-21:

"And the Chief Priest lay both his hands upon the head of the live goat, and confessed over him all the iniquities of the children of Israel, and all their transgressions in all their sins, putting them upon the head of the goat and sent him away into the wilderness."

## Registration Law Cited

Of course, that is the way we treat some of our officials when we are looking for a scapegoat for our political and economic sins.

Perhaps one way to avoid that

would be to prevent the political and economic sins, and that's where you come in. Your statute says that your knowledge of mathematics, of the physical sciences, and of the principles of engineering are to be employed in the public welfare and to safeguard life, health and property.

More and more the men of your profession are participating actively in public affairs, not only in planning and construction, but in administration as well. This is all to the good, for it is in applied science that the modern world claims its superiority to antiquity. It is in the field of mechanical forces that we can claim an advance in civilization. Through inventions and appliances we have developed the five senses beyond the dreams of our forebears. Our seven-league boots are the trains, motors and planes. Whatever the Genii could do with magic, we can do with coal, oil, gas, steam, electricity and explosives. This is the age of science and of mechanism, and of a thousand wonders of sight, sound and movement.

Twenty-five years ago Einstein was asked if man would ever break open the secret of the sun's energy. He replied: "Certainly. Not today; perhaps tomorrow—but I hope it will not come for 50 years. I am afraid the world will not be wise enough to use the power sensibly."

Well, tomorrow is here in half the 50 years. Will the world use its power sensibly? Perhaps. It is more likely to if it has the facts, the implications, and is taught the consequences. And that teaching can best be done by practical and sensible men who are dedicated to truth and who are profoundly interested in the welfare of all mankind.

Awhile ago I said your responsibility was the same as that of every other citizen. I want to take that back, for I really believe that each man's responsibility is in proportion

to his intelligence, education and experience. To whom much has been given, from him much shall be required.

But aside from our special responsibility every citizen has a general obligation to society. With us, government is based upon consent. Ours is a government of law, and its characteristic features are local self-government, states' rights, and a central government of limited powers, checked and balanced against abuse. This government was willed to us by our forebears, and men have died, are dying, and will continue to die to protect our rights under it. They did not make this sacrifice that blind partisans, or the selfish, the foolish, or the reckless, might make a mock of free institutions.

## Indifference Is Foe

If democracy succumbs, it will be due to the fact that the people fail to exercise their powers, including self-restraint. The demagogue, seeking power and place for himself, magnifies the injustices and needs of each group and class, and promises favors in exchange for votes. It would be less immoral and less detrimental to the nation if he paid for the votes with cash, but he finds it cheaper to use promises, to be redeemed, if at all, at the expense of others. The natural tendency is for each individual and group to engage in a mad scramble for special privileges bludgeoned from the public at large by legislative favor. The answer obviously is that political power must be used only for the general welfare, and not for personal or group advantage.

Next to selfishness, I think the main foe of good government is indifference. I have heard it whispered that some engineers were too busy with their own affairs to participate in government. I do not believe that is true. His right to participate in government is certainly one of the most important affairs any citizen can have, and I am sure each one of us is fully conscious of the fact that in this field our group action determines the destiny of all.

Self-government has come to us out of mankind's unceasing struggle through the centuries. It is a great trust and responsibility. To be worthy

of it man must govern himself with dignity, with honor, with humility, with unselfishness.

### 'Progressive Conservatives'

You and I,—every citizen—must participate. It is relatively unimportant whether you are a progressive or a conservative, a Democrat or a Republican, a Mugwump or a Whatnot. The important thing is to participate actively in the affairs of citizenship. Most of you are probably progressive conservatives.

You are progressive—as progressive as science. You are conservative—as conservative as the multiplication table. You know that there are fixed natural laws that must be obeyed. You know that every effect must have a cause, and every action must have its consequence. These talents and characteristics are needed in government.

You know that modern civilization was built by work. Its continuance will require more work. The politician thinks it can be done by talk; and the reformer wants to pass a law or tinker with the machinery. You have heard them. Poverty and trouble should be abolished by law. Or, everyone will be happy if we put them in charge of the organization. Everything must be changed. If responsibility is concentrated, it must be dispersed. If it is dispersed, it must be concentrated. If terms of office are short, they must be lengthened. If they are long, they must be shortened. If we have the primary, it should be a convention, or vice versa. But the one that really irritates me is the childish belief that if you take legislative power from the legislature, judicial power from the courts, and administrative power from the executive, and put it in boards, bureaus and commissions, then everything will be lovely. It's still power, and it needs to be watched as much, and maybe a little more, than when in the hands of ordinary officials where it is checked and balanced.

To make our form of government work well, we need but one change, and that is a change in attitude in those people who are indifferent to their responsibilities as citizens. When you get this, you get everything: good officials, good government, good laws. I have never known of an instance of abuse of power or corruption in office, nor have I read of one in our history, that was not

cleaned up by an aroused citizenry as soon as they knew of it. And, as likely as not, when it was cleaned up, some of them went back to sleep again. Therein lies the difficulty. Democracy is the only form of government which requires the participation of the people, and hence is the most difficult to operate. In a great country like ours it must have a republican form. Therein lies its safety. But it functions only with the support of the good, the wise, and the honest.

Do you know that the Declaration of Independence and the Constitution were set up as standards for the good, the wise, and the honest? The Declaration of Independence, in its concluding paragraph, says:

**"By authority of the GOOD people of these Colonies, we solemnly publish and declare, that these United Colonies are, and of right ought to be, free and independent states."**

And, when the Convention of 1787 was about to make some dubious compromise to attract support to the Constitution being written, it was that great engineer, George Washington, who said: "Let us erect a standard to which the *Wise* and the *Honest* may repair, and leave the event in the hands of God."

And so, as I know this group is composed of the good, the wise, and the honest, I say you have an absolute obligation to participate actively and continuously in governmental affairs in order that they do not fall into the hands of the bad, the foolish, and the dishonest.

### Fear Is Deterrent

In conclusion, I wish to mention one other attribute that prevents many people from participating in public affairs. That is, fear. Fear that they will lose business, lose position, or make enemies. And so you may. The roll of martyrs is long, indeed and is not yet concluded. And some fear for our state and nation if we take our proper place in the world. To them I would quote a poem written in the dark days following the Civil War—days, also, of fear:

"But let our fears, if fears we have, be still,

And turn us to the future. Could we climb

Some mighty Alp and view the coming time,

The rapturous sight would fill our eyes with happy tears,  
Not only for the glories which the years

Shall bring us. Not for lands from sea to sea,

And wealth and power and peace, though these shall be,  
But for the distant peoples we shall bless,

And the hushed murmurs of a world's distress.

For, to give labor to the poor the whole sad planet o'er,  
To save from war and crime the humblest door,

Is one among the many ends for which God makes us great and rich.

The hour, perchance, is not yet wholly ripe,

When all shall own it, but the type

Whereby we shall be known in every land

Is that vast Gulf which lips our southern strand,

And, through the cold untempered ocean, pours

Its genial streams, that far-off Arctic shores

May sometimes catch upon the softening breeze

Strange tropic warmths and hints of summer seas."

And so I say we must overcome indifference, and put away fear, and make the influence of America the force for good our forefathers intended it to be. And, because I know you are going to give your full measure of support to that end—I salute you.



## Prock Is In Japan With Airborne Unit

Lt. George D. Prock is attached to the 11th Airborne Infantry Division which is now the Army's occupation unit in Northern Honshu. His detachment is stationed in an erstwhile Japanese shell-loading plant located at Sendai, Japan.

Lt. Prock is Assistant Division Medical Inspector and has been doing extensive traveling throughout Honshu and Hokkaido. He has learned to speak Japanese with a distinct Texas accent.

After a number of practice parachute jumps the lieutenant has qualified as a paratrooper.

# New Officers and Directors of TSPE



Photographed at the recent 10th annual meeting of TSPE in Houston were these 1946 officers and directors.

They are, front row, reading from left: R. L. Faltinson, Corpus Christi, director; L. W. Blau, Houston, director; James P. Exum, Austin, president; Trigg Twichell, Austin, 2nd vice president; W. W. McClendon, Houston, director; Robert Coltharp, Austin, national director.

Back row, from left: M. J. Gerhardt, San Antonio, J. Neils Thompson, Austin, L. B. Griffith, Waco and Austin, Harold A. Barr, Port Arthur, all directors; Elgin B. Robertson, Dallas, past president; Sam Davis, Amarillo, director; R. S. Guinn, Austin, secretary; and Charles L. Shirley, Houston, director.



## Broader Aspects of Engineering Education

Address prepared for annual meeting of Texas Society of Professional Engineers at Houston, Jan. 15, 1946, by W. R. Woolrich, University of Texas dean of Engineering.)

**T**HE history of the past 500 years indicates that those sections of the world which have experienced the most enterprise in scientific and engineering education have taken the leadership in expanding industrialization and creative development of scientific facilities and processes.

Some of our world powers have recognized this parallelism of industrial progress and technical education and in their colonization procedures have taken great precautions to concentrate their scientific and technical schools on the parent soil. By this procedure they have successfully prevented the provinces from becoming too industrially minded and have retained for the motherland the profitable job of processing and manufacturing the fruits and products of their provincial regions.

The technique of encouraging the provincial states to remain content with the total absence of scientific and technical education consisted primarily in propagandizing such provincial areas that the highest type—and the only type for which they should aspire—was cultural education. To as-

sist their colonies further to shy away from scientific education, these nations have proceeded to define the cultural education as including only those studies that were undebilitated by modern science, engineering and business.

### Dixie Lullaby

In the southern part of the United States, two protracted periods of this cultural indoctrination have been experienced—periods in which the entire population was lulled to contentment by the “words of wisdom” of “great educators” from distant points. Prior to 1850 most of this propaganda emanated from Great Britain and the European continent, but after the War Between the States the source of these hypocritical pronouncements was generally within the industrial area of the United States, known to

industrialists who ship goods as Official Territory.

Southern political leaders and educators have been too gullible and prone to accept this propaganda. If one had looked behind the scenes in Great Britain in the period between 1800 and 1850, he would have discovered that, while this doctrine of maintaining an educational system undefiled by scientific creativeness was passed on to the American continent, to Australia, and to India, within the English homeland technical schools were being nurtured at Manchester, Birmingham, London, Glasgow, and Edinburgh.

Likewise, after the War Between the States, the voices from the much heralded “cultured east” of the United States, while praising the cultural education that was reviving in the south, were themselves bringing into fruition Worcester, Sheffield Scientific, Massachusetts Institute of Technology, Rensselaer, Stevens, Cornell, Franklin Institute, and so forth, for the more serious business of developing an industrial empire.

While the southern part of this

nation of ours still moves under the handicap of too many of these provincial limitations, it is emerging with a militancy that is both inspiring and productive. In this emergence, scientific and technical education are taking a very active leadership. Unfortunately, there are still a number of men and women in the south and southwest who think that Official Territory is the seat of all that is good and glorious in scientific education. While southern and southwestern technical and scientific leaders are repeatedly jolted by announcements of southern-produced capital and other endowments being diverted back to Official Territory, there is evidence that the battle for equity is being won by the fighting south. When the south and southwest acquire enough confidence in their own territory—in its people, its institutions and its universities—they will put forth a brilliance equal to any within this nation's boundaries. Those who have money to invest may well invest it in Texas youth, Texas enterprise and in the Texas of tomorrow.

In this battle for equity in opportunity for the rising generations of the south and southwest, let us not minimize the great value of cultural education. It should be redefined to include those great truths and scientific principles so essential today in living a normal, intelligent life. Let us add that in 1946 no man can be considered cultured unless he has in addition to the classics a thorough knowledge of the fundamentals of mathematics, physics and chemistry, such fundamentals being essential to the normal man's understanding of what is transpiring about him.

### Curricula Revised

A review of the history of the development of engineering education in the United States reveals certain phases of such education that could frankly be appraised as less than cultural. There was a period from 1860 to 1900 when engineering education developed men of high technical skill but of something less than professional distinction. Less than five per cent of the curricula of many of our engineering colleges for the period up to 1910 was devoted to the humanities. Much of the criticism that is given out today in curbstone discussions of engineering education emanates from those of us who received our engineering instruction prior to 1910.

Recently one of our best-known engineers, a national figure who is highly respected, showed me the page proof of a criticism of engineering education he was preparing in which he was decrying the absence of cultural courses in the four-year curricula offered to engineers. He accepted the suggestion of the speaker that he review the curricula of some of our 10 leading universities to determine whether his criticism was justified. He found, to his surprise, that his criticism was based on his own experiences in engineering courses which he had taken between 1900 and 1906, but that the curricula of 1945 in the 10 universities considered were not unlike what he was about to propose.

When we face this problem of engineering education concentrated in the four- or five-year period, there are some arithmetical facts that must be recognized. Those who have labored with the Engineers' Council for Professional Development have wisely prescribed a common denominator, more commonly called the "minimum definition" of the engineer. In their thinking, the man who has attained his degree of Bachelor of Science in any of the engineering fields should have demonstrated proficiency in thermodynamics, mechanics, electricity, and hydraulics. In addition to this he should have a sufficient education in his own field of specialization to permit him to enter his chosen profession well cognizant of its special applications to engineering.

Since the typical student coming from our state system of education has reached only the mathematical level of algebra and plane geometry, may perhaps have had some instruction in physics and chemistry, and has had limited instruction in English, it follows that approximately 80 per cent of the first two years of his college instruction must be devoted to acquiring a fundamental understanding of physics, chemistry, trigonometry, analytical geometry, calculus, and additional English.

### Prolong Training?

This leaves the engineering college approximately four or five semesters in which to give the student his fundamental work in mechanics, thermodynamics, electricity, and hydraulics and to impart to him some knowledge in the field that he has selected as his major interest.

An analysis of the modern engi-

neering curriculum will reveal that approximately two-fifths of the time spent by the candidate in working for the bachelor's degree is given over to the preparatory courses useful as a foundation for his training. Another two-fifths of the time is devoted to engineering fundamentals and specialization, and one-fifth is devoted to English and the humanities. In terms of simple arithmetic, if more instruction in the humanities is to be added to engineering education, then the period of training must be prolonged to five years.

Many questions have been raised relative to the five-year curriculum. The Committee on Engineering Education after the War of the Society for Promotion of Engineering Education faced this problem with great seriousness for several sessions. A number of questions posed themselves. First, are we justified in spending state funds to give all engineering candidates a five-year curriculum when probably one-half of the men will go into operational performance in industry and will find the four-year training ample for their needs? Second, the present engineering bachelor's degree requires nearly as many hours of instruction as are required for the Master of Arts degree of the other colleges on the University campus. If we extend the engineering bachelor's degree requirements beyond the present curriculum, then the bachelor's degree in engineering will require more hours than are required for the master's degree in the other professional schools of the University.

There is a feeling on the part of many of us that it is better to grant the bachelor's degree for the four- or four-and-one-half-year program, then to encourage the men of scientific bent to return for their master's degree, and to grant this degree for the five years of work.

By this procedure students who have no great need for this advanced work will be sent into industry after four years of work, while the men of more scientific turn will be delivered to industry after five years of work; the one group to carry the bachelor's title and the other to carry the master's title.

In the report of the Committee on Engineering Education after the War, one section is set aside for the discussion of education on the technical institute level. The United States of

America has for generations been deficient in technical institute training. In Texas, at the present writing it is questionable whether a single institution can qualify to meet the requirements of technical institute training.

While Russia can boast upwards of 1200 technical institutes within the boundaries of the USSR, the United States does not have more than 50 institutions that can so qualify. Some effort is being made in Texas to bring this to the attention of the junior colleges and to set up a type of technical institution offering from two- to two-and-one-half-years' training which will send into southwestern industries men suited to become what the speaker prefers to call the top sergeants of industry—differentiating from the professional men who might be called the commissioned officers.

Before closing I would like to add something with regard to engineering research. A fundamental activity of scientific and engineering education, according to some authorities, is “. . . the fostering of research as a function collateral to teaching.” There are examples in American universities and colleges where the research objective has become commercial and has seriously disrupted the teaching personnel. If, however, it is accepted that research should have, primarily, an educational objective, with the material results only incidental to the educational process, then research within educational institutions will not become competitive with the educational function.

Creative research in the educational institution should be approached from a broad viewpoint. For example, a complete industrial analysis of the economic possibilities of a proposed plant for processing available kaolins might incite more creative inspiration and courageous industrial fronting than the invention of a new type of radio transmitter. The development of a new small industry is a creative enterprise of a very real type and may call for much more ingenuity than the invention of some new instrument or piece of equipment.

Probably the greatest mistake made in university and college research is the failure to follow through to the point of useful application of creative invention. Mr. Charles Kettering realistically refers to the three stages

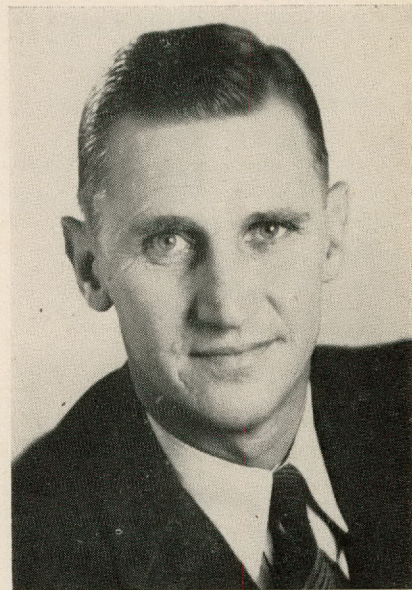
## Frank H. Newnam Returns from China

Frank H. Newnam Jr., after four and a half years of army service, has returned to a civilian position as engineer in charge of a newly-created technical and research division of Thorstenberg and Tamborello and Texas Construction Materials company, large producers of sand and gravel in the Houston area. He is a member of San Jacinto chapter of TSPE.

In addition to technical work with the production of sand and gravel he will furnish technical service and advice to all engineers and agencies using those materials.

Before entering the army in 1941, Newnam was with the Texas highway department for 10 years, serving as soils and base materials engineer. He is the author of numerous manuals and technical publications on that subject.

Newnam served for three years as an officer with the Galveston district, US army engineers, before going



Frank Newnam Jr.

overseas. He recently returned from a year and a half of service in China where he was a colonel in the corps of engineers and was chief engineer



of creative invention as (1) the idea stage, (2) the “shirt-losing” stage, and (3) the profit-making or mass-production stage. It is very necessary to provide the leadership and inspiration to guide the student through this “shirt-losing” stage, if he is to develop that confidence necessary to become productively creative in future years.

In every university scientific or engineering laboratory that has been established for a decade or more there are too many projects that have been discontinued because of lack of inspirational leadership from directing personnel through the second stage.

There are many examples of research departments both in colleges and in industry ascending to notable heights and then becoming disappointingly decadent with the passing of the original leaders.

Creative research is not imitative. It requires inspiration and a minimum of dictation. “Tracking” and the encouragement of “tracking” is likely to be fatal. Research departments can be made to reproduce themselves from generation to generation only through intelligent, inspirational leadership.

At the present moment, the Ameri-

can public has a feeling of awe and reverence for the accomplishments of engineers and scientists during the war just closed. There is, however, a widespread murmur emanating from a group of so-called cultural defenders that scientists and engineers create for destruction. This unwarranted needling in the back, while largely “sour grapes” prompted by jealous envy, must be recognized as lethal to scientific progress.

Every engineer and every scientist should take it as a part of his daily responsibility to participate in the educational, the social, the political and the spiritual activities of his community, county and state, and demonstrate to the nation that scientists can be as effective as human engineers as they are in preparing defensive measures to protect the highest and best in society.

And as one specific job, let us bring to America the firm conviction that science and mathematics are the rightful heritage of every school child and seeker after truth just as certainly as instruction in the classics, in history, and in the philosophy of life. That is the immediate duty of every professional engineer.

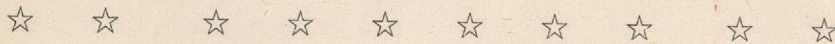
# Full-Time Executive Secretary Fund Campaign Success Assured

Work on the canvass for funds for the operation of the headquarters office with services of a full-time executive secretary has progressed to a point where success is assured. Much work, however, remains to be done.

The Board of Directors has appointed a committee which shall investigate and recommend an individual for the position. The need is great. The need is urgent.

The table herewith shows the results to January 31, 1946.

CHAPTER	Amount Pledged	Amount Paid
Bexar .....	\$ 1,901.00	\$ 931.00
Fort Worth .....	564.50	524.50
North Texas .....	3,055.00	2,580.50
Nueces .....	525.00	462.50
Sabine .....	400.00	375.00
San Jacinto .....	1,435.00	829.50
Travis .....	5,065.00	3,308.75
<b>TOTALS .....</b>	<b>\$12,945.50</b>	<b>\$9,011.75</b>



## J. W. McCutcheon Claimed By Death

John Willis McCutcheon, 61, senior resident engineer of the Texas Highway department, died of a heart attack Nov. 29, 1945, at Stephenville. Burial was at Hutto.

McCutcheon, a 1904 civil engineering graduate of Texas A. & M. college, worked for the Southern Pacific and other railroads in Texas after leaving college, was employed for a time by the city of Waco, by Hess and Skinner, contracting engineers, in 1918 and 1919, then resigned to become Williamson county's Precinct 4 engineer.

He began his service with the state highway department in May, 1921, as project engineer and remained with the department until his death. For the past 14 years, with the exception of a few months in 1942 when he was called to Fort Worth to supervise construction of war access road projects, McCutcheon lived in Stephenville, and during his residence there he was resident engineer on many construction projects in Erath, Hood, Parker and Wise counties. He was a registered professional engineer and a member of the Fort Worth chapter of TSPE.

His widow and a son, John Willis McCutcheon, Jr., survive him.

## Engineer Logan On Board of Control

Hall H. Logan, a registered professional engineer and faculty member at Texas A. & M. College, has been appointed by Gov. Coke Stevenson to be a member of the State Board of Control to succeed Harry Knox.

Logan is an engineer by profession and has been teaching industrial management at Texas A. & M. College for the past three years. He has been doing extra-curricular work for two years in industrial development and has also acted as director of the Texas Postwar Economic Planning commission. He attended both Texas A. & M. College and the University of Texas, receiving the degree of Master of Science in management engineering at Texas A. & M. since joining the faculty of that institution.

Logan's career includes work in the various departments of the Dallas Power and Light Company as a student apprentice during summer months while in college; an eight-year term of employment with Sears-Roebuck and Company as management engineer; three years as vice-president of the Consolidated Venetian Blind Company of Houston; and his professorship at Texas A. & M. College.

## Hagle Is Named Houston Manager

John Marion Hagle, Houston director of public utilities since June, 1943, has been named city manager of Houston, following the resignation of City Mgr. John N. Eddy.

Hagle, born in Manor, Tex., April 1, 1892, was graduated from Texas A. & M. college in 1911, and following graduation was associated with



John M. Hagle

various engineering, railway and construction companies. In 1919 he served as assistant engineer on highway construction for Baylor county, Tex. In 1922, he became a member of the firm of Thompson and Hagle, highway bridge contractors. In 1925 he was resident engineer with the firm of Hagle, Witt, Rollings engineering company in Dallas, and in 1926 became highway engineer in Wharton county, Tex., where he served until 1930.

In the latter year he became associated with the city of Houston as director of public works, serving there until Jan. 1, 1941, when he was engaged as flood control engineer by the Harris County Flood Control Drainage district. After a year of service there, he was employed by the federal government as engineer on construction of the naval base at Hitchcock. He returned to the employ of the city of Houston as director of public utilities in June, 1943.

## Sabine Has 12 Percent Membership Gain

Sabine Chapter has experienced a considerable gain in membership within the past four months. The increase has been better than 12 percent, and new interest has been aroused. At the last regular monthly meeting, almost one-quarter of those present were guests. Some of these men said that they had only recently heard of TSPE and they all indicated a desire to join the Society.

Charlie Davidson has returned from the armed forces, and already has assumed an active part in Chapter activities as evidenced by his presence at the Annual Meeting at Houston. He also is a chapter director for the coming year.

Wheelhorse W. C. Holland has become temporarily inactive because of serious illness in his family. This has been regrettable loss to the Chapter.

Arrangements are being worked out whereby meetings will be held not only in Beaumont as heretofore, but also in Port Arthur, Orange and Port Neches, possibly even as far away as Lufkin.

Condolences are extended to E. W. Pittman upon the loss of his wife. Mr. Pittman is a member of the State Board of Registration for Professional Engineers as well as a past president of Sabine Chapter.

George A. Yeager presided at the first meeting of the year in the absence of President C. R. Eisler who was called to New York on business.

Men outside the Chapter are being interested into applying for State Registration by securing the necessary application forms for them.

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## Ortolani Rejoins Highway Staff

The Texas Highway Department reports the return of Captain Lawrence Ortolani from service with the Army Engineer Corps. Ortolani received a commission in 1942, and was assigned to duty constructing Aloe Army Air Field at Victoria, Tex. Later he was given an overseas assignment and served approximately two and a half years as area engineer in England in the construction of camps, depots, hospitals, and the housing units for troops.

Before going on leave of absence

for duty with the Armed Forces, Mr. Ortolani worked with the Highway Department approximately 13 years. He was resident engineer in the Fort Worth area, and was later in charge of the materials laboratory in Austin. He is currently working with the Road Design division in Austin as a senior designing engineer.

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## Major Pat W. Clark Is Civilian Again

Major Pat W. Clark, a Registered Professional Engineer, recently recently returned on terminal leave to Austin after serving approximately 19 months overseas with the Army Engineers.

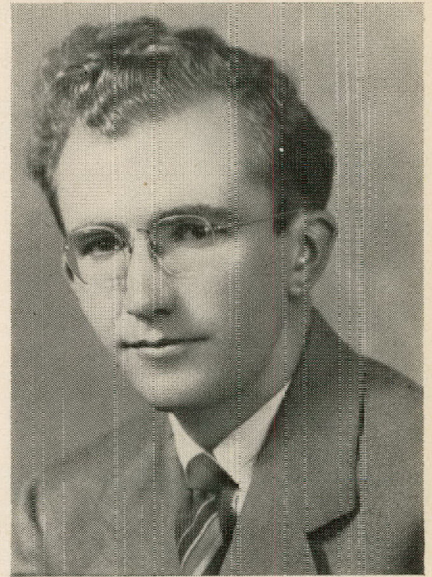
Maj. Clark reported for active duty with the Army in December, 1942, and after completing a short period of training at Camp Claiborne, was assigned to the 1880th Engineers Aviation Battalion. That unit spent twelve months at Geiger Field, Wash., and was then ordered overseas. Its overseas assignment was in the China-Burma-India Theatre—approximately six months rebuilding and enlarging the Ledo Airport, eight months on various sections of the Ledo Road in Burma, and five months on the Burma Road and other roads in China.

Before entering service, Major Clark was connected with the Texas Highway Department for 10 years, in the Maintenance division of the main office, and as resident engineer in Bee and Refugio counties.



Pat Clark

## Texan Given Textile Institute Position



Jack D. Towery

Jack D. Towery has been appointed to the textile engineering staff of the Institute of Textile Technology, Charlottesville, Va. Towery received the B. S. degree in textile engineering from Texas Technological College in June 1938. From 1942 to 1945 he was textile engineer in charge of cotton-spinning and weaving research projects at the University of Texas. This work was sponsored originally by the Texas Cotton Research Committee and later jointly by the National Cotton Council and the Office of Production and Research Development of the War Production Board.

Towery is a registered professional engineer and a member of numerous professional societies including Phi Psi, the American Association of Textile Technologists, and the American Association of Textile Chemists and Colorists.

☆☆☆

## Karl B. Wagner Returns From Navy

Karl B. Wagner, Travis Chapter member, has returned to civilian life after 32 months in the Civil Engineer Corps of the U. S. Navy. He is returning to employment with the E. L. Daltor Company, Contractors, of Dallas, Texas.

Mr. Wagner went into Japan on August 30, 1945 with the 511th Parachute Infantry Regiment



# PROFESSIONAL AND BUSINESS DIRECTORY



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# With Pen In Hand

## Praise And Advice

Sirs:

It has been more than a year since I abandoned the straight practice of engineering and entered another field, but I have maintained my interest in your efforts since I know from personal experience what a struggle it is to produce this magazine in an acceptable form.

You have done a swell job and I want to extend my congratulations to all of you.

If a few more of the engineers would get outside of their profession and look at themselves as others see them, I believe that your job would be an easier one.

I am not recommending the abandonment of the profession, but I do certainly urge that the practicing engineers do a little self-analysis of their profession and of themselves.

There is a tendency on the part of some of the profession to assume that the State registration law will, by its very existence, improve the character and quality of the profession and eventually better the economic standing. There is no denying that the existence of the law is a definite betterment. I have heard it praised by an executive of one of our large utility companies who stated that it was a great relief to be able to pick up the Texas roster of professional engineers when he was in need of engineering services and select a name from that list. He had confidence that the men named there were qualified to perform the services he needed. We hope that his faith in this roster will never be misplaced.

But this man is one of a very few. In my present occupation, I am continuously made aware of the failure of engineers to sell their service to the public. In chamber of commerce work we deal to a great extent with the ways and means of developing and utilizing the resources of the community in the manner best suited to community growth and improvement. Unfortunately, too many of our communities have grown up without engineering guidance and control and as a result they have failed to take advantage of many of their natural

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resources and are in such shape now that they cannot correct their mistakes without tremendous expense, and will go on suffering economic losses for many years.

Had the engineers sold the public on the need and necessity for engineering control, design and operation, there would be no dearth of jobs and no feeling that an engineering fee is an unnecessary expense. If it is possible to find a properly engineered small community, we, as engineers, should develop its story, publicize its achievements and spread its pictures to proclaim the advantages of our services. There are hundreds of small communities in need of the service but it is up to us to show them, not only that they need these services, but how they can afford them.

We have to overcome a prejudice that has developed because of past experiences with unprincipled engineers who have collected large fees for work which was no better than similar work done by the local commissioner or street superintendent.

All this can be done. All branches of the profession can benefit, but it will require that the whole professional group have sufficient faith in their own work and ability to be willing to contribute their own time and their own money to get the job done. When industry and even the Federal government are spending thousands for public relations development, and the labor unions are able to collect from two dollars to 50 dollars or more per month from their members to further their economic welfare, it seems strange that a group, presumed to be more familiar with the laws and functions of economics are so slow to accept the evidence that lies all around them that it takes both brains and money to make money, and that if they are not willing to spend their own money for their own advancement, no one else is going to do it for them.

We are wholeheartedly in accord with the aims and efforts of the TSPE and sincerely hope that they will be successful.

With sincere best wishes for a prosperous and successful New Year, I am yours very truly,

DON V. PURINGTON,  
Manager, Pecos County  
Chamber of Commerce,  
Fort Stockton, Texas.

Jan. 3, 1946.

# Panhandle Installs Reading President

G. K. Reading of Pampa was installed as 1946 president of Panhandle chapter at its meeting Jan. 7 at Amarillo. Other new officers are Morris Browning of Amarillo, vice president; and J. L. Adams of Amarillo, secretary-treasurer.

Committee chairmen were appointed for the year as follows: J. P. Wehrung, Pampa, membership; G. C. Hatfield, Amarillo, ethics and practice; W. M. Clifton, Amarillo, public relations; and E. N. Bliss, Amarillo, chapter activities.

The chapter heard a talk by Jack Little, member of the legislature, who complimented engineers on their efforts and pledged his further support.

Sam W. Davis, Morris Browning, E. N. Bliss and G. W. Thompson were named as Panhandle chapter delegates to the 10th annual TSPE state meeting in Houston.

Borger was selected as the site for the chapter's February meeting.

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HOE, HAROLD M., Constr. Engr.-Design. Engr., Gulf Oil Corp., Schenley Apts., Pittsburgh 13, Pa.

PAYNE, FRANK H., Partner, Frank H. Payne & Associates, Civil Engrs., 621½ N. Sylvania, Ft. Worth

YEATTS, ERNEST B., City Engr., City of Abilene, 2433 S. 11th, Abilene

NORTH TEXAS CHAPTER  
ANDERSON, OLIVER C., Texas Hwy. Dept., Dallas

BARNUM, W. H., Jr. Res. Engr., Texas Hwy. Dept., 5638 Miller, Dallas

BOYCE, J. C., Mgr., Dallas Office, Ceco Steel Products Corp., 203 Const. Bldg., Dallas

CAMPBELL, R. TRENT, Sales Mgr., Mosher Steel Co., P. O. Box 5651, Dallas 2

DAVIS, WILLIAM J., Technical Writer, Editorial Staff, The Petroleum Engineer Magazine, 700 Irwin Keasler Bldg., Dallas

FANCHER, K. N., Mgr., Chemical Engineering Co., 2800 Logan, Dallas

FRANKLIN, GEORGE E., Designer, Powell & Powell, Engrs., 5027 Mission, Dallas

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GULLION, GUY, Jr., Res. Engr., Texas Hwy. Dept., 904 Louise St., Atlanta

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(Continued on Page 18)

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SCHNEIDER, CHAS. J., Asst. Bridge Designer, Texas Hwy. Dept., Austin  
SHERROD, ARCHIE J., Office Engr., Maint. Divn., Texas Hwy. Dept., Austin



**'Jack' Spry Opens Office In Odessa**

M. E. "Jack" Spry, formerly of Travis Chapter, has opened a general engineering and surveying service at Odessa, Tex., and will make a specialty of city subdivision and paving work and land surveying. Spry is a licensed land surveyor in addition to being a registered engineer. His experience includes seven years of highway and county engineering and eight years land surveying and construction with Phillips Petroleum Company.



**Texas Girl Knows Her Engineering**

A Texas girl who knows her engineering—Miss Marilyn Broom of Austin—goes down in University of Texas history as the only feminine member of Pi Tau Sigma, honorary mechanical engineering organization.

Miss Broom was one of nine who graduated from the College of Engineering last fall with Magna Cum Laude honors. She is now doing specialized work in stress and weight angles with the Douglas Aircraft Corp., Santa Monica, California.

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## Alamo Heights Engineer Returns From Army

Capt. Jack L. Ririe, son of Mrs. A. A. Ririe of 655 Woodlawn Ave., San Antonio, has been honorably separated from the Army Air Forces after three and one half years active service.

Capt. Ririe's last assignment was in the Utilities and Installed Equipment unit of S-4 (Supply) at headquarters, Eastern Flying Training

command, Maxwell Field, Ala. Previously, he had served as post engineer at Stuttgart, Ark., Army Air Field for two years.

Prior to enlisting in the service, Capt. Ririe served as city engineer at Alamo Heights, the job to which he plans to return. He received his engineering training at the University of Texas.

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