

NON-CIRCULATING



TEXAS STATE BOARD OF REGISTRATION
FOR PROFESSIONAL ENGINEERS

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NEWSLETTER

DONALD C. KLEIN, P.E.
EXECUTIVE DIRECTOR

APRIL, 1979

MANDATORY CONTINUING EDUCATION FOR ENGINEERS

Mandatory continuing education has been proposed as a means of ensuring that registered professional engineers maintain the level of competence necessary to serve the public properly. In determining its position on the subject, the State Board of Registration for Professional Engineers gave consideration to the following aspects of the question.

Continuing education in some form is a necessity if engineers are to keep abreast of progress in their individual disciplines. Such education can take many forms, including: (1) additional formal education, (2) short courses and seminars, (3) programs sponsored by associations, (4) published literature, and (5) contact with other engineers in the marketplace. Participation in the first three types of continuing education can be easily measured in terms of attendance and certificates or diplomas earned. Participation in the last two, however, cannot be easily measured, although they are both important sources of education which should not be disregarded when evaluations are made.

If continuing education credit is limited to those areas that are easily measured, many engineers will find themselves unable to comply. Additional formal education, short courses and seminars, and programs sponsored by associations simply are not available to large numbers of engineers because they cannot take time off from their work or afford the expense of travel to locations where these programs are available. Employers in remote areas could expect major problems in hiring and keeping engineers unless they could provide expense-paid travel to attend creditable

functions. Even then, employers would be forced to pass on the high cost of such programs, which would mean that the expense would eventually be borne by the public, either through increased prices to cover costs in the public sector, or as increased taxes to cover costs in the governmental sector.

There is already a strong incentive for engineers to maintain a high level of expertise in order to be able to compete in the marketplace, since competition removes those who fail to keep pace in their disciplines. With the wide diversification that now exists in engineering, individual engineers should be allowed to select the sources and procedures which best fit their own personal needs for continuing education without having to be concerned with meeting mandatory rules.

In addition to the approximately 33,000 persons registered to practice as professional engineers in Texas, it is estimated that over 50,000 persons are practicing engineering legally in Texas under the exemptions of Section 20 of the Texas Engineering Practice Act. If our aim is to more adequately protect the public health, safety, and welfare, it would seem more logical to work for tighter controls over those who are presently permitted to practice without having demonstrated their qualifications than to mandate additional qualifications for engineers who have already established their competence by registration and successful practice. After all, requirements for continuing education would have no effect whatsoever on those who are allowed to practice without having established their qualifications to do so.

There is also the possibility that imposing a requirement for continuing

education as a prerequisite for license renewal for persons who have already established their competence would be considered by the courts to be a restriction on their rights to earn their livelihoods. Any proposed legislation should be carefully considered to assure that it would not subsequently be ruled unconstitutional.

The Board now renews the licenses of approximately 33,000 registered engineers yearly, and this number is increasing. It is a continuing job of major proportions for the Board staff to handle the logistics of mailing notices, receiving and depositing monies, and updating permanent records, but if, in addition to those responsibilities, the staff were required to make evaluations of the continuing education submitted by each of the registrants, the costs of the renewal procedure would quickly become exorbitant. If Board Members were required to review and evaluate each submittal, the task would be virtually impossible.

In light of the foregoing considerations, the Board came to the conclusion that mandatory continuing education as a requirement for license renewal would not be practical. The problems associated with such a program would reduce it to a meaningless, expensive, and ineffective gesture. The public would be far better served if the Board could direct the same efforts toward enforcing an Engineering Practice Act that had been expanded by the legislature to cover all engineering performed in the state. By virtue of the reasons herein stated, the Board is opposed to mandatory continuing education for professional engineers.

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PUBLIC BOARD MEMBERS

The inclusion of public members on regulatory boards has been proposed as a means of assuring that the boards act to protect the public health, safety and welfare, instead of advancing the professions they regulate. The State Board of Registration for Professional Engineers has considered this proposal to determine its position on this subject.

The Texas Engineering Practice Act requires that an applicant meet certain minimum qualifications of education, experience, or examination before he or she is granted registration as a professional engineer. In order to be registered under Section 12, Subsection (a), an applicant must have an "approved" degree in engineering and, in addition, four years of experience "of a character satisfactory to the Board." To be granted registration under Section 12, Subsection (b), an applicant must pass certain examinations and, in addition, have eight years of experience "of a character satisfactory to the Board." In each instance, the act requires the Board to determine that the work record (experience) of the applicant indicates "that the applicant is competent to be placed in responsible charge of such work." To assure that the Board is qualified and capable of making this evaluation of the applicant's experience, it is now required that each member of the Board "shall have been engaged in the practice of the profession of engineering for at least 10 years." Since public members would, by definition, have had no association with the profession for a specified period of time, it is evident that they could not meet this qualifica-

tion for determining the adequacy of an applicant's experience.

If the public members do not have the qualifications necessary to evaluate the work being done by engineers, it would be illogical to permit them to take part in the registration process. Further, this same logic can be applied to the consideration of enforcement matters that involve questions of engineering practice. Thus, the public member(s) would be limited severely in taking an active part in Board deliberations. In fact, they would in essence become Board observers except for overseeing office procedures and establishing administration policies.

If the public members were to replace one or more of the present professional members, the efficiency of the Board would be decreased considerably. The evaluation of the qualifications of applicants is the sole responsibility of the Board Members and it constitutes a heavy work load for each Board Member in terms of actual hours of time. Further, this work is done outside of regular Board meetings and it is work for which the Board Members are not compensated. Decreasing the number of professional members by substituting public members would increase this work load. This would result in delays in acting on applications or it would reduce the thoroughness with which applications are reviewed. In either case, the result would be detrimental to the public.

If the public members were added as an addition to the present professional members of the Board, they would not hinder the operation of the Board. They would be able to evaluate the extent to which the Board is complying with the requirements of the act to protect the public health, safety and

welfare. With the information that would be gained, the public members could be excellent public relations persons to enhance the public image of the Board and the profession. This, however, would not provide any benefits to the public that are not already available.

The Board meetings for this agency are open to the public as required by law. In addition, regular quarterly Board meetings are scheduled in various cities in the state other than Austin on alternate meeting dates. This is specifically designed to afford easier access to Board meetings by the public. Also, members of the Board and members of the staff are active in seminars, group meetings, speaking engagements, etc., to assist the public in understanding the requirements of the Texas Engineering Practice Act and the procedures to follow if they have a complaint against a registrant. The public would be served better by spending the monies that would be required to support public members to increase this type of program of public information.

In summary, the inclusion of public members on the State Board of Registration for Professional Engineers would not provide additional protection to the public health, safety and welfare. We welcome public scrutiny, which is already available to interested parties without any additional expense. The addition of public members would necessitate the expenditure of budgeted funds that could better be spent on far more effective programs. For these reasons, the State Board of Registration for Professional Engineers is opposed to the addition of public members.

POSITION PAPER ON HB-893 (THE SURVEYORS BILL)

The Engineering Registration Board reviewed HB-893 during its April 4, 1979 quarterly meeting in Tyler, and wishes to make the following observations and take the position herein stated:

Public land surveying as practiced by the Texas Public and State Land Surveyors is the practice of engineering technology, a subdiscipline of engineering.

Most graduate engineers who become registered professional engineers are not educationally qualified to practice land surveying.

Most other state licensing authorities distinguish in their registration procedures the licensing of engineers from surveyors.

All land surveyors should be readily identifiable and listed in one roster printed by the Land Surveyors' Board.

Engineers who are qualified by education and experience to practice land surveying should be licensed by and

under the purview of the state agency authorized to administer the practice of land surveying.

Section 9, Paragraph B of HB-893 provides, without written examination, for the registration as land surveyors of those registered engineers who have been practicing land surveying under their engineering seals for the past year or longer.

In view of the above observations, the Engineering Registration Board believes it is in the interest of the

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public health, safety and welfare for one agency to administer and enforce the legal practice of land surveying in the state of Texas, and that agency should be the Public Land Surveyors Board.

NEWSLETTER

This NEWSLETTER is published by the Board for the information of registrants and through them, those interested in registration. Inquiries and comments are requested. Reaction to our first NEWSLETTER in July, 1978, was outstanding, encouraging and modestly rewarding. Many of the articles apparently stimulated readers to be more aware of circumstances which were suspect of being violative of the Engineering Practice Act, and several enforcement files were initiated as a result of letters received.

NEW BOARD RULES

After a second reading at the April, 1979, Board Meeting, the following new rules were promulgated:

383.01.08. BOARD REVIEW OF APPLICATION

.001. INITIAL REVIEW. An application will be considered complete when all information required by the Act, the Board Rules, and the instructions has been received and accepted by the Executive Director or a designated representative. When an application is complete, it will be reviewed by the Executive Director or a designated representative, and a summary of the application will be prepared. This summary will include a recommendation that the application be approved, not approved, rejected, or that no action be taken in accordance with Board Rule .05.001(j). The application will then be circulated to each Board Member for his or her individual review and vote.

.002. APPROVED APPLICATIONS.

(a) If on the basis of the initial review, the Executive Director or a designated representative recommends that an applicant be granted registration and the first Board Member who reviews the application concurs and votes accordingly, the applicant will be granted registration and a record of the action will be made a part of the minutes of the next regular Board Meeting.

(b) If on the basis of the initial review, the Executive Director or a

designated representative recommends that an applicant be granted registration and the first Board Member who reviews the application does not concur and votes accordingly, or if the Executive Director or a designated representative does not recommend that the applicant be granted registration, the application will be circulated to each Board Member for his or her individual review until four members of the board have voted that the applicant be approved for registration. The applicant will then be granted registration and a record of the action will be made a part of the minutes of the next regular Board Meeting.

SUPERVISION OF ENGINEERING CONSTRUCTION

Responsible supervision of construction is enumerated among the activities constituting the practice of engineering per Board Rule .01.018(o), expounding on the general definition set forth in Sec. 2 of the Texas Engineering Practice Act.

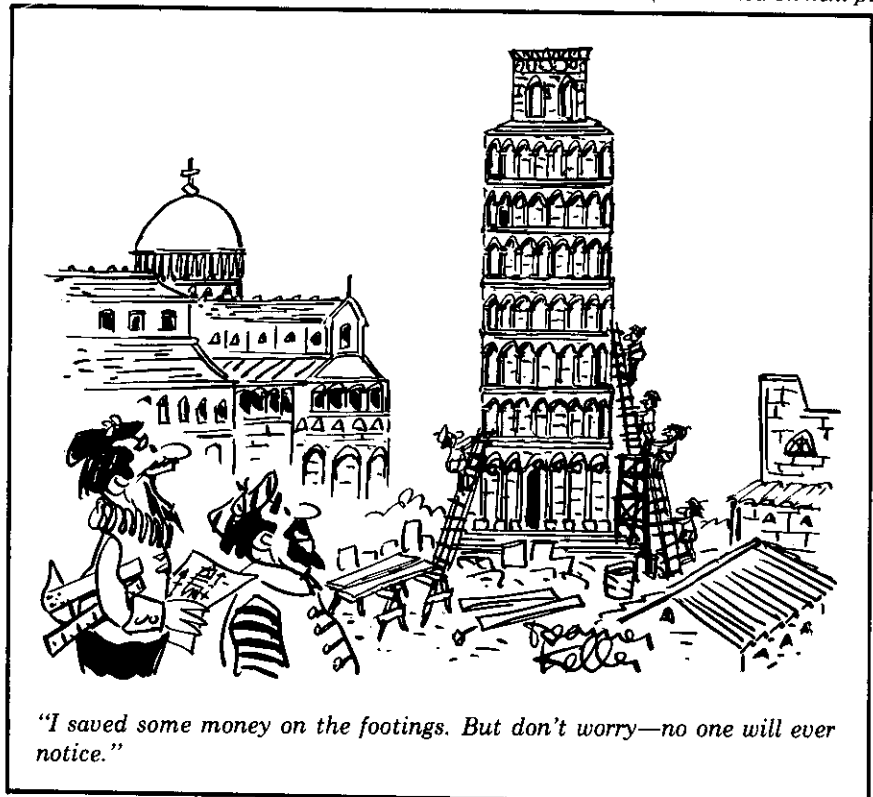
For several years now the members of this Board and those of the State Board of Architectural Examiners have expressed concern about individuals not registered as engineers taking on the responsibilities of supervising engineering construction. Professional liability is one aspect involved but so,

too, is the illegal practice of engineering.

Supervision/inspection of engineering construction is not limited to public work projects as required by Section 19 of the Engineering Practice Act. The rationale is applicable to all engineered construction. In response to an inquiry about the interpretation of that part of Section 19 dealing with supervision of engineering construction, the Attorney General rendered Opinion C-791 which states in part: "In the absence of a specific factual situation, we can only state that he (*the engineer*) must be in a position to inspect and control, as each progresses, the various phases of the construction project which involve the 'practice of engineering' as defined in Section 2(4) of Article 3271a of Vernon's Civil Statutes." (Emphasis added.)

This Board is currently investigating a new school plant facility in a rural independent school district which has been halted after the half-completed concrete slab and tilt-wall project was determined by a team of independent consulting architect and engineers to be of questionable structural integrity. The lack of construction supervision is the apparent culprit and individual re-

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sponsibilities may be sorted out only after litigation. The Board staff considers this to be a "classic" case of how not to construct a building.

The foregoing matters have been recounted not only as a matter of law, but as a matter of interest to consulting engineers who are not always engaged to supervise/inspect construction of their engineering design efforts.

BOARD MEETINGS OUTSIDE AUSTIN

To provide more registrants and the general public an opportunity to attend some of the Board's regular quarterly meetings, two meetings are scheduled each year outside Austin. Last October the meeting was held in El Paso on the campus of the University of Texas. The April, 1979, meeting was held at the Sheraton Inn in Tyler. Coupled with that meeting, the Board Members and two staff members presented short talks on a variety of topics of interest at the business meeting of the East Texas Chapter of TSPE. While the July, 1979, meeting will be held at the Board office in Austin, the last meeting of the year is set for October 25 and 26 at the Houston Oaks Hotel, Houston, Texas. All interested persons are invited to attend any Board meeting, to meet the Members, key staff personnel and discuss matters of concern. Any lengthy presentation by an individual or group should be cleared

through the Executive Director for consideration of time on the agenda.

NEW BOARD OFFICES

Construction of the new building to house the State Board of Registration is progressing toward its scheduled completion date in July. An open house and dedication ceremonies have been tentatively set for November. Until officially notified of a new permanent mailing address, registrants and applicants should continue to send correspondence to the current address for the Board.

NEXT ROSTER OF ENGINEERS IN 1980

As provided in Section 11 of the Engineering Practice Act, the Board will publish a roster of registered engineers only once every two years, the next one of which will be as of January 1, 1980.

CANADIAN DEGREES ACCEPTED

Some Canadian engineering degrees will now be accepted by the Board as approved degrees under Section 12(a) of the Texas Engineering Practice Act. During its January, 1979, meeting, the Board was advised that the Engineers' Council for Professional Development would begin publishing a list of Canadian degrees accredited by the Canadian Accreditation Board. The Board agreed to accept these degrees as long as ECPD continues to publish the list. This will make it possible for persons

with one of these accredited Canadian degrees to obtain registration in Texas under Section 12(a).

EXAMINATIONS ON THE RISE

Although most applicants for registration in Texas are not required to take examinations, the number of examinations scheduled continues to increase. This past year the Board experienced an 18% increase over the previous year, and records indicate the number of examinations scheduled have increased from 2,073 in fiscal year 1974, to 4,287 in fiscal year 1979. This is an increase of 107% in five years.

11 YEARS OF ENFORCEMENT

In January, 1968, Edwin Dalrymple, the Board's first staff investigator, began an active program to bring about compliance with the Engineering Practice Act, starting with about 100 unresolved inquiries initiated by various chapters of TSPE. During the 11-year period up to January, 1979, 6,571 enforcement matters were initiated and resolved, except for 895 still pending. Of the 5,581 closed cases, 50.8% were through voluntary compliance. A total of 56 matters were filed in local courts for resolution, 5 of which were pending at the end of 1978.

1978 APPLICATIONS HIGH

In FY 1978, 2,062 applications for registration were received, and indications are that FY 1979 will bring even more.

NEW BOARD OFFICERS

Board officers to serve for one year beginning with the July 1979 Quar-

terly Meeting were elected at the April Meeting. Mr. Fred J. Benson, P.E., Bryan, will be Chairman of the Board; Mr. Robert E. Layton, Jr., P.E., Tyler, will be Vice Chairman; and Mr. R.

L. Reid, P.E., Houston, will be the member Secretary.

(The 1978 Roster of Professional Engineers may be updated by clipping this item and inserting it on page 3.)

FROM
TEXAS STATE BOARD OF REGISTRATION
FOR PROFESSIONAL ENGINEERS
Room 200, 1400 Congress
Austin, Texas 78701

BULK RATE
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**SINCE MANY PE'S ARE INTERESTED IN ENERGY AUDITS
WE ARE REPRODUCING THE FOLLOWING PRESS RELEASE
ISSUED BY THE
GOVERNOR'S OFFICE OF ENERGY RESOURCES**

**NOTICE OF ENERGY AUDITOR TRAINING PROGRAM SPONSORED BY
GOVERNOR'S OFFICE OF ENERGY RESOURCES MAY 14 THROUGH JUNE 1, 1979**

The Governor's Office of Energy Resources is announcing a series of 18 meetings throughout the State to train energy auditors for conducting audits of buildings owned by public and private non-profit Schools, Hospitals, Local Governments, and Public Care Institutions.

The two-day training programs to be conducted between May 14 and June 1, 1979, will partially fulfill the requirements of the National Energy Conservation Policy Act of 1978 (PL 95-619), which contains major grants programs to promote energy conservation in the above-mentioned four sectors of public and private non-profit buildings constructed prior to April 20, 1977. The Grants Program will provide funding for voluntary activities relating to energy audits of buildings and energy conservation measures for reducing the rate of energy consumption. Over \$9.27 million of Federal funding will be available to the eligible institutions in Texas and for program administration through September 30, 1979. A total of almost \$40 million will be available in Texas over the next three-year period pending appropriations of Congress which may equal this already approved funding authorization level as provided by current Department of Energy allocation formulas.

Since the energy audits are a prerequisite to applying for Technical Assistance (TA: detailed engineering analysis) and Energy Conservation Measures (ECM: installation of materials and equipment) grants, these training sessions will be important for qualifying people as energy auditors. Nearly all the information and materials that will be needed for your participation in all parts of the program — including Preliminary Energy Audit and Energy Audit forms and Technical Assistance and Energy Conservation Measures applications — will be distributed and thoroughly discussed at the training sessions.

The two-day training sessions will be conducted from 8:00 a.m. to 5:00 p.m. at the following locations according to the referenced schedules:

May 14 and 15

Austin—Joe C. Thompson Center, Room 3102, just north of LBJ Library
El Paso—El Paso Teachers' Association, 6632 Continental
Houston—Ramada Inn North, 4225 North Freeway

May 17 and 18

Ft. Worth (north of) — Tarrant Cnty. Community College, S. Campus, Loop 820 S at Wichita St., Rotunda Bldg., Rm. 132
Edinburg (near McAllen)—Region I Education Service Center, 1900 W. Schunior
San Antonio—John Calvin Presbyterian Church, Fellowship Hall, 8102 Midcrowne (Walzern Rd. exit of I-35).

May 21 and 22

Abilene—Briarwood Manor, 101 Eplen's Court (behind Toyota dealer on S. 1st (Hwy 80)).
Tyler—Texas Eastern Univ., Administration Bldg., Room 127
Lubbock—Lubbock Memorial Civic Center, 1501 6th Street, Ballroom.

May 24 and 25

Corpus Christi—Corpus Christi State University, Corpus Christi Hall, Room 17, 6300 Ocean Drive
Midland-Odessa—Regional Educa. Serv. Center 18, Midland Air Terminal, La Force Blvd.
Wichita Falls—Midwestern State University, 3410 Taft, Clark Student Center, Ballroom

May 29 and 30

Richardson (north of Dallas)—Regional Educa. Serv. Cntr. 10, 400 E. Spring Valley Rd.

Amarillo—Amarillo High School Cafeteria, 4225 Danbury

Houston—Marriot Hotel at Astrodome, 2100 S. Braeswood at Greenbriar

May 31 and June 1

Beaumont—St. Andrews Presbyterian Church, Gladys St. at 23rd St.

San Angelo—Angelo State University, Houston Hart Student Center, Conference Room (Ave. N, then left on Rosemont, left in 2nd parking lot, Center is east of lot)

Waco—Waco Convention Center, 100 Washington Avenue, Ranger Room

There are no special qualifications for attending the training program. Anyone who attends the two-day training program will be eligible to conduct energy audits for the building owners.

For more information contact either John Carlson (Program Coordinator for Hospitals); Larry Morgan (Program Coordinator for Local Government and Public Care Institutions); or Duane Keeran (Program Coordinator for Educational Institutions) in the Governor's Office of Energy Resources, 7703 North Lamar, #502, Austin, Texas 78752 (512) 475-5407.

May 4, 1979
