

The California Surveyor



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A MESSAGE FROM YOUR ASSOCIATION PRESIDENT.....

WILLIAM CHARLES WATTLES

Since this issue of the California Surveyor will be the last to appear during my term as President, I would like to review some of the activities of the past year, for the membership in general. Of course, all of you who are planning to attend the Annual Meeting will hear all of the details by way of the Committee reports, but some of you will not be able to attend, as much as you would like to be able to. To me a 100% attendance would be the most gratifying thing that could possibly happen.

It has been very gratifying to see the increase in membership during the past year, and I would like to thank the Membership Committee for their efforts. They have worked very hard but they can only do so much. Possibly the members could have worked more than they have, by each member getting one new member. We then would have over 300 members out of a possible 1100 or more. You all know the old cliché, "There is strength in numbers".

The Legislative Committee was very active, attending hearings and formulating counter proposals to some of the objectionable bills presented to the Legislature. Fortunately the most objectionable bill did not get out of committee but we must continue to be alert for it and similar proposals during the coming session. Each member can help by contacting your political representatives and making them aware of your views on these matters. This is one of the most important reasons for this Association, to be able to present a solid front on important matters.

Another satisfying project has been the organization of the various Chapters of the Association. Hopefully we shall soon have more of them so that each of

On the 7th of October 1967 the surveying profession lost a truly great practitioner. While best known to most of us through his book "Land Survey Descriptions" and from his participation in the A.C.S.M. and the Surveying & Mapping Division of the A.S.C.E. Bill Wattles was indeed much more. Perhaps the following outline will recall his life to some and introduce it to others.

William Charles Wattles was born March 27, 1881 in Burlington, Kansas. He graduated E.M. from Colorado School of Mines in 1903. From 1904 to 1905 he was chief of party and Assistant to the District Engineer of South Alberta, Canada.

In 1905 he moved to Los Angeles and spent the next 11 years with the County Surveyor as Chief of Party and Office Engineer.

In 1916 he joined Title Insurance and Trust Company and surveyed most of what is now downtown Los Angeles during his first four years. He then became the Chief Engineer until his retirement in 1947.

During the years 1917-1918 he was City Engineer of Tropic, California (later annexed to Glendale).

Following retirement, Wattles did much consultation work and became well known for his excellent ability as an expert witness in court. He covered all of California and was especially conversant with the greater Los Angeles area.

Beginning in the early 1930's, Bill Wattles started writing articles, giving lectures and teaching classes in title engineering, land locations and description writing. He continued this extra curricular activity with a constant flow of subject matter and making appearances from Berkeley to San Diego,

Presidents Message (cont.)

you can meet and know your fellow members better. Also to talk over your local problems, and to direct the attention of the Board of Directors to them for solution. Other projects worthy of consideration at the local level could be the sponcering of educational activities in your local schools or sponsering Explorer Scout Troops as the Sacramento Chapter has done.

There are many activities to work on, many things need our attention, and I sincerely hope that the Association can continue to grow and to gain influence in order that we may achieve our goals.

Land Surveyors Examination

The 1967 Land Surveyors examination was a very successful on for many of the applicants and for the profession as a whole. A total of 324 applicants took the examination and a total of 99 successfully passed. This is the highest number of new licensees to be admitted to practice in many years.

We should all make a special effort to welcome these newcomers to our profession. It is on our new blood that we must deligate the responsibility for the future of Land Surveying. At this time a list of the successfull candidates was not available but we hope to print it in our next issue. Make an effort to introduce these men to the Association. It will benifit them as well as all of us.

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William C. Wattles (cont.)

Phoenix, Florida and Washington D.C. His articles appeared in the Journal of the American Congress on Surveying and Mapping, Proceedings of the American Society of Civil Engineers, The Texas Surveyor and Backsights and Foresights of the Florida Society of Professional Land Surveyors. He was best known for his book "Land Survey Descriptions" published by the Title Insurance & Trust Co.

He was a Land Surveyor and Registered Civil Engineer in the State of California.

He belonged to the Colorado School of Mines Alumni Association and belonged to several fraternal orders. In 1918 he was 2nd Lieut. in the T.I. & T.'s Home Guard

Bill Wattles was President of the first California Land Surveyors Association from 1930 to 1946 and was a charter member of the American Congress on Surveying and Mapping, wherein he held many important positions and was accorded special acknowledgement and made an honorary and life member by the award of a plaque in convention at Washington D.C. in 1965. The Southern California Section of ACSM also gave him an honary and life membership as did the Northern California Section. In 1963 the Florida Society of Professional L Land Surveyors awarded him its only honorary and life membership.

As a charter member, Bill helped to form and expand the original Chapter 1 in Los Angeles of the American Right of Way Assoc,

He has been listed in Who's Who in the West.

On the 7th of October 1967 William C. Wattles began to chain a new baseline.

Board of Registration

In January 1968 the Land Surveyor member of the Board, held by Donald E. Kistor was vacated. The Board of Directors of the C.L.L.S.A. by letter to Governor Reagen has endorsed the appointment of Curtis Brown to this position.

As of the time of publication no public word has been released concerning this appointment.

Some Fables and Facts

about

Engineering Registration in California

For more than a decade now engineering registration procedures have been the target of a small group within the Department of Professional and Vocational Standards for a takeover. The first major effort of this nature occurred in 1956 when a plan for reorganization of the Department was submitted to the Governor for his consideration. The plan proposed creating several new Divisions within the Department under jurisdiction of the Director. It further proposed the removal of various administrative and investigative duties from more than two dozen Boards, Bureaus and Commissions comprising the Department and making them functions of the new Divisions. Under the plan the various Boards, Bureaus and Commissions would retain responsibility for the performance of such duties, but they would have no authority to control and direct either the activities or the personnel performing them. The plan was subsequently rejected by the Governor. It proved to be uneconomical and impractical, among other things.

After nine years of polish and refinement, the 1956 reorganization plan appeared once again in the form of a legislative draft. Known as Senate Bill 1203 during the 1965 Session, this new version emerged as a printed package of 144 pages, amending 481 sections, repealing another 132, and adding 12 more to the Business and Professions Code. The effect of this Bill, according to the Legislative Counsel's digest, would be to transfer to the Department of Professional and Vocational Standards and to the Director of the Department "jurisdiction now vested in various boards in department relating, among other matters, to selection of secretaries and other employees of boards, the examination and issuance of licenses and certificates to persons subject to regulation by such boards, the publication of directories containing names of licensees, inspections and investigations, and work organization." Opposition to the Bill was so great it was tabled in Committee and left to die.

Just recently, another version of the 1956 reorganization plan was made public through a report of the Commission on California State Government Organization and Economy. The report is dated September 15, 1967, and copies have been submitted to the Governor and to all members of the State Legislature. Among a great many recommendations in the report, several have been made to remove various administrative, examining and investigative duties from the Engineers Registration Board and make them functions of the Department of Professional and Vocational Standards.

The possession of facts is knowledge; the use of them is wisdom; the choice of them, education. Knowledge is not power but riches, and like them, has its value in spending. "Some Fables and Facts about Engineering Registration in California" is intended to provide the public in general and engineers in particular with some of the reasons for the present method of administering engineering registration laws in this State for a better understanding of the subject.

FABLE: Engineering registration laws are self-serving and exist only to benefit the profession.

FACT: Engineering emerged as a profession during the 19th Century when the individuals who adapted the great scientific discoveries of that era to the needs of society formally organized themselves. The mission of the engineering profession, ever since then, has been one of meeting the needs of mankind. As forces for shaping the future are constantly at work, professional engineers today continue to pioneer the application of scientific discoveries for the common good, as they have for more than a century. This remarkable record was compiled over this long period of time by many generations of engineers whose myriad contributions in the service of mankind exemplify the true spirit of professionalism. It is not the history of a profession motivated by selfishness, nor is it one which reflects the achievements of a group of self-serving individuals.

FACT: When St. Francis Dam collapsed in 1928, the death and destruction which followed the sudden release of its impounded waters tragically demonstrated the need for laws to protect the people of California from further disasters of this nature. As a result of this tragedy, the Legislature created a dam safety agency in 1929, giving it authority to regulate design, construction and maintenance of all dams in the state except those under Federal jurisdiction. But creating administrative machinery for regulating dam safety provided only a partial safeguard of the public interest. The human factor, too, had to be considered by the Legislature. The effectiveness of any dam safety program was related directly to the technical ability and professional skill of individuals. The threat of disaster, however, was not limited to dams alone. Obviously, the danger existed in many other areas of public concern. Tunnels, bridges, buildings, harbors, canals, highways, and similar man-made structures were also vulnerable to failure. So a program for regulating the human factor was essential to health, safety and welfare of the people of California for two compelling reasons. It reinforced the dam safety program, first of all, with an additional safeguard; and secondly, it expanded the area of public protection from incompetence to include the other man-made structures. Engineering registration laws thus evolved through public necessity. They resulted from a need to protect the people of California from the uneducated, the untrained, and the unskilled who, prior to enactment of such laws in 1929, were free to offer their services without any restriction whatsoever.

FABLE: The administration of engineering registration laws in California is in urgent need of reform. The Engineers Registration Board is totally inept. Its administration is corrupt; hampered by waste and inefficiency; plagued with political favoritism; arrogant in the abuse of its authority; handicapped by lack of dynamic and dedicated leadership; and inhibited by myopic board members who are motivated only by selfishness.

FACT: None of these allegations are true of course. Nor have they been made specifically against the Engineers Registration Board by anyone. What is significant, though, is the absence here of even one allegation of this nature to support reorganization or justify a change in present registration procedures.

FACT: The sole standard for measuring objectively the true effectiveness of engineering registration laws and their administration in this state is the health, safety and welfare of the people. There is no other. To learn from failure, moreover, is to learn the hard way; how much easier to learn from success. Engineering registration laws resulted from a lesson learned the hard way: the tragic failure of St. Francis Dam in 1928. In contrast, the administration of engineering registration laws by a board of professional engineers teaches us through success. It offers a long history of honest, efficient and objective administration, dedicated to safeguarding the health, safety and welfare of the people of California for over 38 years. To offer the people of this state anything less through reorganization of engineering registration procedures only sacrifices the experience of success for a future of hazardous experimentation.

FABLE: The present administration of engineering registration laws in California by an autonomous board of professional engineers is simply a form of self regulation disguised as a governmental agency, in violation of the public trust, to serve the ends of the engineering profession.

FACT: The Engineers Registration Board was created by the Legislature in 1929 as the result of public need, and engineering registration laws were enacted at the same time to provide the Board with the practical means of meeting that need. This delegation of authority by the Legislature had the general effect of permitting self regulation; but it secured for the people, in turn, the expert services of the engineering profession in a highly technical area of public need. Prior to 1929 efforts of the profession to maintain minimum standards of practice with current technology were successful only within the existing framework of engineering societies. Such efforts, however did not protect the public from the unqualified and the incompetent who were outside this framework. It was here where the need was greatest and the public interest had to be met. The Legislature, obviously, had neither the expertise nor the time to meet this need itself. So authority to judge standards of admission to licensure and authority to judge standards to be maintained after licensure were logically delegated to those equipped with the essential knowledge to perform this function: the engineering profession. It is a fundamental principle of our society that a person is entitled to be judged by his peers. Since the evaluation of professional standards involves the exercise of judgment, it is only reasonable for those being judged to expect judgment from persons who are fully qualified by education, training and experience

to exercise such a responsibility. Any other delegation of authority by the Legislature would make the entire registration process a meaningless procedure, in violation of the public trust.

FACT: The right of society to impose certain restraints upon its members for the common good is rarely disputed today as being a sound principle of government. It is more likely to be the degree of restraint exercised now which provokes the most frequent controversy over government control. The Engineers Registration Board is no exception in this respect. The public, for instance, is more concerned with the amount of protection it receives through registration laws than with the degree of control required to provide such protection. The regulated group, on the other hand, may frequently view the Board as a service agency for promoting its ends. These are not conflicting points of view, as some persons would believe. They are identical, in fact, for both reflect the same goal: a mutual desire for technical proficiency and professional competence. The history of the engineering profession has been long distinguished for dedication to self improvement through research and development programs, which serve to expand areas of technology, improve standards of practice, and advance the art of the profession generally. Activities of this nature, as experience has shown, contribute substantially to the health, safety and welfare of the people; and they seldom, if ever, become public issues. The contrary is true with measures taken by a profession to advance its economic status. Adverse public reaction in this sensitive area, however, is not limited to the professions alone. Public reaction has always been equally adverse to such measures by other interests, including business, industry, commerce, labor, and even the Legislature. The common denominator here is the pocketbook, and efforts by one group to improve its economic position, warranted or not, are bound to be unpopular as well as suspect when gained at the expense of others. But legislative foresight in 1929 removed the pocketbook issue from self regulation as a source of conflict by wisely withholding authority in this sensitive area from the Engineers Registration Board.

FACT: The engineering profession plays a unique role in the regulatory process of government, through self regulation, by performing a vital service for the common good. It furnishes the public with the essential technical knowledge and know-how from the most authoritative source; it advances the public interest by maintaining professional standards of practice with current developments in technology; it provides the public with a reliable source of names of technically competent practitioners; and it protects the public by preventing the unqualified and the incompetent from practicing. Any change in this role which reduces authority of the present Board only relieves the profession of a commensurate responsibility for the public trust. Who else is qualified to assume responsibility for the health, safety and welfare of the people, if not the profession? No man can serve two masters. Either the Legislature continues to hold the profession accountable for the public interest through self regulation, as demonstrated so successfully for more than 38 years; or as the alternative, it abandons its historic position as representatives of the people to the bureaucratic establishment of the Department of Professional & Vocational Standards. If the latter course is adopted, the inevitable struggle between the executive and legislative branches of government over the division of responsibilities—and the conflicting loyalties of the bureaucracy which result—will eventually destroy accountability and its function of safeguarding the public interest.

SURVEYING REGISTRATION

The following letter was prepared by Maurice Lafferty of Bakersfield, and sent to Past President Richard Hogan and to Our Secretary Herb Schumacher. We print it here not because we agree with all of its implications but because we do feel that it represents a very important viewpoint of one of our members.

Mr. Laffert has agreed to participate in a panel discussion at the annual meeting.

"It is fruitless to re-hash the encroachment into surveying by unqualified civil engineers. The situation is bad and getting worse from the additional numbers of new civils each year.

What is not commonly known is that a move is under way by the architects to force local and regional planning bodies to accept tentative survey maps from licensed architects. This has been done in Los Angeles, Santa Barbara and is being pushed in Bakersfield. The only effective opposition to this move has come from the engineer groups and from the California Council of Civil Engineers and Land Surveyors. The architects goal seems to be to get a test case into court, and who knows what the court may decide? They are presently pushing their request armed with an Attorney Generals opinion which either supports them or not, depending on whose attorney is interpreting it.

The point is that many land surveyors depend directly on subdivision work for their livelihood and this attempt by the architects affects the surveyor as well as the engineer.

If the architect is successful, the trend of course will become statewide. This could seriously affect all land surveyors and their employees throughout the state.

It has been advocated by some surveyors that a legal and organizational separation of land surveying from civil engineering will patch the dike and stem such encroachments by others. The facts are that the surveyor and

the engineer are both behind the same dike, like it or not, and the separation of either weakens the position of both.

However, let us assume for a minute that the surveyor abandons his historical relationship with the engineer and decides to go it alone. What are the problems?

First, of course, he must obtain his own governing board. He must do this to guarantee his autonomy and right to govern his own affairs. It is obvious that in view of recent attempts by the legislature to dissolve all governing boards and place all professions immediately under the Director of Vocational Standards, the surveyor must fail. He will fail in his effort to create his own Board simply because the trend in California government is to dissolve, not to create, autonomy.

It is possible I suppose to imagine the surveyor abandoning the engineer as a group and placing himself under the control of the Director of Vocational Standards. It is unreasonable to me, however, to prefer to share the anonymity under the state department than to share autonomy with the engineers.

This is the choice as I see it. Join the engineers in the fight against erosion of both professions or place ourselves separately under the direct control of a political appointee.

I'd rather fight than switch!

If we join the engineers, than it is necessary that we help them block further erosion by the state and others. This was the primary purpose of the Charter Engineers - not to destroy the land surveyor as some would have it.

At this time I would like to refer back to the architects and tentative maps for a minute. Land surveyors historically have signed and submitted tentative maps. It is becoming more common, however, for local bodies to require tentative maps to show engineering data such as drainage, utilities, and soil conditions, as well as land survey data. As a result land surveyors who sign tentative maps may be practicing engineering in doing so. This situation certainly weakens the argument of the surveyor and the engineer against the architect who also wants the same privilege. One solution to this, which would shut the door to the architects and preserve the livelihood of land surveyors engaged in this type of work, was the 'grandfather' provision of the Charter Engineers.

The problems have not changed since the suspension of the Charter Engineers Act in

state committee. They are just a little more evident in the light of recent manipulations by others.

It is time that all land surveyors be made aware of the situation and, most important, adopt a policy which has the best chance of protecting our profession against further encroachment.

I would like to request that the Board of Directors consider the points brought out in this letter and consider creating a panel for the airing of this problem at some early date".

"SURVEYING EDUCATION" Richard Stephan

The formal education of the Land Surveyor, or the lack of it, is a much discussed subject and has been for many years. One can read material written on this subject 20 years ago and the ideas expressed are basically the same as those being written today.

The progress made over the past 20 years has been almost nil. The time for offering excuses and explanations has expired. Today we are interested in what can be done to correct an unacceptable situation. Our concern must be action, not interminable discussion.

Our rapidly expanding technology now requires the teaching of subjects which did not even exist 20 or 30 years ago. Within the civil engineering curriculum these subjects have been added at the expense of surveying, but the civil engineers certainly have the right to decide what is proper training for their graduates.

Any further attempt to build an adequate land surveying curriculum within or around a civil engineering program is futile. The many curriculums which have been proposed in the past were merely modified civil engineering programs and they are much to scientifically oriented. The futility of this approach is quite evident by their general lack of success.

The program that we need must be oriented towards the arts with an adequate scientific background to assure proficiency in boundary location, law, land planning and photogrammetry. The liberal education of the student must be stressed to enable him to fully appreciate and discharge his responsibility to society.

There is little student demand for a land surveying curriculum and there will not be until the profession enhances its own image and until all land surveying work is done only by the Licensed Land Surveyor.