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# The California Surveyor

No. 63

The Voice of the Land Surveyors of California

Winter/Conference 1981



**Inside: Special Report on WFPLS**

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Cover: *Aerial view of the MGM Grand Hotel, Reno, Nevada, site of the WFPLS Conference. Photo courtesy of Gene Lafferty, Great Basin Aerial Surveys, Sparks, Nevada.*

## The California Surveyor

is the quarterly publication of The California Land Surveyors Association and is published as a service to the Land Surveying profession of California. It is mailed to all Licensed Land Surveyors and Land Surveyors in Training in the state of California as well as to all members of California Land Surveyors Association. *The California Surveyor* is an open forum for all surveyors, with an editorial policy predicated on the preamble to the constitution of the California Land Surveyors Association and its stated aims and objectives, which read:

"Recognizing that the true merit of a profession is determined by the value of its services to society, the 'California Land Surveyors Association' does hereby dedicate itself to the promotion and protection of the profession of Land Surveying as a social and economic influence vital to the welfare of society, community, and state."

"The purpose of this organization is to promote the common good and welfare of its members in their activities in the profession of Land Surveying, to promote and maintain the highest possible standards of professional ethics and practices, to promote professional uniformity, to promote public faith and dependence in the Land Surveyors and their work."

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### Sustaining Membership

Membership in the California Land Surveyors Association as a sustaining member is open to any individual, company or corporation who, by their interest in the Land Surveying profession, is desirous of supporting the purposes and objectives of this association. For information regarding sustaining membership, contact the Editor of *The California Surveyor*.

### Editorial Material.

All articles, reports, letters and contributions are accepted and will be considered for publication regardless of the author's affiliation with the California Land Surveyors Association. Material should be sent to *The California Surveyor*.

Unless indicated, all articles in this publication are prepared by the editor

EDITOR: **R. E. Baldwin, L.S.**  
1345 California St.  
Berkeley, CA 94703

### DEADLINE DATES FOR THE CALIFORNIA SURVEYOR

SPRING . . . . . MARCH 10, 1981  
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Articles, Reports, Letters, etc., received after the above mentioned date will be placed in the next edition.

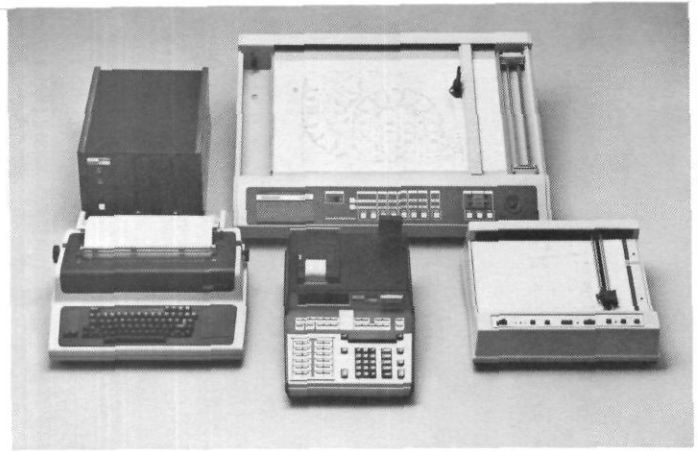
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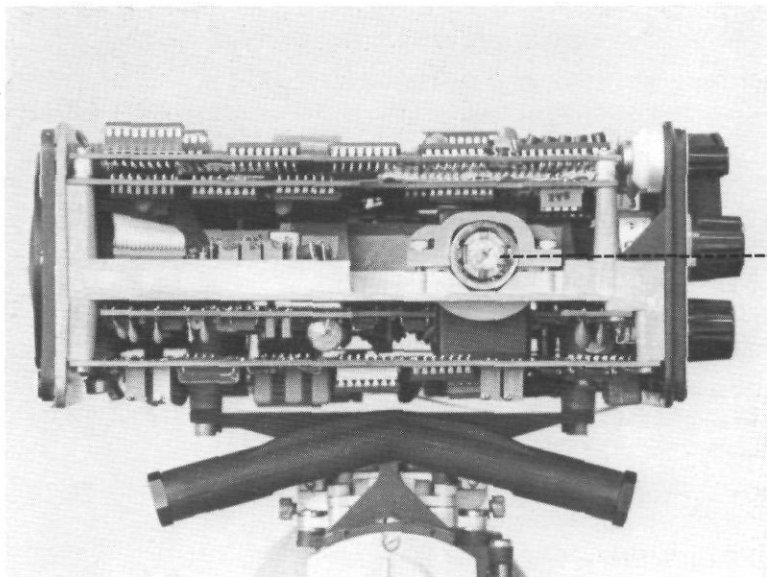
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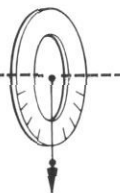
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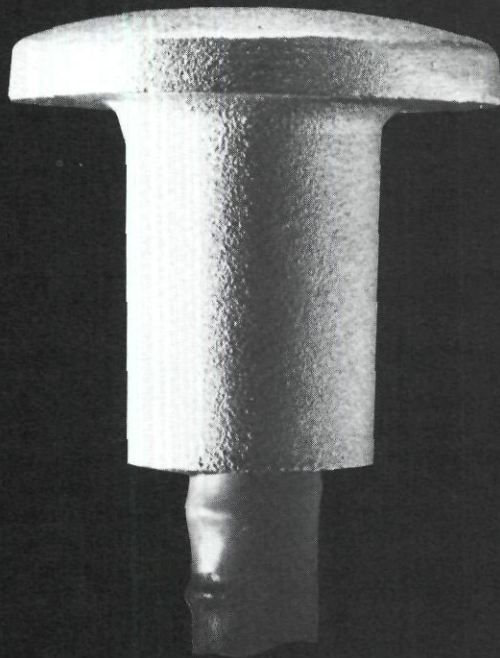
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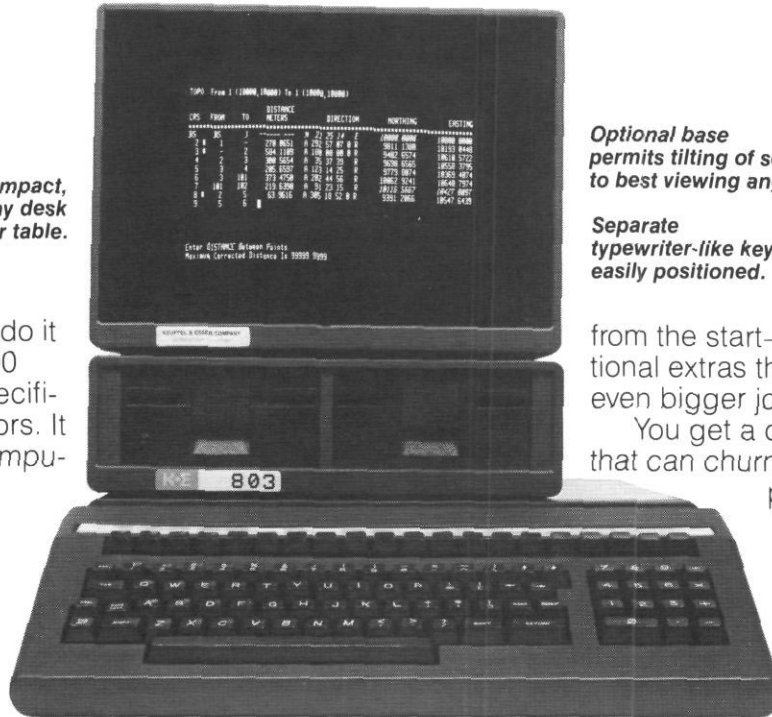
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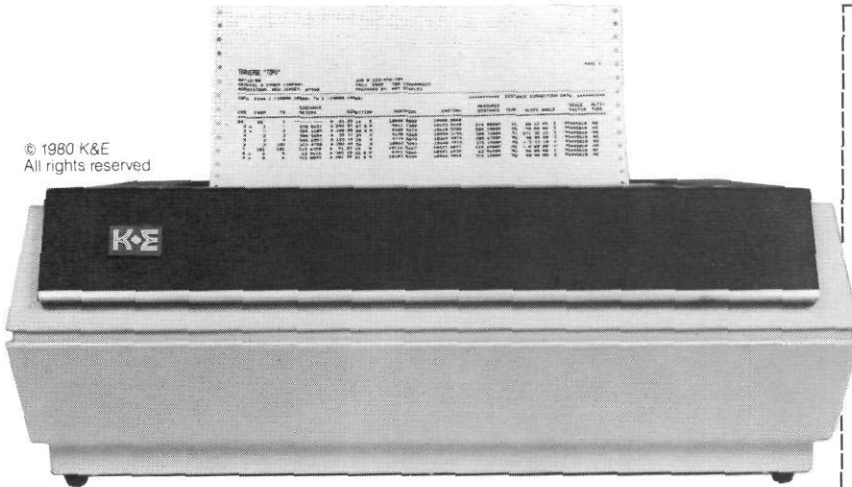
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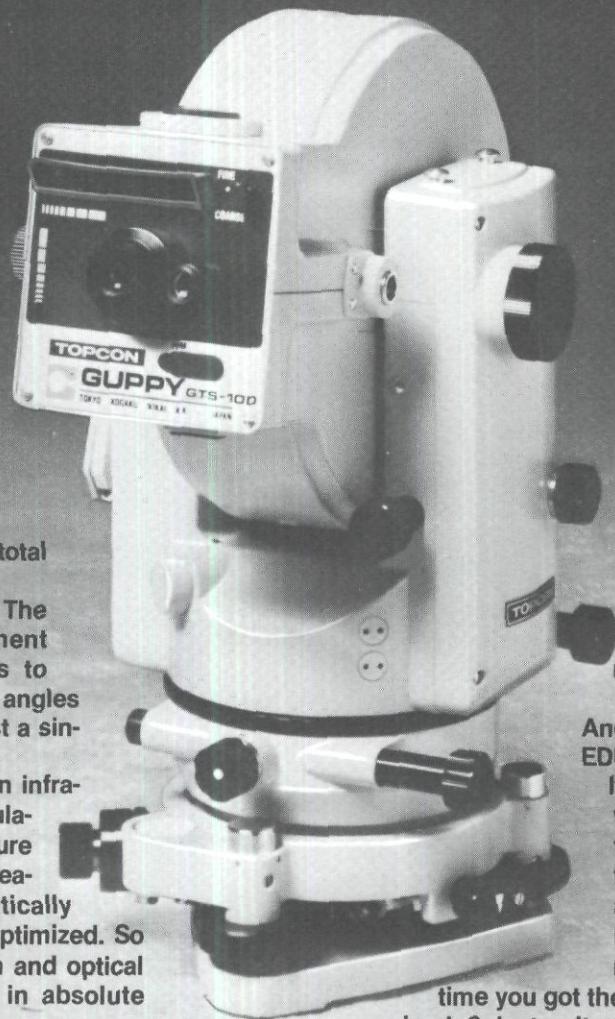
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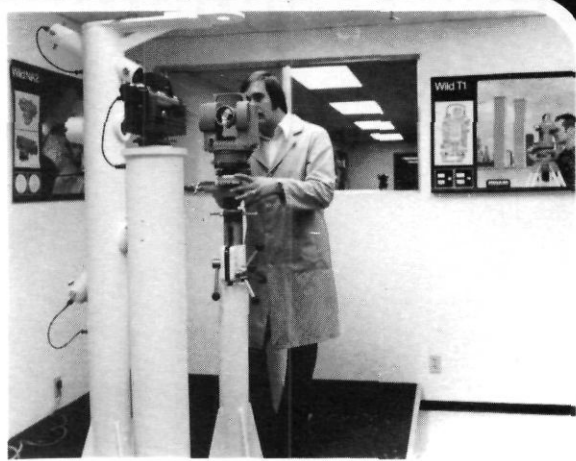
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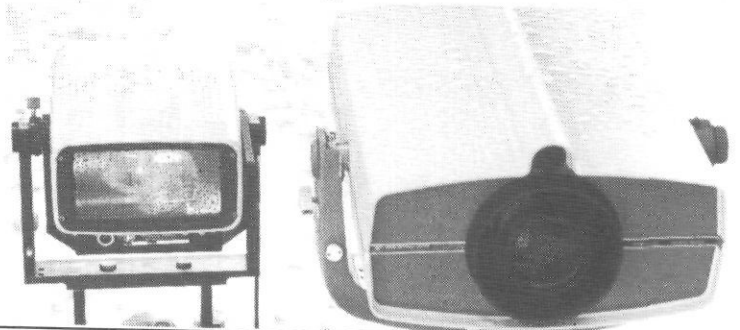
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# Letters

## EDITOR:

The following fits in with Kenneth Lamb's quotation in the Fall issue: "Everything that needs to be said has already been said, but, since no one was listening, everything must be said again."

So — Webster's definition of "image" is in part: "A mental conception held in common by members of a group". Does this mean a surveyor is professional if he thinks he is? Not exactly.

I feel that all members of CLSA are professional surveyors, and many surveyors who do not belong to CLSA are professionals. However, I also feel that there are many surveyors who are not professional. I do not understand why those professional surveyors outside CLSA do not belong to CLSA so that they can be more easily identified. There is more to being professional than just having the public's interest in mind, doing your best work-always, and filing Records of Survey and Corner Records. Professional Surveyors should band together and be recognized.

Oh, by the way, another part of Webster's definition of image is: "A mental picture of something not actually present."

Sincerely,  
D.L. Dean, L.S.

## EDITOR:

A number of articles appeared in the Fall, 1980 edition of *The California Surveyor*, addressing subjects in which I have a personal involvement. Because recent activity has somewhat altered their status, the following comments are offered as an update to the previous reporting:

### VON SCHMIDT BOUNDARY MARKER

In "Letters to the Editor," Mr. Russell Avery submitted photographs and a story about the 1873 Von Schmidt California-Nevada boundary marker near the Colorado River. There also appeared pictures of both the California and Nevada Historic Monument plaques, which purportedly tell of the marker's history and significance. The plaques describe it as marking the southern

terminus of the bi-state border established by Alexey W. Von Schmidt, and further proclaim his line was the first officially accepted oblique state boundary. The same boundary marker has also been nominated for the National Register of Historic Places, with acceptance still pending.

Unfortunately, this impressive relic is not quite what it is claimed to be. Included in the monument's iron casting are words identifying it as Von Schmidt milepost 612 (from Oregon). In 1878, the marker was found in the bed of the Colorado River by local resident W.H. Sailsbury, who randomly moved it to its present, inland site with the assistance of 10 Mojave Indians. For the last 102 years, its location has been offset 494 feet to the northeast of the Von Schmidt oblique boundary line. An additional problem is that Von Schmidt's field notes do not reflect the placement of a 612 milepost; in fact, he reached the river at 611 miles, 63 chains, 67 links. Von Schmidt claims to have set a cast-iron monument similar in appearance at station 611 miles, 59 chains, but stated that one was marked 611 miles, 59 chains. To the best of my knowledge, a marker bearing this identification has never been found. Question: Did he falsify his work and use the precast 612 milepost at 611 miles, 59 chains, or discard the marker in the river because of its erroneous marking? In any event, it is evident that the monument has not served to mark the obsolete state boundary for over 100 years, and maybe never did. Additionally, the Von Schmidt survey of the oblique boundary was never officially accepted by either California or Nevada.

As a result of the incorrect wording on the plaques, I filed with the California Office of Historic Preservation an amended application setting forth the marker's true history, together with an abundance of supportive evidence. That office will soon add an additional "errata" plaque alongside the erroneous original. The U.S. Heritage Conservation and Recreation Service has rejected the marker's nomination to the National Register, as of all the historic boundary markers in the

state, this one seems an inappropriate selection for special recognition considering its uncertain origin and insignificant location.

### CALIFORNIA — NEVADA BOUNDARY LITIGATION

As reported in the Fall article, the Court has rendered a decision on the location of the bi-state border as it runs across land, but not across Lake Tahoe. The states have agreed in principle to the lakebed position, but are still trying to reach accord on the technical details. Involved is reconstructing Von Schmidt's actions at the south end of the lake as he placed himself in the alignment of the 120th meridian, as determined from his earlier operations to the north. The application of historic survey techniques has come into focus, and as yet there is a lack of agreement between the surveying experts used by the two states.

Another significant matter still to be resolved is the status of land titles adjacent to the border. Through application of the "Pellkofer" ruling of the Department of the Interior, the U.S. has challenged private and state ownership of land acquired from the U.S. by one state, which is now physically located within the borders of the neighboring state. The U.S. feels a state could only acquire title, through various old grants, to land within its true borders. Because of past border shifts, uncertainties, and lax administration, we now find that the states acquired and sold land which they may have thought were within their borders, but today are not. At stake is title to thousands of acres of land, including extremely valuable privately-owned residential and commercial property at both the north and south shores of Lake Tahoe. The California Land Title Association is working with the two states in attempting to resolve the problem through legislation (preferably), and also litigation if necessary. The U.S. Supreme Court declined to accept jurisdiction of this ownership question, feeling that if litigated it should first be handled at the District Court level. ▲

**NEWS DIGEST ARTICLE  
ABOUT THE 3-MILE OFFSHORE  
BOUNDARY AND ITS  
RELATION TO THE LOW  
WATER LINE.**

The article presents the U.S. Supreme Court's ruling against California on the effect of piers question (whether the 3-mile limit is measured from the outer end of a pier, or from the mean lower low water line along the shore, neglecting the pier). Although not stated, the same decision also affirmed California's contentions regarding the closing lines of San Diego Bay and San Pedro Bay. After the ruling denying the state's arguments on piers, California filed with the Court a request for rehearing. That body has now directed the U.S. to submit a brief on why the state should not be entitled to the rehearing. While this is not unprecedented action for the Court, it cer-

tainly is not regularly done. Perhaps the last word on the use of piers as basepoints has yet to be heard.

One other unresolved issue in the offshore boundary dispute involving California is the treatment of certain offshore rocks, whose elevation is so close to the tide height of mean lower low water that present surveying technology has not positively identified whether they are above or below that tidal datum. In some instances extreme accuracy is necessary, because the elevation of offshore rocks determines if they qualify as basepoints from which to swing arcs delimiting the 3-mile boundary. Millions of dollars in oil royalties are potentially at stake. After running up surveying costs of \$80,000 in the 1960's, the U.S. Coast and Geodetic Survey, with reference to a particular rock offshore of Carpinteria, reported to the Bureau of Land Manage-

ment that, "... because of uncertainty in the determination of the coefficient for correction of atmospheric refraction due to the lack of an observing platform on the rock, a definitive elevation for the rock is not possible." Further, in the opinion of the Coast and Geodetic Survey, "... a definitive elevation could be established only (1) if a portable tide gauge were established on the rock, (2) a first-order leveling water crossing were performed, or (3) a series of zenith distance measurements to the rock were made over a wide range of atmospheric conditions. Any one of the three methods would require the erection of a stable platform over the rock. For a number of reasons, no further action has been considered." (See "Surveying Involvement in Controverted Offshore Boundaries," by Clark L. Gumm, A.C.S.M. Journal, June 1973, p. 169-173).

Sincerely,

F.D. Uzes

## Editorial

### SPECIAL REPORT

In July of this year, per the instructions of CLSA's Publications Committee, I wrote to the editors of publications of the various land surveyors' associations in the western States which comprise WFPLS offering our Winter Edition as a joint "Conference Edition" to publicize the Reno Conference. Three States responded positively, one responded negatively, and the remainder did not respond at all. Of the three positive responses, two — Washington and Nevada — decided to participate in this edition along with California. The result of these efforts is the special report which is devoted to the Federation, three of its member associations, and the upcoming conference to be held in Reno, Nevada.

The Western Federation of Professional Land Surveyors was formed to deal with problems local to the thirteen western States. Many of the issues which ACSM deals with have little relevance to the West, and it was felt that a group comprised of the land surveyors' associations from the western States could work more effectively on common local problems. The Federation will be holding its Conference in Reno, and everyone is urged to not only attend the technical sessions, but to become involved in

the work of the Federation and of their own Association as well.

The purpose of the special report on WFPLS is not merely to publicize the Conference, but to enlighten each of us as to what the other is doing before we all come together in Reno. By becoming acquainted through this admittedly brief series of articles, we can do more than just learn about each other — we can obtain ideas as to what our own association might be doing, new ideas from outside our own association. Plus, when we do meet in February, it should be easier to get acquainted because we just may have something to talk about besides how to outfit our survey trucks.

### CIVIL ENGINEERS IN CLSA?

The Board of Directors is now considering a change in the By-Laws to admit to Corporate membership anyone currently allowed to practice Land Surveying in California. This, in essence, is a move to admit Civil Engineers. Those in favor of this change argue that Civil Engineers are now allowed to practice Land Surveying, that if we seek the betterment of the profession we should include all those practicing it, and the CLSA's financial position will be improved by the increase in

membership.

Those opposed to the By-Laws change argue that there are already plenty of Civil Engineering Societies, that those societies are exclusively for Civil Engineers, that Land Surveyors also need an association to look after their needs exclusively, and aside from CLSA no such association exists in California.

A third position is expressed by those who argue that it took CLSA fourteen years to remove the Civil Engineers Exemption from the Land Surveyors' Act and, rather than being rushed, we should wait to see how the Board of Registration will implement the new law (which does not become effective until 1982) before we change our By-Laws.

All members of CLSA have a vested interest in this issue. If you have an opinion on this proposed change in our By-Laws, it is imperative that you voice it before the next Board of Directors Meeting. Do NOT sit back and let someone make the decision for you, and then complain about the decision once it is made. CLSA is your association — you must determine its future course.

— R.E. Baldwin  
Editor

# News Digest

*This section of the California Surveyor is designed to provide access to information by printing short news items, reviewing articles from other publications, and reviewing new products. Its success depends upon readers responding with information to be included herein.*

## IN MEMORIAM

We mourn the passing of W. Alan Harrison, L.S. 2263. Al was a member and supporter of CLSA since its beginning and became a Life Member in 1978. He was experienced in many aspects of Land Surveying, beginning with subdivision work in 1934. He was licensed in 1939, and maintained the highest standards in all his years as a Land Surveyor. He will be dearly missed by us all.

## FREE PHOTOGRAMMETRY COURSE

The City College of San Francisco will offer a course in Photogrammetry, three college credit units, on Mondays and Wednesdays from 6:00 p.m. to 9:00 p.m. Instruction begins on February 4, 1981. Tuition is free. This course is essential for L.S. examination. For persons engaged in surveying practice, no prerequisites are required.

Laboratory work will cover the following: the test of stereoscopic vision, computation of calibrated focal length of an aerial camera, measurement of photocoordinates and computation of flying height, planning for an aerial photographic mission, use of parallax bar, use of a parallel guide to plot contours, identification and survey of photocontrol points, radial line plot, use of sketchmaster, determination of tilt in an aerial photograph, operation of Kelsh and Ballplex plotters, relative and absolute orientation and map compilation. The College has three Ballplex plotters, one Kelsh, and one Multiplex plotter, four stereoimage alternators and other laboratory equipment for about 15 students.

The necessary forms for enrollment can be obtained from the Registrar's Office, City College of San Francisco, 50 Phelan Avenue, San Francisco, CA 94112; (415) 239-3581; or from Dr. Engr. D.E.

Slavoj, Coordinator, Civil Engineering Technology; (415) 239-3159 or 239-3505, after Dec. 1st, 1980.

## SURVEYORS HISTORICAL SOCIETY DISPLAY AT GOLD COUNTRY MUSEUM

The Surveyors Historical Society, in conjunction with the Placer County Museum, will put on a two-month long display focusing on "Changing Patterns on the Land." The show, scheduled for March and April, 1981, will feature items relating to the early transformations in real estate which occurred within the region. Included in the exhibit are early-date subdivision and mineral property maps, and many examples of authentic old surveying and mapping instruments.

The Placer County Museum is located at the Gold Country Fairgrounds, 1273 High Street, Auburn, California. Further information can be obtained by contacting Mr. F.D. Uzes, 6840 Pine Cone Rd., Loomis, California 95650, telephone (916) 791-0148.

## CCSF SEEKS INSTRUCTORS

The Engineering Department of the City College of San Francisco wishes to develop a pool of qualified individuals to teach civil engineering technology on a part-time basis. Minimum qualifications are:

- 1) B.S. degree in engineering or engineering technology
- 2) Valid RCE or LS
- 3) Hold or be eligible for California community college instructor credential
- 4) Three years professional experience in U.S.A.
- 5) Membership and activity in professional engineering organizations.

For full information, phone Mr. James Lallas at CCSF: (415) 239-3505.

## LEGAL SEMINAR

TO BE HELD IN  
SAN FRANCISCO ON  
MAY 2, 1981,  
ORANGE COUNTY ON  
MAY 23, 1981

This one-day seminar is designed for the Professional Land Surveyor

interested in gaining additional knowledge and skills on the subjects of surveyor liability, legal research and contracts. The program will be presented in such manner by each of the speakers so as to encourage active participation from the audience by posing questions and generating discussion.

"Surveyor Liability," presented by Judge Philip D. Baiamonte, will include a discussion of the liability law as it effects the land surveyor as well as a discussion on selective previous cases on that subject.

"Legal Research," presented by Peter Jan Honigsberg will take you step-by-step through the legal research process. You will learn how to find a federal or state case, statute and decision, and learn where and how to look for the most recent cases and laws on any subject.

"Surveyor Contracts," presented by Robert Demarco will cover the preparation of contracts between a land surveyor and his client.

FOR FURTHER INFORMATION, CONTACT C.L.S.A. CENTRAL OFFICE, P.O. Box 9098, Santa Rosa, CA 95405, Telephone: 707/539-3633



## NEW LECTURER AT CSUF

Porter W. McDonnell, Jr. has been appointed as a lecturer in Surveying and Photogrammetry at CSU-Fresno for 1980-81. Mr. McDonnell was the first full-time Land Surveying Coordinator for the National Council of Engineering Examiners. His duties with NCEE were to assemble, edit and publish the "Fundamentals of Land Surveying"

and "Principles & Practice of Land Surveying" examinations, supervise the scoring and reporting to the State Boards, and coordinate the other activities of the Land Surveying Committee. From 1965 to 1979, he was in charge of the Surveying Technology program at the Mont Alto Campus of Pennsylvania State University.

Mr. McDonnell is the author of a textbook, *Introduction to Map Projections*, and was the Editor of *The*

*Pennsylvania Surveyor* for eleven years. In 1974, he chaired the National Surveying Teachers Conference. He taught at the University of Arizona and Case Western Reserve University, and was the Product Manager of Surveying Equipment for the Eugene Dietzgen Company. He gained practical experience with his father in Toledo, Ohio, where he became a registered Land Surveyor. He is a member of the Pennsylvania

Society of Land Surveyors, for which he wrote a manual, *Simplified Tables for the Pennsylvania Coordinate System*.

Mr. McDonnell is also a member of CLSA, ACSM, NSPE, ASEE and ASCE. He holds B.S. and M.S. degrees from the University of Michigan, and has taken graduate courses at Purdue University, Texas A.&M. and the University of New Brunswick. ▲

## Calendar

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### 1981

- January 31 CALIFORNIA LAND SURVEYORS ASSOCIATION quarterly Board of Directors meeting to be held at the Grosvenor Airport Inn, 380 South Airport Blvd., So. San Francisco, CA 94080.
- February 17 -20 WESTERN FEDERATION OF PROFESSIONAL LAND SURVEYORS CONFERENCE to be held at the MGM Grand Hotel, Reno, Nevada. For further information contact: W.F.P.L.S., P.O. Box 7400, Santa Rosa, CA 95401 - 707/539-3633.
- February 22- 27 ASP/ACSM ANNUAL CONFERENCE, Sponsored by ASP/ACSM to be held at the Washington Hilton. For further information contact Val E. Sellers, 2214 Glencourse Lane, Reston, VA 22091 - 703/664-5711.
- April 25 CALIFORNIA LAND SURVEYORS ASSOCIATION quarterly Board of Directors meeting to be held at the Grosvenor Airport Inn, 380 South Airport Blvd., So. San Francisco, CA 94080.
- July 25 CALIFORNIA LAND SURVEYORS ASSOCIATION quarterly Board of Directors meeting to be held at the Grosvenor Airport Inn, 380 South Airport Blvd., So. San Francisco, CA 94080.
- August 9 - 12 NATIONAL COUNCIL OF ENGINEERING EXAMINERS (NCEE) Annual meeting to be held at Williams Plaza, Tulsa, OK.
- September 8 - 12 ASP/ACSM FALL 1981 CONFERENCE to be held at the San Francisco Hilton, San Francisco, CA. For further information contact Lee W. Aggers, USGS, 345 Middlefield Road, MS 31, Menlo Park, CA 94025 - 415/323-8111, Ext. 2426.
- October 17 CALIFORNIA LAND SURVEYORS ASSOCIATION quarterly Board of Directors meeting to be held at the Grosvenor Airport Inn, 380 South Airport Blvd., So. San Francisco, CA 94080.

### 1982

- March 17 - 19 CLSA ANNUAL CONFERENCE, Town & Country Hotel, San Diego, CA.

PLEASE SEND INFORMATION to be included in this calendar, along with Sponsor, theme, dates and fee to:

California Land Surveyors Association (C.L.S.A.) Central Office  
P.O. Box 9098, Santa Rosa, CA 95405

# Influencing Legislators

## HAVING THINGS YOUR WAY IN SACRAMENTO (AND WASHINGTON)

By Alvar Yelvington  
CLSA's Legislative Representative

### Part 2 ROLE OF THE GROUP

"No man's life, liberty or property is safe while the Legislature is in session". (1)

It simply does not pay to turn your back on the Legislature at any time, session or no-session. Understandably, an individual, even one with a lot at stake, can't do his or her own legislature-watching enough of the time. The smart person joins a group with similar interests and depends upon group action to look out for the common interest. Looking out for the common interest and benefit for a sizable professional group is no small undertaking. As an organized professional association, CLSA has assumed, and carries well, many responsibilities — professional ethics, education, communication with related professions and groups, legislative liaison and advocacy, to name a few.

CLSA's legislative program is probably the most complex and expensive of its on-going activities. There are times when it is also the most vital activity so far as the prosperity of, and free reliance upon ethical standards by, land surveyors is concerned.

Keeping a watchful eye on the legislature is the responsibility of the Legislative Committee, under the direction of Jim Prendergast and Mike Welch, co-chairmen. It is this committee that must select bills of potential interest to land surveyors and study carefully those that may actually get more political mileage through directing the distribution of an accumulated sum, as opposed to many different persons making individual contributions. (The contributions made to the author of SB 2 by individual CLSA members were handled in the same manner as a Political Action Committee (PAC); all the contributions were funneled through CLSA's central office and forwarded to him in batches, making him aware the contributions were a direct result of CLSA's efforts).

Thanks to the leadership of Jim Prendergast and Mike Welch, CLSA members did so well with the letter writing campaign, when sponsoring SB 2, that we literally overwhelmed any opposition. Those letters, etc., were largely responsible for our success in eliminating the "engineers exemption" in the Land Surveyors Act.

Taking stock of CLSA's legislative accomplishments over the last several years, we have moved up to the main line of influence. Our legislative accomplishments include the remonumentation act, the right-of-trespass act, amendments to every subdivision map act that has made it all the way through, the surveyor-in-training act, the elimination of the engineers exemption, and many more.

It is time for CLSA to recognize that it has the potentiality of being the greatest single influence on legislation relating to its interests, and form its own PAC. With several bills coming up next year to reform the Board of Engineering Examiners, and probably not to our liking, the stakes are going to be too high not to have a PAC.

Individual members will be asked to contribute to the CLSA PAC, should it be formed. If so, be generous! The PAC will be the key to land surveyors realizing their collective professional goals and preventing other special interest groups from doing to the surveyor things surveyors do not want done.

"Money is the mother's milk of politics." (2)

It may seem unfair and undemocratic, but the wealthier, better financed groups are the ones that have the least problems with the Legislature and administrative agencies. That is simply the reality of it. It costs very large sums to run for public office, and those who win legislative seats expect to be helped by the special interest groups that come to them for favors. A legislator is only human when he or she seems always to have time to listen to representatives of those groups that have been generous with their campaign contributions.

The Fair Political Practices Commission, which keeps tabs on such things, reported that special interest

groups spent \$7.9 million to influence legislative and administrative decisions during the first three months of 1980. That works out to over \$65,000 for each of the 120 members of the Legislature. Most of that money went to lobbyists as retainers, but lobbyists are known for their generosity toward politicians. In the same three months, lobbyists spent an average of \$420 per Assembly-person and \$300 per Senator for food and beverage. The watering holes around the Capitol Building all do well when the legislature is in session.

Most of the funds funneled into legislative campaign coffers flow through what is known as a Political Action Committee, or "PAC". PAC's were first formed because of the limit on corporate contributions to campaigns for federal offices. The PAC is a device used by major corporations to get around this limit. The executive employees of these large corporations "voluntarily" contribute to the company's PAC from their "personal" funds; thus the corporations are not involved. PACs are used by statewide associations as a means of accumulating funds for a focused and coordinated lobbying effort. A PAC can appear to affect the land surveyor. These bills are forwarded to the full legislative committee members who study them and recommend a CLSA position on each.

The full Committee meets once a month and determines final CLSA positions. A letter is then sent to the author of each bill informing him or her where CLSA stands on the bill. If CLSA supports a measure, Al Yelvington, your Legislative representative, is instructed to assist the author in gaining passage of the measure. If CLSA's position is to oppose a bill, the author is advised what our objection is and what amendments he or she can make to cause us to change our position. Again, Yelvington is instructed to assist the author in making these changes.

If CLSA's position on a bill is neutral, the author is advised that CLSA has reviewed his or her measure, that we are neutral on it but will continue to monitor it as it moves through the legislature and that future amendments may cause us to

change our position.

All of this reviewing of bills requires a lot of time and dedication on the part of CLSA volunteers. The position letters help keep legislators aware of CLSA and help strengthen rapport. Yelvington's appearance before committees, either for or against a measure, helps strengthen

legislators' respect for CLSA.

Maintaining a professional representative in Sacramento is an important element of CLSA's considerable success in Sacramento. It is Yelvington who deals with legislators on a person-to-person basis concerning CLSA's needs and wants regarding specific bills. There is probably no

major group in California that does not maintain a professional advocate in Sacramento, whether that be a religious group, a civic interest group, or a commercial interest group.

- (1) Tucker, 247 (N.Y.) Surr., 1866
- (2) Jess Marvin Unruh, circa 1972 (as a candidate for Governor)

# New Members

## NEW MEMBERS - THIRD QUARTER, 1980

### CORPORATE MEMBERS

Ronald W. Wootton, LS, Vista, CA  
Jack N. Sowers, LS, Vista, CA  
Samuel H. Kushner, LS, Oakland, CA  
Joseph S. Westvold, LS, Klamath Falls, OR  
Charles G. de St. Maurice, LS, Marysville, CA  
Charles V. Crowe, LS, Agua Dulce, CA  
Robert J. Bittel, LS, Lancaster, CA  
Francis T. Caporaal, LS, Ventura, CA  
Warren A. Hill, LS, Bakersfield, CA  
Eugene A. Shaffer, LS, Redding, CA  
James P. Welker, LS, Cathedral City, CA  
Donald M. Barrie, LS, Irvine, CA  
Anthony R. Matthews, LS, Costa Mesa, CA  
Joseph T. Greer, LS, Escondido, CA  
Vincent J. Sincek, LS, Fall Brook, CA  
Ira H. Alexander, LS, Los Angeles, CA  
Clifford Lewis, LS, Arcadia, CA  
Charles L. Hornbeck, LS, Redding, CA  
Raymond N. Jokela, LS, Santa Maria, CA  
Francois D. Uzes, LS, Loomis, CA  
G.S. Kelso, LS, Spring Valley, CA  
Steven J. Williams, LS, Fair Oaks, CA  
Curtis E. Hawkins, LS, Riverside, CA  
Gene N. Holden, LS, Santa Rosa, CA  
William L. Green, LS, Mission Viejo, CA  
James R. Dorsey, LS, Simi Valley, CA  
Ray C. Amsler, LS, Murrieta, CA  
Larry L. Walker, LS, Anaheim, CA  
Roger E. Longden, LS, San Luis Obispo, CA  
Luis Gomez, LS, Perris, CA  
William B. Snow, LS, Tustin, CA  
Ronald R. Post, LS, Tustin, CA  
Marvin Cabelli, LS, Simi Valley, CA

### AFFILIATE MEMBERS

James P. Chesney, Escondido, CA  
Renoris Dillingham, San Diego, CA

### ASSOCIATE MEMBERS

Chuck Harris, Sunnymead, CA  
Gerald L. Garcia, Carnelian Bay, CA  
Howard C. Whitman, Jr., Chico, CA  
Robert Stubblefield, San Francisco, CA  
Bruce A. Lazenby, Hacienda Heights, CA  
Robert J. Flake, Mojave, CA  
Genciano B. Taday, Thousand Oaks, CA  
Jose R. Gamboa, Rosemead, CA  
Larry O. Cloyed, Sonora, CA  
Julia E. Terry, Concord, CA  
Jerry Wahl, Ojai, CA  
Gary P. Salmen, San Pedro, CA  
Stephen J. Preston, Davis, CA  
Leon E. Mills, Fresno, CA  
Stanley E. Heffnre, San Francisco, CA  
Bradley A. Thomas, Balboa, CA  
John E. Russell, McCall, ID  
Stephen M. Hughey, Canoga Park, CA  
Anne F. Friend, Los Angeles, CA  
David K. Minoggio, Jr., Albany, CA  
Robert C. McGregor, Santa Cruz, CA  
Lucy Lai Young, Palmdale, CA  
David A. Morse, Riverside, CA  
John G. Moore, Tustin, CA

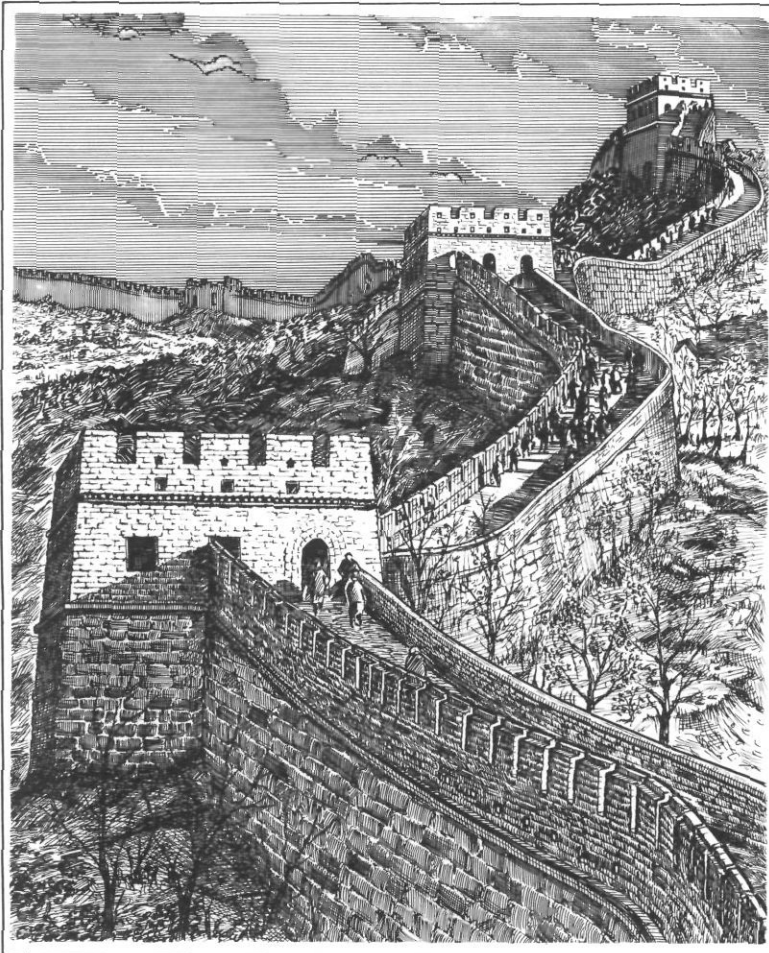
### STUDENT MEMBERS

Fidel Marquez, San Francisco, CA  
Lester E. Carter, Jr., San Diego, CA  
Robert M. Vrabel, Costa Mesa, CA

# Backsights on Surveying

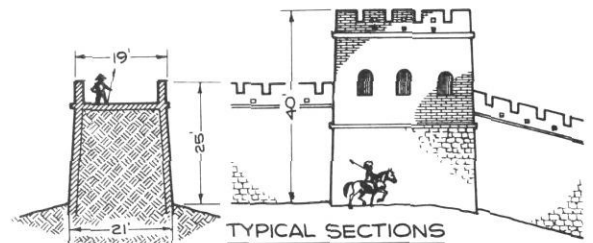
## 万里长城

# THE GREAT WALL OF CHINA



FROM AN ORIGIN SHROUDED IN MYTH AND LEGEND, CHINA'S RECORDED HISTORY SPANS 4000 YEARS. CONSTRUCTION ON THE "GREAT WALL" BEGAN DURING THE "PERIOD OF THE WARRING STATES" (476-221 B.C.). WHEN THE NORTHERNMOST KINGDOMS EACH BUILT WALLS AROUND THEIR CITY-STATE FOR PROTECTION FROM EACH OTHER AND AGAINST INCURSIONS BY THE NOMADIC PEOPLES OF THE FAR NORTH, ANCESTORS OF THE TURKS, MANCHUS AND MONGOLS. WHEN THE "SIX STATES" WERE UNIFIED IN 221 B.C., SHIH HUANG TI, FIRST EMPEROR OF THE CH'IN (QIN) DYNASTY, PUT 300,000 MEN (MANY OF THEM POLITICAL PRISONERS) TO WORK CONNECTING THE SEGMENTS INTO ONE HUGE RAMPART OF STONE AND EARTH WHICH WAS NAMED "WAN LI CH'ANG CH'ENG" (THE WALL OF 10,000 LI).

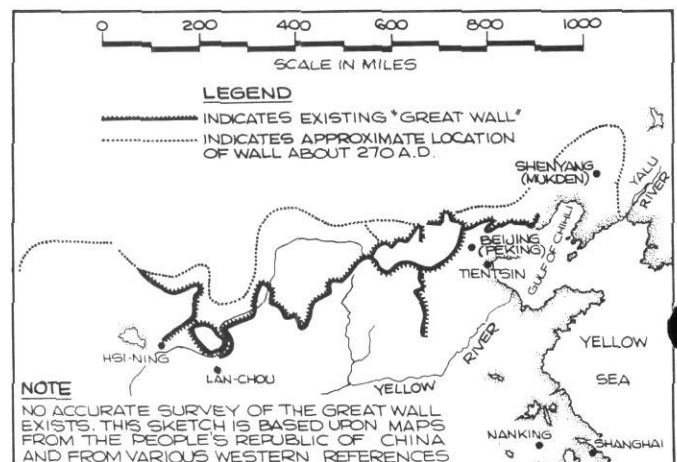
SUCCESSIVE DYNASTIES MAINTAINED AND REINFORCED THE WALL FOR 16 CENTURIES UNTIL 1368 WHEN THE MING DEPOSED THE MONGOLS. THE MING DYNASTY SAW A MASSIVE ONE HUNDRED-YEAR-LONG CONSTRUCTION PROJECT TRANSFORM THE 2,000 MILE LONG STONE AND EARTH RAMPART INTO A REAL FORTIFICATION STRETCHING WESTWARD FROM THE YALU RIVER TO JIAYUGUAN DEEP IN CENTRAL ASIA. CONSTRUCTION, BASICALLY, CONSISTS OF COMPACTED EARTH BETWEEN PARALLEL STONE AND BRICK WALLS WITH A STONE-PAVED ROADWAY ON TOP. THE SECTION AT PA-TA-LING PASS, TYPICAL OF THE "GREAT WALL", MEASURES AN AVERAGE 21 FT. WIDE AT THE BASE, 19 FT. WIDE AT THE TOP AND 25 FT. HIGH. 40 FT. HIGH STONE WATCHTOWERS AT APPROXIMATE 460 FT. INTERVALS, SERVED AS BARRACKS FOR UP TO 100 SOLDIERS AND WERE USED FOR SIGNALLING WITH SMOKE BY DAY AND FIRE BY NIGHT.



OLD RECORDS INDICATE THAT THE WIDTH OF THE ROADWAY WAS ESTABLISHED TO ACCOMMODATE "SIX HORSES RUNNING AHEAD", HOWEVER, THE 45 DEGREE INCLINES, STEPPED SECTIONS, ABRUPT TURNS AND MAN-SIZE DOORWAYS INTO THE WATCHTOWERS WOULD APPEAR TO HAVE PRECLUDED THE PRACTICAL USE OF HORSES ON THE "GREAT WALL".

ALTHOUGH IT PRESENTED A FORMIDABLE BARRIER TO SMALL BANDS OF HORSEMEN BENT ON RAIDING FARMS TO THE SOUTH AND THEN RETREATING WITH CAPTURED LIVESTOCK, THE GREAT WALL LOST ITS EFFECTIVENESS WHEN THE NOMADS UNITED UNDER A STRONG LEADER. BARBARIAN HORDES FREQUENTLY BREACHED THE WALL AND, IN THE 13<sup>TH</sup> AND THE 17<sup>TH</sup> CENTURIES, EVEN ESTABLISHED THEIR OWN DYNASTIES. AFTER CHINA'S BORDERS WERE MADE SECURE UNDER THE BARBARIAN CH'ING DYNASTY (1644-1912), THE WALL WAS OBSOLETE AND IT WAS ALLOWED TO GRADUALLY FALL INTO DISREPAIR.

CHINA GAVE THE WORLD THE COMPASS, CALENDAR, CLOCK, GUNPOWDER, PAPER, PRINTING, PLOW, WINDMILL, COINS, PAPER MONEY, SILK, SOCCER AND SPAGHETTI. THEY MAPPED THE STARS, BUILT THE FIRST SUSPENSION BRIDGE, DRILLED THE FIRST DEEP BOREHOLE AND CREATED THE CIVIL SERVICE AND POSTAL SYSTEMS, THEY TRANSMITTED NATURAL GAS THROUGH BAMBOO PIPES FOR LIGHTING, HEATING AND COOKING OVER 3000 YEARS AGO. THEY TAMED RIVERS, RECLAIMED SWAMPS AND DUG CANALS AND VAST IRRIGATION SYSTEMS. THEY PIONEERED IN THE FIELDS OF INTERNAL MEDICINE, PHARMACOLOGY, NUTRITION, CHEMISTRY, METALLURGY, SCIENTIFIC FARMING AND MINING. THEIR SCULPTURE, CERAMICS, TEXTILES AND ARTWORKS WERE PRIZED THROUGHOUT THE WORLD AND THEIR MAGNIFICENT ARCHITECTURE HAS NEVER BEEN SURPASSED. THAT THEY WERE MASTER SURVEYORS AND ENGINEERS IS EVIDENCED BY THAT INCREDIBLE WALL SNAKING ACROSS 3,930 MILES OF HILLS, PLAINS AND RUGGED MOUNTAINS.



W. J. McGee, I.S.



# WESSCO'S AUTOMATIC LEVEL PACKAGE:

Strong enough for construction.  
Accurate enough for engineering.

Now specially  
priced at  
**\$899.**



Versatility. That's one of the reasons why we believe the Wild NA-1 is one of the finest levels on the market today. Rugged and durable, it easily withstands the rigorous demands of construction projects. Yet the NA-1's excellent optics and compensator repeatability assure accuracy for most engineering and surveying applications too.

And the Wild name on an instrument means superb quality as well as dependability. On the NA-1 a unique Wild feature is the pushbutton control which automatically self-checks the compensator and verifies that it's functioning properly. High winds and heavy traffic conditions no longer present insurmountable problems because the NA-1's superior dampening system helps overcome them.

Our complete automatic level package includes: a Wild NA-1 automatic level, Wessco heavy-duty, wooden, wide-frame tripod and a high quality metal-faced wooden level rod (your choice of San Francisco or Philadelphia styles).

Now you can purchase one of the finest levels, a Wild, with a full 5-year warranty, at a price that is competitive with other brands. List price for this package is \$1425. *Wessco's price is \$899.* Our offer is good until March 31, 1981 but is subject to change without notice should manufacturers increase their prices. We also have a complete line of additional models to satisfy the requirements of the construction trade as well as precision engineering applications. Call us for competitive prices.

To take advantage of our low package price or for further information call Wessco toll free at 800-525-0266; or if in Colorado phone 800-332-1364. Terms and conditions at this low package price are payment in advance or upon delivery of the equipment.

## WESSCO

WESTERN ENGINEERING & SURVEYING SYSTEMS CO.  
4895 JOLIET STREET • DENVER, COLORADO 80239

Transporting separate pieces of sophisticated EDM equipment is simply unwieldy. For many applications such as stake-out work where precision accuracy and longer distances are not required we discovered a more efficient, easy-to-handle solution - Topcon's streamlined GTS-10D Total Station.

Drawing upon the technological expertise which produced the DM-C2, Topcon combined a distance meter with a 10 second theodolite to produce a single, compact and reliable instrument, the GTS-10D Guppy. 25% lighter than a theodolite mounted EDM, the GTS-10D does not require demounting for transporting.

The GTS-10D is easy to carry and easy to operate too. Instead of pointing two instruments at the target, distance measurements and angular readings are achieved with only one pointing, because the axis of light coincides with the optical line of sight at all times. Just adjust the light attenuator and in less than 10 seconds the reading will be displayed. No "start" button is necessary. Under good atmospheric conditions measurements up to one mile are possible.

Our complete total station package includes a Topcon GTS-10D, triple prism assembly, tilting single prism assembly, prism target, prism carrying bags, tripod and stake-out range pole.

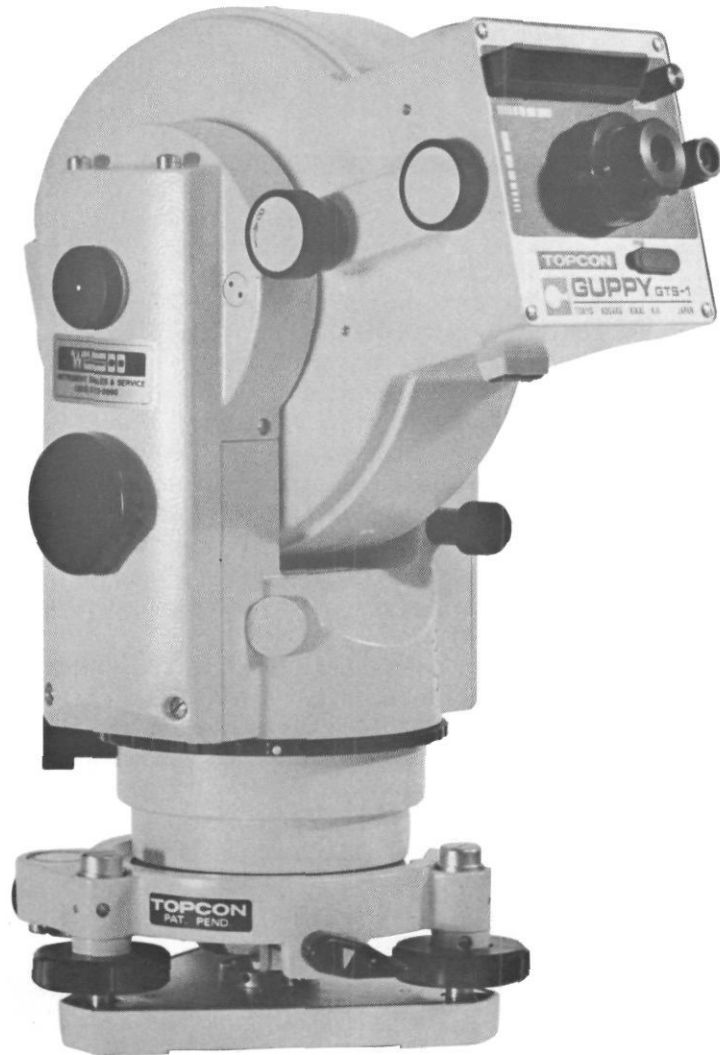
We're so confident of the GTS-10D's reliability that we back it with the best EDM service in the country. Should a breakdown occur during the warranty period, we'll provide you with a free loaner if we can't repair it within 24 hours, freight included.

This package's list price is \$9000. Wessco's price is \$7950. Our offer is subject to change without notice should manufacturers increase their prices.

To take advantage of our low package price or for further information call Wessco toll free at 800-525-0266 or if in Colorado phone 800-332-1364. Terms and conditions at this low package price are payment in advance or upon delivery of the equipment.

## WESSCO'S TOTAL STATION PACKAGE:

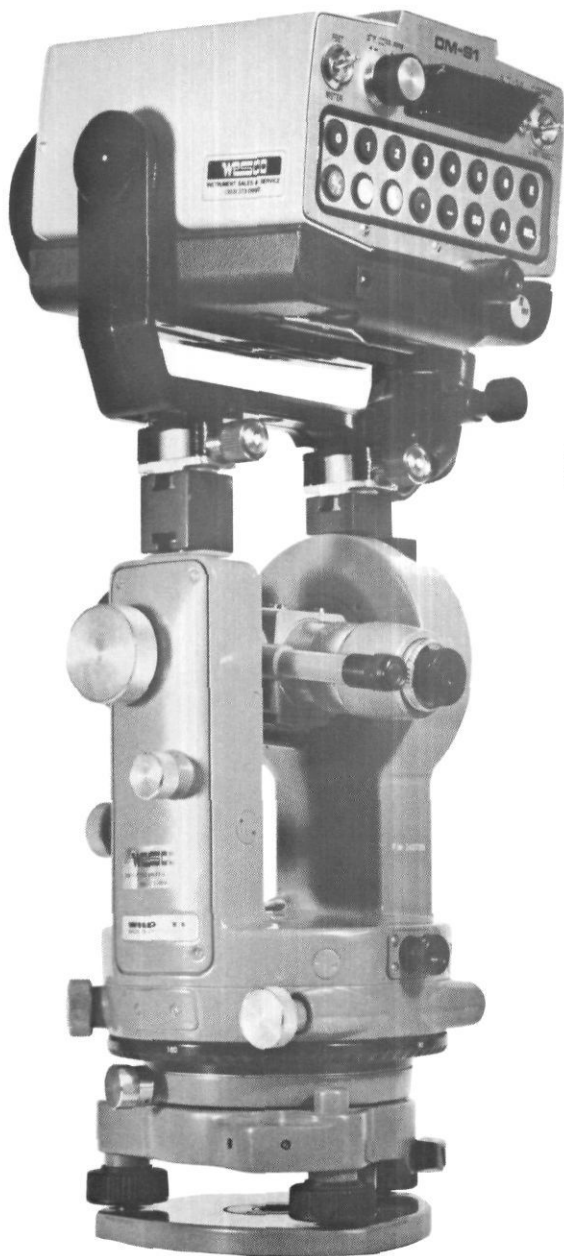
### Compact Enough to Carry in One Hand and Now With All Accessories: \$7950.



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# WESSCO'S NEWEST EDM PACKAGE: Proven Performance and Now With Slope Reduction: \$9490.



We're proud to announce Topcon's new EDM, the DM-S1. It incorporates the proven reliability and performance of the DM-C2 with six new features: 1) Pushbutton Horizontal and Vertical Distance Reduction, 2) Automatic Light Attenuation, 3) Improved Sighting Optics, 4) Self-Contained Battery Pack, 5) Programmable Stake-Out Mode and 6) Tracking Mode.

Now more than ever we believe that Topcon produces the best EDM for the money... the best slope reduction distance meter for the money - the new DM-S1. Attached under the distance meter the self-contained battery pack eliminates the earlier separate battery and cable to offer more freedom of movement. DM-S1's programmable stake-out mode further simplifies stake-out work. Simply preset desired horizontal or vertical distance and the EDM calculates how far you need to move your prism. On the DM-S1 the tracking mode updates distances every second to expedite lay-out work.

And like the DM-C2 Topcon's DM-S1 is almost fool-proof. But now with automatic light attenuation this new EDM is even easier to operate. Just point the distance meter and theodolite at your target. Automatically you'll obtain readings in less than 10 seconds. Under average atmospheric conditions you can measure over 1 mile.

Our complete package includes a Topcon DM-S1, Wild T-1 or T-16D theodolite, battery and charger, tool kit, triple prism and single prism with carrying bags, tribrach, prism adaptor, pointing target, stake-out range pole, two tripods, barometer, thermometer, EDM mounts and installation.

We sold over 300 systems with the DM-C2 and we believe that our new package featuring the DM-S1 is even better. We're so confident of our new system that we back it with the best EDM service in the country. Should a breakdown occur during the warranty period, we'll provide you with a free loaner if we can't repair it within 24 hours, freight included.

For this system Wessco's package price is \$9490. With a Wild T-2, add \$2000. With a Lietz TM-20C, subtract \$1200. Our offer is subject to change without notice should manufacturers increase their prices.

To take advantage of our low price or for further information call Wessco toll free at 800-525-0266; or if in Colorado phone 800-332-1364. Terms and conditions at this low package price are payment in advance or upon delivery of the equipment.

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# **WE'LL REPAIR YOUR INSTRUMENT WITHIN 3 WEEKS OR WE'LL LOAN YOU ONE OF OURS AT NO CHARGE.**

---

## **THAT'S OUR GUARANTEE**

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You can count on it, because we have one of the country's best equipped repair facilities with the most recent and sophisticated equipment available. Our technicians are craftsmen - skilled, proud and dedicated to excellent workmanship. Consequently, we've gained an outstanding reputation in the western United States for being thorough, accurate and prompt.

Theodolites, distance meters, transits or levels — we have the experience to handle them all. Whatever fine surveying equipment you entrust to us will receive a thorough examination to determine the precise repairs or adjustments required. If you request it, we'll even provide an estimate of the probable cost before starting work.

For all repairs our goal is a 2 week turn-around but occasionally time may stretch out to 3 weeks if rare parts are ordered.

But that's when we draw the line. We're so confident of our abilities that we not only guarantee our work — we also guarantee that we'll repair your instrument within 3 weeks. If not, we'll loan you one of our own instruments at no charge.

That's a promise. Count on Wessco the next time your instrument needs repair. For quality work and fast turn-around you've got our word on it.

For further information, call Wessco toll free at 800-525-0266; or if in Colorado phone 800-332-1364.

# **WESCO**

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# REN81

## WESTERN FEDERATION OF PROFESSIONAL LAND SURVEYORS



### NEWS

### CONFERENCE INFORMATION

*"Every man owes a part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere."*

*Theodore Roosevelt*

# SPECIAL REPORT:

## NON-PROFESSIONALS TO SET USFS BOUNDARIES

The United States Forest Service has announced its intention to contract with persons in private practice for the survey of lands under its jurisdiction. The intention of the Forest Service is to issue contracts based upon technical rather than professional criteria - that is to firms or individuals not necessarily registered as Professional Land Surveyors in the state in which the project is situated.

This raises the question regarding the scope of laws regulating Land Surveying within the individual states, specifically as said laws pertain to the setting and marking of property boundaries.

According to the Forest Service's own evaluation, the scope of the contracts would entail field traverse, computation, and the setting and marking of boundary lines. Since the establishment of these boundaries is clearly the establishment of the boundaries of

adjoiners to Forest Service land as well, the interest of every individual is affected. As such, the determination of these boundaries comes under the jurisdiction of the survey laws of the individual states, which laws were established to protect the public welfare.

In this manner, the Forest Service proposal circumvents state statutes and constitutes a clear violation of States Rights, rendering the individual states unable to protect the welfare of the public under their own jurisdictions.

The Board of Directors of the Western Federation of Professional Land Surveyors has reviewed the statutes governing land surveying in the states which comprise the Federation, and found the Forest Service proposal to establish boundary lines as above described to fall within the scope of Professional Land Surveying in each of the states.

Pursuant to this investigation, the Western Federation of Professional Land Surveyors issued a Resolution

(no. 80-05) at their meeting in Denver, Colorado, on September 13-14, opposing the contracting of these surveys to firms or individuals who are not registered as Professional Land Surveyors in the state where the project is situated. The Resolution went on to request that Congressmen representing the states which form the WFPLS cause an investigation of the Forest Service action, and that the investigative findings and resultant decree be made a matter of congressional record.

The resolution was sent to all U.S. Senators and Congressmen in the Federation states, to state associations, and to ACSM. As individuals you can support the WFPLS position by writing to your Senators and Congressmen stating your position. [For some helpful information on writing effective letters, refer to "Having Things Your Way in Sacramento (and Washington): Part I - Role of the Individual" by Alvar Yelvington, published in the Fall 1980 Edition of *The California Surveyor*.] ▲

## THAT BALL AND CHAIN AND THE I.R.S.

Those of you planning on attending the WFPLS Conference in Reno are encouraged to bring your spouse. Aside from the many attractions in and around Reno, special ladies activities are scheduled for wives of the participants (although I cannot find listed anywhere a corresponding schedule for husbands, friends, or lovers).

Those of you who consider your spouse not only wonderful, but a wonderful tax deductible business expense, should take note of the following recent rulings by the Internal Revenue Service and the U.S.

Tax Court regarding the role of the spouse at a professional conference.

In order to qualify for tax deduction, your spouse must participate in *bona fide* business activities. Their attendance of the conference must be both *appropriate and helpful* to your actual business interests, and their activities must *directly relate* to those interests.

Furthermore, the U.S. Tax Court has recently ruled that your spouse must be a *registered participant* in the conference, and the conference *cannot* be considered a holiday with a vacation on the way to or from it.

It is apparent that being charming and creating good will for your

business does not qualify your spouse for that tax deduction, nor do their activities directly involved in the conference unless they are a registered participant. If your spouse is qualified, it is still advisable that a diary be kept of all activities, and that conference paraphernalia such as name badges, materials handed out, etc., be kept to verify your spouse's activities.

Hopefully, after reading all this, you are still planning on bringing your spouse to the Conference, tax deduction or not. Better yet, why not register them and get them involved in that part of your life they know only as your "work"? ▲

# SPECIAL REPORT:



## LAND SURVEYORS' ASSOCIATION OF WASHINGTON

by Darrell R. Sorenson, P.L.S.  
Editor, *Evergreen Surveyor*

What does a member get from his Surveyors Association dues? A publication, convention, seminars, standards, social contacts, problem solving, and other things. It is hoped that the average member receives all of the above, plus interest on their own invested time. If they are active and involved in the local chapter or at the state level, at least the member should receive input toward their professional attitude.

Just what is "professionalism"? Is it never making a mistake? Or dedication to work? Or wearing a tie to work? Or having respect from other "professionals"? Is it the size of the fee charged? Or good client relations? Or is it a combination of all the above, plus other items not mentioned?

In Washington State, the Land Surveyor's Association has made great strides in the area of promoting professionalism the past seven years. "Individuality" was what our organization seemed to emphasize seven years ago. Problems are solved today through cooperation and unified action in the state, which indicates that our professionalism has come a long way. Some of the activities the "professional" is involved with in Washington are: teaching classes to potential candidates for licensing; serving on a board of arbitration to resolve a dispute between two other professionals; showing interest in personal continuing education by attending the annual convention and spring work-shop. Other ways to demonstrate professionalism are by reviewing work carefully before it leaves the office; by setting fees using "good business practices" (presently receiving considerable discussion at the moment); and by following our new positively-worded code of ethics.

The new L.S.A.W. Standards Manual has been published and the price is \$12.75 plus postage. It is available from the chapter, or from the State Executive Secretary. The Standards Committee is now working on providing material to fill the unwritten chapters in the manual.

Today's professional is not just an individual, but is concerned with the activities of the profession and involved in the Land Surveyors Association of Washington. After reviewing the reports from the last L.S.A.W. Board meeting in Spokane on November 8, the following observations on professionalism and unity in our organization are made: Cascade Columbia Chapter had a discussion prompted by reading two opposing letters in the N.W. Chapter's newsletter on fees and professional image. The conclusion was that the Chapter executive committee will be responsible for reviewing and discussing local survey problems as they arise. Most chapters are involved, and are providing input to the amendment process of their local platting and land use ordinances, as well as staying informed about the proposed changes in state legislation covering surveys and professional registration. The legislative committee is keeping us informed on progress in that area and board members are exploring ways to get local chapters involved in the lobbying effort.

The ethics committee is attending the State Board of Registration Meetings and reporting on the results, as well as recommending action to the Board of Registration after reviewing complaints against surveyors. The past chairman, Jim Benthin, even appeared on TV and discussed professional practices in surveying during the consumer complaint news segment, "King Call for Action". Our association, in

conjunction with the State Board of Registration, will be conducting classes on how to keep your license (an idea borrowed from Oregon).

Four chapters are conducting license examination refresher classes for the Associate Members and other interested students. The curriculum material was assembled last year and distributed at the convention in September. The chairman hopes the chapters will add new lesson plans to the outline and contribute additional reference material for future classes. The survey Arbitration Committee is assembling a handbook and soliciting volunteers to act as arbitrators. The *Evergreen Surveyor* has added a section to the publication for the "LINK", the Washington State Section of the A.C.S.M.'s publication, and are now mailing a joint issue to all members of both organizations.

Subscriptions to the "EVERGREEN SURVEYOR" are offered to members of ACSM or other Surveying Associations for \$4.00 per year and we hope that other states will make a similar reciprocal offer.

The L.S.A.W. spring seminar will be held at the Seatac Red Lion Motor Inn, Seattle WA, on May 8 and 9, 1981 and the Convention will be October 1, 2 and 3.

The members from Washington State who attended the first Western Federation meeting at Lake Tahoe in 1979 have been telling others what a great meeting RENO '81 is expected to be. The preliminary program lists many sessions which will expand the professional's knowledge of surveying and business, and will provide a good spring board for discussions with members of our profession from other states. Attendance or the desire to attend is one indication of your commitment to professionalism. See you there! ▲

# SPECIAL REPORT:



## NEVADA ASSOCIATION OF LAND SURVEYORS

by Russ Davies  
Editor, the Nevada Traverse

### OBJECTIVE:

The purpose of this association shall be to promote the common good and welfare of its members in their activities in the profession of Land Surveying; to promote and maintain the highest possible standards of professional ethics and practices; to promote professional uniformity; to promote public awareness and trust in Registered Land Surveyors and their work.

This organization, in its activities and in its membership, shall be non-political, non-partisan, non-sectarian, non-discriminatory and state-wide in its scope. Present membership is 146, which includes 102 regular members, 39 associate members and five sustaining members.

### HIGHLIGHTS OF 1980:

The Seventh Annual Conference of NALS was held in Las Vegas in February of 1980. Well planned and well attended, the program had several expert guest speakers who spoke on such topics as: Nevada history and boundaries, the historical role of the surveyor in the building of America and legal aspects of surveying. A simulated court trial was held which impressed upon all who attended the need for proper credentials and precautions in surveys, especially pre-survey research.

A calibrated base line has been established at the University of Nevada, Las Vegas, thanks to more than two years of hard work by the Southern Nevada Chapter under the Committee of Les McFarlane. Dr. Richard Wyman of the UNLV Engineering Department assisted the Southern Nevada Chapter in this effort. Final results are recorded with the Southern Chapter's Office, the Clark County Surveyor's Office and the UNLV Engineering Department. Doug Hopkins chairs a committee for the Northern Nevada Chapter working on establishing base line for Northern Nevada.

An Associate Degree Program in Surveying Technology is offered by the Western Nevada Community College, Carson City Campus. Gil Ayarbe, the instructor, consults with NALS members, Walt Heitz, John Brook and Gene Lafferty—members of the advisory board for the curriculum. John Butler of the State Board of Registration is acting as an advisor, and Charles Miskilin and Fred Thompson of the Nevada Department of Highways advise on Mapping Courses.

Clark County (Las Vegas) Community College offers an Associate in Applied Science Degree in conjunction with the Southern Nevada Joint Apprenticeship Training pro-

gram. The program is basically a work study type - many of the participants in the program have gone on to obtain their professional Registration.

The Lahontan Chapter (Northern Nevada) sponsors LS and LSIT exam preparation courses through the Truckee Meadows Community College. These are in addition to full credit Surveying courses taught in the Fall and Spring semesters.

The Education Committee of the Lahontan Chapter sponsored several seminars during the year, including a seminar on solar observations and seminars on surveying to various real estate groups. The Committee also donated 16 surveying texts to the Washoe County Library System for the use of all interested leaders within the State of Nevada. NALS, thru its publication, *The Nevada Traverse*, actively communicates with other State's surveying organizations. Membership information can be obtained from Nevada Association of Land Surveyors, P.O. Box 20522, Reno, Nevada 89515.

Working with CLSA, NALS was part of the original nucleus which led to the formation of the Western Federation of Professional Land Surveyors. ▲

### EXHIBITORS

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The Leitz Company  
Lewis & Lewis

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Hewlett Packard  
Schonstedt Instrument Co.  
Carl-Zeiss, Inc.  
Topcon Instrument Corp. of America  
Seco Surveying Equipment

Disco-Tech/Morton Technologies  
Motorola  
Kern Instruments, Inc.  
Holmans of Nevada  
Carsonite International Corp.





## CALIFORNIA LAND SURVEYORS ASSOCIATION

The California Land Surveyors Association was formed in 1966 by a group of surveyors who found the climate for professional land surveying deteriorating rapidly, and decided to reverse the situation. Since then, CLSA has been the State's leading force in promoting the status of land surveying through legislative activities, public relations, and services to members.

One of the association's major activities has been to make the surveyor's presence felt in Sacramento. Alvar Yelvington, CLSA's legislative advocate, and the Legislative Committee headed by Jim Prendergast review bills of interest to surveyors, then act to support or oppose them. Through their efforts, and with the support of those Land Surveyors and Civil Engineers concerned with maintaining standards of excellence, CLSA-sponsored legislation to remove the Civil Engineers Exemption from the Land Surveyors' Act was passed and has become statute: Civil Engineers registered after January 1, 1982, who wish to practice land surveying in California must first prove their competency to do so. While this is their major accomplishment, they continue to be watchdogs in Sacramento, following all pending legislation which may even remotely affect the profession.

Other of CLSA's activities include the annual conference at which surveyors meet to share ideas and common concerns, and to attend the seminars offered. In addition to seminars which are an integral part of the conferences, the association sponsors workshops such as the real property law and water boundary workshops recently held, and the legal workshop scheduled for early 1981. These workshops, held in both northern

and southern California, are well attended and provide vital information to the professional practitioner.

A Proprietors Council will be established in 1981 to provide support to surveyors in private. Among the services being formulated at this time are group E & O insurance, a standard form of contract, and a monthly newsletter giving *current* information on legislation, case law, taxes, public agency policy decisions, equipment, etc.

Another service provided by CLSA is this publication, which is printed and mailed at the association's expense to *all* land surveyors and LSITs in California because CLSA feels that all should be informed and have the opportunity to discuss ideas and issues of common interest without regard to their membership in CLSA. Costs are rising, however, and 1980 may be the last year that CLSA will be financially able to do this.

A bill-collecting service from I.C. Systems is made available from CLSA, and a program whereby safety glasses may be obtained for about one-fourth to one-third of their ordinary cost is also available. Also, studies on the offering of group health and life insurance are being completed, and work is going forward to provide these services to members.

Aside from the activities of the State organization, local Chapters are also involved in a variety of projects. For example, the East Bay Chapter has a Map Review Committee to review obvious errors in surveys (*not* problems involving differences of professional judgment). Every attempt is made to have errors corrected without going outside the surveying community, however some obdurate individuals

have been referred to the Board of Registration for appropriate action. Another example of local Chapter work is that of the Sonoma Chapter which, in conjunction with their local College, is establishing a computer storage and retrieval system indexing the nature and location of survey records in their area.

To coordinate all of these programs and activities, CLSA maintains an administrative office in Santa Rosa headed by an Executive Director, Dorothy Calagari, who is under contract to the association to run its day-to-day business activities. This includes coordinating the activities of the Board of Directors, coordinating conference and workshop activities, liaison between the Chapters, other State associations, regional and national associations, coordinating the activities of CLSA Committees, and maintaining records including the mailing list for this publication which is approximately two years ahead of the Board of Registration's published listing of Land Surveyors.

CLSA has been able to make positive changes for the profession in California because of the personal dedication of those individuals who give freely of their time to see that needed changes are accomplished, and those land surveyors who are professional enough to join and support the only organization promoting their interests in California.

The California Land Surveyors' Association was one of the original sponsors of the Western Federation of Professional Land Surveyors first Conference at South Lake Tahoe, Nevada, in 1978. Those of us who attended that Conference remember it as one of the best ever, and are eagerly awaiting the upcoming one. Join us!

# SPECIAL REPORT:

## PRELIMINARY PROGRAM

### TUESDAY, FEBRUARY 17, 1981

Individual State Land Surveyor Association Board of Director Meetings  
Historical Society Meeting  
Western Federation of Professional Land Surveyors Board of Directors Meeting  
Historical Society Meeting

#### CONCURRENT WORKSHOPS

Retracement of Evidence Workshop  
Practical Photogrammetry Workshop  
Homestead Entry and Mineral Surveys Workshop  
Survey Instrument Adjustment Workshop  
Historical Survey Equipment Workshop  
Title Research and Liability Workshop  
Exhibitor Sponsored Cocktail Party.

### WEDNESDAY, FEBRUARY 18, 1981

Official Opening of the 1981 Conference, Welcoming remarks, Recognition of Dignitaries and Opening Address

World's Largest Construction Project  
"Coming of the Age of the Surveyor"  
"Surveyor, Who Is He?"  
"Sermon on the Mound"

#### CONCURRENT WORKSHOPS

Title, Research and Liability Workshop  
Historical Survey Equipment Workshop  
Training, Hiring and Firing Workshop  
Survey Instrument Adjustment Workshop  
Retracement of Evidence Workshop  
Practical Photogrammetry Workshop  
Homestead Entry and Mineral Surveys Workshop  
Exhibitor Workshops  
Basque Theme Party

### THURSDAY, FEBRUARY 19, 1981

#### CONCURRENT WORKSHOPS

Adverse Possession Court  
Exhibitor Workshops

Time Management Workshop  
Basic Photogrammetry Workshop  
Influencing The Course of Survey History  
Education For Surveyors, A Bermuda Triangle

Joint Mens - Ladies Luncheon

#### CONCURRENT WORKSHOPS

Adverse Possession Court  
Exhibitors Workshops  
Training, Hiring and Firing Workshop  
Future Implications of Government Contracting As It Affects Surveyors and Mappers  
"Hello Hollywood Hello" Dinner Show

### FRIDAY, FEBRUARY 20, 1981

1st Annual Reno Encampment of Historical Surveyors  
Basic Photogrammetry Workshop  
Time Management Workshop  
Future Implications of Government Contracting  
Closing Ceremonies

## SOCIAL EVENTS

On Tuesday evening, the exhibitors will be hosting a Get Acquainted Cocktail Party.

On Wednesday evening we invite you to join us at a true Basque Party. Entertainment will include a local Basque band and dancers. Dinner will consist of a buffet.

On Thursday evening, MGM will proudly present the spectacular "Hello

Hollywood Hello", a two hour dinner show covering the glitter and glory of Hollywood's Golden Years. Included in the show are 150 gorgeous and talented dancers, recreating many of Hollywood's successful shows of yesteryear. Seating will be at 6:00 P.M. Price includes tax and gratuity.

Weather permitting we are planning a 49,000,709.6 links fun run during the

conference. The run is tentatively planned around Thursday noon, since the temperature for an early morning run may be around 30°F. The cost of the run (\$10.00) includes a super-designed T-shirt. If enough people are interested, we will hold a racquet ball tournament in a nearby gym during the conference. Info on that will be available in the Registration Area.

## LADIES ACTIVITIES

The ladies activities will begin on Tuesday morning with a brunch at the hotel and a live audience-participation gaming demonstration.

The brunch and gaming demonstration will be repeated on Wednesday at the same time. In addition, on that day, Bingo will be available at the Reno Sahara. Buses will leave the MGM Hotel at 9:00 A.M. for the Reno Sahara and return by noon, just in time for a cocktail before joining the other ladies for Lunch and Fashion Show at the MGM.

On Thursday, Bingo will again be available at the Sahara Reno. For those of you who have a need for exercise, an amateur "All For Fun" bowling tournament will be held at the MGM from 9:30 A.M. — 11:30 A.M. The hotel bowling manager encourages "non-bowlers" as well as bowlers to participate.

For those of you who have a hankering to hit the slopes, a special Ski excursion to North Star at Tahoe will be available on both Thursday and Friday.

For those of you who wish to visit the

famous museum town of Virginia City, we will have a tour available on Thursday weather permitting. The buses will leave around 10:00 A.M. and return at 3:00 P.M. The trip includes bus transportation and a Buffet Luncheon at the Red Garter Saloon.

The above ladies' activities are not limited to the ladies. We have tried to design the program to be of interest to all. Men are cordially invited to attend. HAVE FUN.

# RENO 81

# RENO 81

# RENO 81



BACKSIGHT ON INDIVIDUALISM



FORESIGHT ON UNITY



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# Records

## SURVEYORS HISTORICAL SOCIETY QUESTIONNAIRE

The Surveyors Historical Society is compiling an inventory of survey maps, field books, and other survey records in California for a centralized information retrieval system, and we need your help!

The society recently mailed questionnaires to state and county agencies (survey and recorder offices, libraries, Cal Trans, etc.), historical societies, and museums, asking about records retained, how indexed, and location. So far, the response from this questionnaire has supplied information from 48 out of 58 counties.

We are now requesting similar information from and/or about all individual surveyors in California. Please take the time to answer the following questions regarding your own survey records and those of deceased or out-of-practice surveyors that you may have in your possession, and return as soon as possible to:

Myron A. Lewis  
31457 Hugh Way  
Hayward, CA 94544

We would also appreciate names of other contacts who do not receive this publication.

1. Name of surveyor or engineer: \_\_\_\_\_
2. Registration Number \_\_\_\_\_ L.S. \_\_\_\_\_? R.E. \_\_\_\_\_?
3. Active? \_\_\_\_\_ Inactive/Retired? \_\_\_\_\_ Deceased? \_\_\_\_\_
4. Records cover years from \_\_\_\_\_ to \_\_\_\_\_, for the following area(s):  
\_\_\_\_\_
5. Present location of records:  
\_\_\_\_\_
6. Were any records destroyed? no \_\_\_\_\_ yes \_\_\_\_\_. Which? \_\_\_\_\_
7. Are records indexed? no \_\_\_\_\_ yes \_\_\_\_\_.  
Index method: \_\_\_\_\_  
(Example: Calif. Coord. System, Township & Range, Client's name, etc.)
8. Who has access to these records?: \_\_\_\_\_
9. Would you release records for public access? no \_\_\_\_\_ yes \_\_\_\_\_
10. Your name (if different from above): \_\_\_\_\_  
Your Address: \_\_\_\_\_  
\_\_\_\_\_  
Your Phone #: \_\_\_\_\_

Comments:

Please make copies of above for each surveyor's records.  
Attach additional sheet if needed.

# Book Nook

1. *Shore and Sea Boundaries* (1962) Reprint 1975—Aaron L. Shalowitz, U.S. Department of Commerce Publication No. 10-1  
*Vol. II—The Interpretation and Use of U.S. Coast and Geodetic Survey Data* . . . . . \$11.95 ea.
2. *Tide and Current Glossary*—U.S. Department of Commerce, N.O.A.A.—National Ocean Survey (1949) Revised 1975. Special Publication No. 228. \$ 0.75 ea.
3. *Proceedings; Water and Water Related Boundaries Workshop II, May 20 & 21, 1977, Irvine, CA* (262 pages)  
CLSA Members. . . \$15.00 ea.  
Non-Members. . . \$20.00 ea.
4. *Coastal Zone Map #TP-00189—Florida, Palm Beach County, Lantana to Boynton Beach—1:10,000 (1970)*  
An extremely interesting map format which contains detailed printed instructions to Surveyors on How to Locate a Mean High Water Line According to Law, adopted by the Florida State Legislature. A real collector's item . . . . . \$ 2.50 ea.
5. *Restoration of Lost or Obliterated Corners & Subdivision of Sections*—a guide for surveyors—United State Department of the Interior, Bureau of Land Management—1974 Edition. . .75 ea.
6. *Metric Practice Guide for Surveying and Mapping*—American Congress on Surveying and Mapping. This Metric Practice Guide has been prepared to aid those engaged in surveying and mapping

in the use of the International System of Units (SI) in accordance with recommendations contained in the Metric Conversion Act of 1975, Public Law 94-168 . 1.50 ea.

7. *Cassette Tape Recordings of the CLSA Water & Water Related Boundaries Workshop II at Irvine, CA—May 25–26, 1977.*  
Costs have been established as follows:  
Complete 10 cassette set, including "Proceedings" (Item 3 above) (Over 8 hours of lecture and discussion)  
CLSA Members. . . . \$50.00  
Non-Members. . . . \$60.00
  - a. *The Pornography of Water and Water Related Boundaries (Terms and Terminology)*—James N. Dowden, L.S., Boundary Determination Officer, State Lands Commission.
  - b. *Tides, Time and Shoreline Processes*—Dr. Warren C. Thompson, Professor of Physical Oceanography, U.S. Naval Post Graduate School, Monterey.
  - c. *California Law Looks at the Water Boundary*—Peter H. F. Graber, Esq., Deputy Attorney General, Land Law Section, Department of Justice.
  - d. *The Ordinary High Water Mark — How Determined!*—Ned Washburn, Esq., Attorney at Law, Landes, Ripley & Diamond, San Francisco, CA
  - e. *To Insure or Not to Insure—That is the Exception!*—James R. Dorsey, L.S., Executive Vice President, Winter,

- Durnford, Dorsey and Associates, Land Consultants.
- f. *More Muddles in the Puddle—The Jurisdictional Aspects and Boundaries of the California Coastal Zone Commission and San Francisco Bay Conservation and Development Commission*—Raymond B. Thinggaard, L.S., Assistant Manager Real Property, Leslie Salt Co.
  - g. *Internal Conflicts—State V. Federal Rules, Sovereign Lands and Rights*—Ed Griffin, L.S., Chief, Branch of Cadastral Surveys, California State Office of U.S. Bureau of Land Management.
  - h. *The Restless Tides and the Marine Boundary Program of the National Ocean Survey*—Carrol I. Thurlow, Deputy Chief, Oceanographic Division, Office of Marine Surveys and Maps, N.O.S.
  - i. *Slope and Undulations of Tidal Datum Planes and Quantification of Accuracy of Various Methods*—Cdr. A. Nicholas Bodnar, R.C.E. (California) Principal Engineer, Requirements and Facilities Section, Tides and Water Levels Branch, Oceanographic Division, Office of Marine Surveys and Maps, N.O.S.
  - j. *Survey Procedures For Determination of Mean High Water*—Jack E. Guth, Capt. N.O.S. (Ret.), President of Coast Survey Limited, Herndon, VA.

ORDERS AND PAYMENT SHOULD BE DIRECTED TO:  
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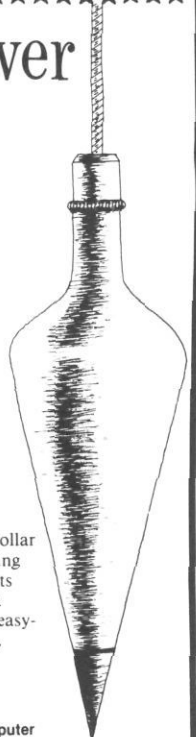
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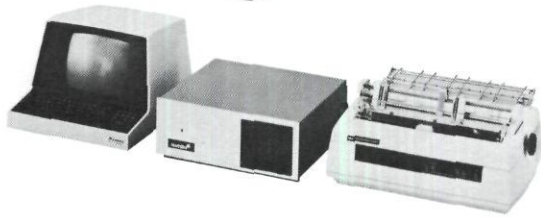


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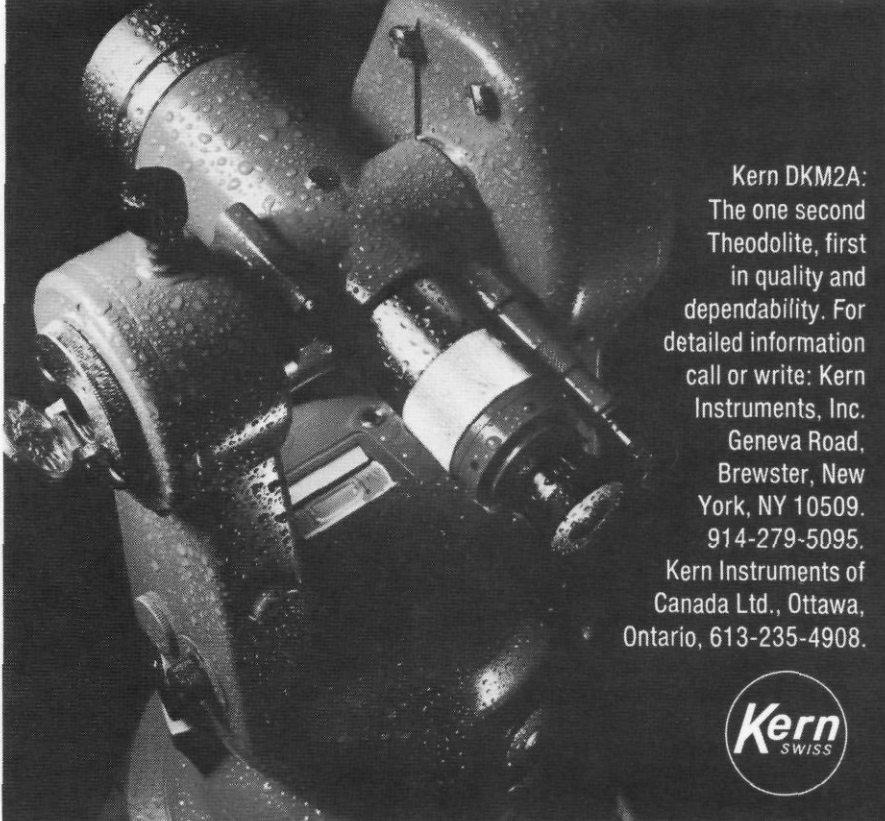
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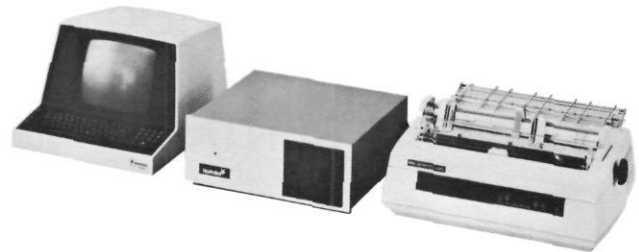
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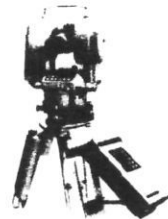


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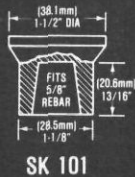
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