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# The California Surveyor



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## 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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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: **J. E. Terry, L.S.**  
 6059 Harwood Ave.,  
 Oakland, CA 94618

### DEADLINE DATES FOR THE CALIFORNIA SURVEYOR

Summer ..... July 15, 1983

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

*Cover: Clarence Westgate Cook, at right, with his team of surveyors during an assignment on Bunker Hill in 1912. The task in progress was to determine cost feasibility of cutting down the familiar hill landmark which, even then, was being considered for future redevelopment. Furnished by C.W. Cook Co., Los Angeles, CA.*

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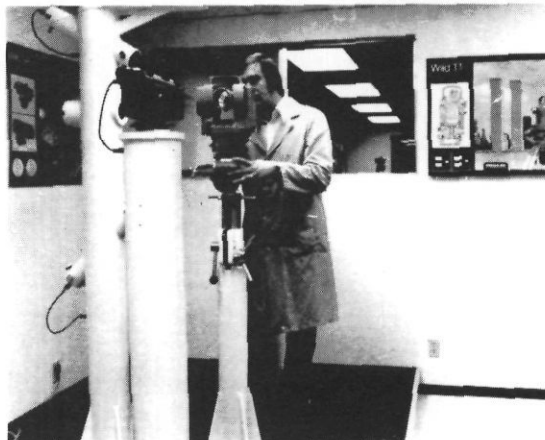
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# From The Editor

## FROM THE EDITOR

As I'm sure most of you know, each chapter is responsible for sending articles to me for publication in the California Surveyor. Approximately six chapters have "the duty" every time this magazine goes to print. I would like to take this opportunity to thank each chapter for, in effect, acting as reporters for this publication. Without all of you, the publishing of this magazine would become a monumental task. The effort you make on behalf of your professional organization is noted and greatly appreciated.

I would also like to take a moment here to acknowledge Jon Blake, LS as the author of "Determination of a Mean Bearing in a Fractional Second" which appeared in the Articles section of the Winter 1983 issue of this magazine. Besides not appearing as author, there were two other errors that we should acknowledge here. Under Method 3, "(distances not considered)" should have read "(distances considered)"; and, the map to go along with his article, unfortunately appeared on the following page. Our apologies to Mr. Blake.

**STOLEN**—W. & L.E. Gurley Solar Compass and Gurley Light Mountain Transit from the Kern County Museum. Unfortunately, serial numbers are unavailable. The solar compass was quite tarnished. They were last seen in April, 1980. If you have seen these, please contact the Bakersfield Chapter at (805) 871-9491.

## PROPRIETOR'S COUNCIL

The Proprietor's Council is designed to meet the needs of the private surveying practitioner by providing business education, specialized services and State and Local influence on regulatory agencies.

Among the benefits derived from the PROPRIETOR'S COUNCIL is the monthly Newsletter, modeled upon the needs of the proprietor. This letter covers information such as liability, ethics, finance, credit, tax benefits, client relations, business practices, billings, economic trends, contractual practices, accounting, legal, collections, etc.

Benefits of the PROPRIETOR'S COUNCIL, other than the monthly Newsletters, are anticipated to be: Create standard work order form, Bureau of Land Management account (presently established for PC Members), provide a collection service, monitor and lobby for professional business legislation, publish or purchase copies of

the Land Surveyors Act, develop a group health program, examine and analyze software of various computers, allow group purchase, advertise used equipment, monitor employment situations, create a hot sheet, provide local liaison or monitoring of regional or local problems by Chapters, develop standard of procedures, develop standards of accuracy, provide lobby for local or regional agencies, provide liaison with the Board of Registration regarding disciplinary proceedings, provide accounting consultants, legal consultants, and tax consultants, monitor case law, and many other services as the membership may from time to time direct.

In order to become a member of the PROPRIETOR'S COUNCIL, fill out the enclosed application form, submit the initiation fee and first year's dues for 1983 (pro-rated from the date of application), and return to the address provided on the membership application form. You will be contacted within a short time as to your chapter meeting location.

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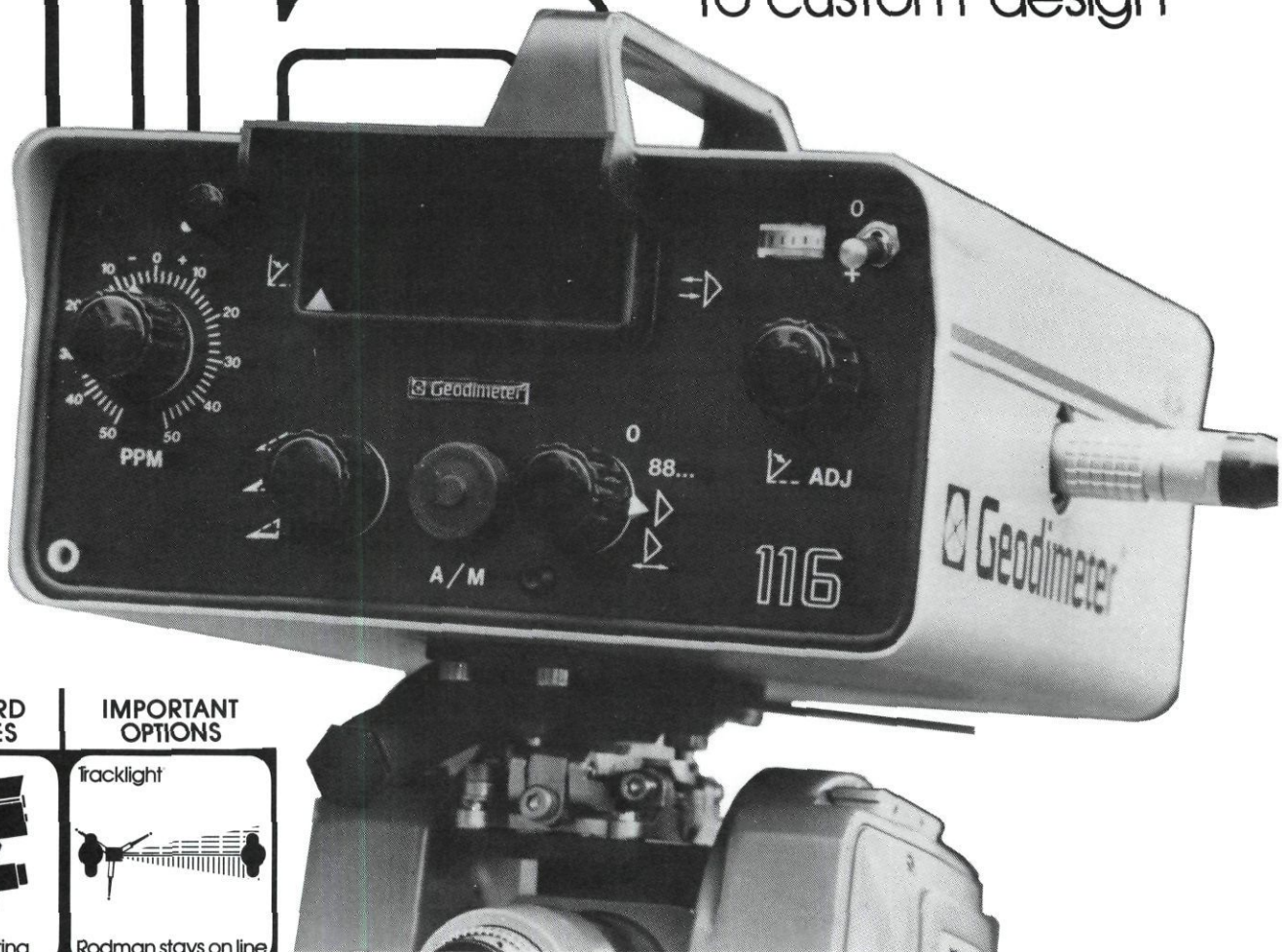
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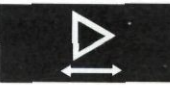

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# Book Nook

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. . . . . \$1.00 ea.

3. *Coastal Zone Map #TP-00189—Florida, Palm Beach County, Lan-*

*tana to Boynton Beach—1.10,000 (1970)*

An extremely interesting map format which contains detailed printed instruction 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.

4. *Restoration of Lost or Obliterated Corners & Subdivision of Sections*—a guide for surveyors—United States Department of In-

terior, Bureau of Land Management—1974 Edition . . . . . \$ .75 ea.

5. *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.

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**Letters to the Editor**  
(Continued from page 12)

2. The surveying surrounding the project
3. The deeds to the adjoining properties
4. The intent of the owners of the subject property and the adjoining owners,

to mention only a few of the problems confronting the professional in starting a project, he will not even be able to start properly.

The area presenting the greatest problems to the profession today is, in my opinion, the lack of knowledge of who we are and what we do. Many a person can be trained to run a theodolite, stake a building, measure a distance, etc., but it takes a lot more knowledge before he can be called a surveyor.

William J Richard, L.S. 4451  
President.  
ERB Engineering, Inc.

**Riverside**  
(Continued from page 22)

checking fee.

**Parcel Map Checking Fees**

- A. Checking fee: \$310 plus \$20 per parcel
- B. Checking fee for all re-subdivisions of an entire lot or parcel created on a final map or parcel recorded after January 1, 1960 is \$125.

**Environmental Analysis**

- A. Initial Environmental Determination: \$136
- B. Minor Subdivisions: \$90

The survey community and persons dividing property in San Bernardino County sincerely appreciate the consideration and work that went into this change. Thank you, San Bernardino County Surveyor and County Planning Departments.

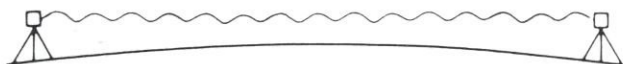
Riverside-San Bernardino  
Chapter

**IN MEMORIAM**

*James M. Prendergast, LS*  
1914 — 1983

It is with a great deal of sadness that we learn of the death of James M. Prendergast. Jim was an active member and Chairman of the Legislative Committee and a member of the CLSA Board of Directors. Jim's dedicated efforts on behalf of CLSA will be missed.

Survivors include his daughter, Norma Prendergast of New York; his son, Roy Prendergast of Los Angeles and five grandchildren.



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# Articles

## GOVERNMENT AFFAIRS REPORT

by: John M. Palatiello

The 97th Congress, certainly one of the most historic in the past forty years, came to a cantankerous and even rancorous adjournment on December 21, leaving unresolved many issues of interest to ACSM-ASP members. Herewith, is a summary of legislative and administrative issues your Government Affairs Director has been monitoring.

**National Surveyors Week** (S.J. Res. 263/H.J. Res. 591)

More than 160 members of Congress and 30 Senators co-sponsored respective House and Senate Resolutions to authorize the proclamation of March 13-19 as NATIONAL SURVEYORS WEEK. The Senate resolution, authored by Senator Strom Thurmond (R-SC), passed unanimously by a voice vote on December 10. A companion measure, introduced by Representative G. William Whitehurst (R-VA), was not brought up in the House as similar "commemorative resolutions" were ridiculed and defeated during the final days of the lame duck session.

**Federal Land Survey Act** (H.R. 4399/S. 706)

As one of its last acts before adjourning, the House passed S.705, the Small Tracts Act, thus clearing the bill for the President. This action came as a complete surprise to ACSM-ASP. On November 24, we met with Representative John F. Seiberling (D-OH), Chairman of the House Public Lands Subcommittee to discuss the possibility of combining the Federal Land Survey Act and Small Tracts into one piece of legislation. While Representative Seiberling indicated support for the "marriage" of the two bills, he expressed reluctance to take action on the Administration-supported small tracts bill in view of a lack of action by the Republican controlled Senate on several wilderness protection bills Seiberling shepherded through the House. On December 1, Seiber-

ling held a hearing on small tracts and publicly stated his intention not to take any further action. ACSM-ASP submitted a written statement in favor of S. 705, but advocated the addition of H.R. 4399 as an amendment. Apparently Seiberling had a change of heart and mind about holding small tracts hostage, and without advising ACSM-ASP of his intentions, he passed the bill through the House. Plans are being made for reintroducing H.R. 4399 in the 98th Congress.

**Federal Trade Commission**

The House and Senate passed differing amendments to limit or exclude state-regulated professions from Federal Trade Commission (FTC) regulation. No final agreement was reached on the exemption pushed by health professionals, led by the AMA. Furthermore, no clarification was made on which state-licensed professions would be exempt from FTC scrutiny, thus leaving the status of surveyors in doubt.

**Surveying Postage Stamp**

ACSM has proposed that the U.S. Postal Service issue a commemorative stamp in 1985 to mark the 200th anniversary of the establishment of the rectangular survey system, as drafted by a committee chaired by Thomas Jefferson and implemented by the Continental Congress in 1785. The postage stamp proposal has been endorsed by ASP, Senator John Warner (R-VA), U.S. Forest Service, National Geodetic Survey, and U.S. Geological Survey.

**Corps of Engineers**

**Procurement—Civil Works**

Although both the House and Senate Appropriations Committee approved 1983 Energy and Water Development funding bills which included a provision to clarify the authority of the Corps to use "Brooks Bill" procedures for surveying and mapping, architecture and engineering procurements for civil works projects (similar authority was provided to Corps military projects by P.L. 97-214), that appropriation was not considered by either the full House or Senate. A stopgap fun-

ding bill, also known as a "continuing resolution" was passed in the absence of several regular appropriations. That resolution provided the Corps with funding at the 1982 level and consequently did not include the procurement provision.

On a related issue, ACSM-ASP was successful in reversing a recent Corps of Engineers procurement by the Vicksburg (MS) District which sought a variety of surveying and mapping services on a one year work order basis, to be awarded to the lowest bidder. ACSM-ASP advised the Corps Washington office of this solicitation's violation of the spirit and intention of the Corps current engineering circular which emphasizes the use of a combination of price and qualifications in those states in which the Brooks procedure cannot be used. The Corps has cancelled the Vicksburg procurement and will reissue using the RFP.

**Federal Land Survey Procedures**

More than a year has passed since Paul B. Lapham, immediate Past President of NSPS and current Chairman of the Joint Legislative Affairs Committee, and other ACSM members met with BLM Director Robert Burford (See ACSM News, Vol. 3, No. 4, October, 1981) seeking reforms in BLM survey procedures. Lapham has written Mr. Burford to request an update on BLM-initiated improvements in such areas as recording of plats; compliance with state law; state licensure or federal equivalency for chief field personnel; prompt approval of plats; and identification of "temporary monuments."

ACSM-ASP has also written the federal Property Review Board to determine what role surveyors and remote sensing specialists with expertise in resource assessment will play in the Reagan Administration's program to identify and sell surplus real property. The inquiry seeks further information on government plans to survey and inventory natural resources of land slated for disposal.

## COFPAES

The Committee on Federal Procurement of Architect/Engineer Services (COFPAES) met in Washington, D.C. on November 18. Representing ACSM was our COFPAES delegate Bill Wallace and myself. The panel discussed various legislative and administrative issues affecting A/E procurement in general and the "Brooks Bill" in particular. At the meeting, it was disclosed that the controversial January 18, 1982 memorandum from the Office of Federal Procurement Policy (OFPP), which would have limited the Brooks Bill to construction-related projects, would be permanently withdrawn. This action is expected since the General Accounting Office (GAO) has advised OFPP of its view that Congress did not intend to limit the Brooks Bill solely to construction-related A/E procurements.

The COFPAES member societies met with Department of Defense officials at the Pentagon on December 7 to discuss recently expressed concern by a Congressional Committee that design errors by A/E firms cause costly modifications in military construction projects. ACSM member P. Porcher "Shay" Gregg and myself attended the meeting at which Pentagon officials indicated greater continuity of personnel by both the military and the A/E firm and more communication between the government and the contractor could help reduce the number of design errors.

### Landsat

The U.S. Department of Commerce Land Remote Sensing Satellite Advisory Committee released its report and recommendations on November 19. The committee, which included several ASP members, urged a strong commitment from the federal government for continuity of a governmental and/or private sector civil land remote sensing system. The panel recommended that the U.S. negotiate with private industry to own and/or operate specified space and ground segments, up to and including archiving of raw unprocessed data, of the land satellite system; that the U.S.

make a firm long range commitment to continue to provide or cause to be provided viable R&D programs on both the land and meteorological satellite projects; that the private or government operator subscribe to the "open sky" policy providing that anyone, anywhere can purchase Landsat data at equitable prices; and that all necessary legislation and appropriations be enacted promptly to implement these recommendations. The report and recommendations were provided to Commerce Secretary Malcolm Baldrige for his review and implementation.

## ADVERSE POSSESSION

by: *Betty J. Raab*

Well another blow has been struck against justice and I would like to warn all property owners that your property could be stolen from you by an unscrupulous neighbor. Also, that theft will probably be upheld by the courts.

You may ask how this could be. It can be done by your neighbor storing old cars on your land, by his rocking up an area around a Manzanita bush, or maybe by putting up a post with a basketball basket nailed to it. Oh yes, did you know that you can obtain a prescriptive easement over the land that PG&E places poles and strings wires across to give you electric service? If you think I am kidding just read the court case of *Raab vs. Casper* and you will find that it is true.

To summarize—in 1970 my mother and I discovered a house being built on our 20 acres. By checking the building permit we found that the builder was our neighbor who owned the 3½ acres next to our parcel. We immediately notified him that he was building on our land (he was over the line by approximately 70 feet). His answer was that if we took him to court we would have to have a survey, which would cost us several thousand dollars, and he continued to build until the house was completed, at which point he rented it out.

In the meantime, at much expense to us, we had the property surveyed, which proved that our neighbor was indeed building on our land. The judge at the first

trial (we were not allowed a jury trial) agreed that he was building on our property, but stated that because he thought he was building on his own land we had to sell him the lot on which the house stood for \$500. (This is known as "Good Faith Improvement.") This decision was handed down in spite of the fact that this land is zoned for 5 acre parcels and the section to be taken would have ruined the chance of splitting this property into 4 parcels. Also, the house and leach lines were built on an easement and effectively blocked our entry to approximately 10 acres of our property.

During the survey we found that our neighbor's residence and yard encroached on the other portion of our property. The court decided that because our neighbor had planted Bermuda, a few shrubs, put up a post with a basketball hoop and parked some old cars around the area, he had gained more of our land by "Adverse Possession". The court also found that because PG&E had put their poles on and strung their wires across our land (easement given by prior owner) our neighbor was given a "Prescriptive Easement" because he was receiving service through the PG&E wires.

Our neighbor had also put in a water line, beginning on his property near his well and ending on his property near his house, but swinging onto our property in the middle. Even though this water line was underground on our land the judge found that was "open and obvious", so he was given a "Prescriptive Easement" over that part of our land.

One of the rules for finding "Adverse Possession" and "Prescriptive Easement" is that the "improvements" be in place for five years and for "Adverse Possession" pay the taxes for five years. Our tax records were placed in evidence showing that we had paid the taxes assessed for that period as described on our deed. Our neighbor's records showed that he had paid the taxes on his property as described in his deed. However, because a prior tax appraiser testified that the appraisers usually assume that

*(Continued on page 21)*

# Equipment Corner

by Reily Smith

## Results of poll on radios:

We only had six response cards to this poll; although, some of the cards discussed more than one radio. For this reason, the results are summarized, rather than listed.

Precision International Inc., **Surv-Com TR4C**, handheld. (Wilson makes a similar model) 2.5 watts with a cost of about \$500. Three responses with an average rating of 9. Problems: The speaker/microphone is a common problem and they are rather fragile.

**Yaesu FTC-2003**, handheld. 3 watts with a cost of about \$600. One response with an average rating of 9.

**Wilson Citi-com #2** (40 watt) and **HV66A** (6 watt handheld) One response with an average rating of 9, except no instruction manual received. Good range, but a little fragile.

**Radio Shack Realistic TRC-208**, handheld. 5 watts with a cost of about \$100. One response with an average rating of 7. Rugged, dependable, but awkward with long antenna. Short range and crowded C.B. channel.

**Yaesu FTC2040** mobile. 40 watts with a cost of about \$600. One response. Good range and great when used in conjunction with the handhelds for extra range.

A common complaint with the handhelds is that they are fragile and easily broken if dropped or jarred. The ni-cad batteries wear out within a few months if overcharged. A solution to this is to use a timer set to charge all ni-cad batteries for the recommended time.

The itinerant frequency of 151.625 MHz generally sold in the handhelds is crowded in some areas. The FCC will give you a "base frequency" in addition to the "itinerant frequency" if you apply for another license. The extra crystal is about \$25 and well worth it. When applying for the FCC license on the 151.625 MHz itinerant frequency, be sure to tell them your area of operation is in

several western states; otherwise, they will send the application back to you for further clarification.

Remember: Transmitting on your radios during EDM operation may cause an error in the measurement.

## Next poll will be on computers:

The future is here in regards to this important tool! A lot of us have been dragging our feet about making this large investment in time and money. Would those of you who have taken the plunge please give us some feedback? In order to make the publication deadlines, please try to send in your responses within two weeks after receiving *The California Surveyor*.

Besides such models as the Osborn, TRS 80, Sharp 1500, and the HP 80 series, let's include the newer handhelds such as the HP41CV. Be sure to cover availability of survey program software and other peripheral software. We could all use some information on what to buy, what not to buy and problems to expect. Such things as "does the supplier offer a no obligation trial period" are important.

For those of you who already have computers, or are planning to purchase one, may I suggest that you subscribe to *Survey Calculations Journal*, P.O. Box 6674, San Bernardino, Ca. 92412. It is a good magazine written by a surveyor for surveyors. Joe Bell is the editor and has said that if he cannot get 750 paid subscriptions prior to the end of 1983, he will have to discontinue the publication. There is a definite need for this magazine and if we let it cease operations, it will be a sad day for surveyors. The price is \$36.00 per year (\$3.00 per issue). If you want to support it and see it continue, you should send a check for the remainder of 1983 @ \$3.00/month, and a second check for \$36.00, dated December 1, 1983. The second check will be held until December 1983, if there are 750 paid subscribers for 1984, the *Survey Calculations Journal* will continue. If there are not 750 subscribers, your second check

will be destroyed. The magazine will save us neophytes a lot of "re-inventing the wheel" time!

If you are a principal in a firm and either own or plan to own a computer, you can receive a free subscription to *Business Computer Systems* magazine, P.O. Box 17452, Denver, Colorado 80217. If you do not own a computer, the price is \$35.00 per year.

If there are other good survey computer publications out there, would you let us know?

## Comments and notes:

1. Joe Bell suggested that we make a change in the reporting format of the Equipment Corner. "You are set up so that the snipes at equipment manufacturers are anonymous. That weakens the effectiveness of the survey, it cuts you off from a list of potential helpers and may have something to do with the (small) response. After all, if the complainer is not going to be hesitant about identifying himself. Anonymity separates and we need to join forces." Mr. Bell is correct. Another consideration is, if you do have a problem, the supplier may offer to correct it if we know who you are.

2. One supplier wrote: ". . . I would like to add that surveyors create the market for inferior equipment by purchasing equipment on price alone. In today's market this is more the rule than the exception. Surveyors want to be thought of as professionals, but don't want to act in the same manner." Anonymous.

3. Many suppliers do not check out their equipment prior to shipment. Items often have manufactured flaws, or are out of adjustment when received. Reily Smith.

4. One surveyor sent a response card on the Leitz Philadelphia rod, model 8061-23. "Not only Lenkers are declining. We bought a new Philly rod as the old one had warped. After exchanging the new rod once, we went back to using the old rod. Problems included warpage and target sliding on the new rod. It was not hardwood either, but extremely lightweight." Anonymous.

5. A number of response cards were received on EDM's, too late

to put in the poll results. One that should be passed on was about the Zeiss Elta II. He gave it an average rating of 2.2. "Random 10 meter bust; extremely heavy; awkward to carry; very poor instructions for computer interface. Easy to use as EDM, theodolite; possible advantages in subdivision, construction layout." Anonymous.

**6. STOLEN EQUIPMENT HOTLINE:** Have you ever had the opportunity to buy a used piece of surveying equipment from a stranger, but been afraid it may be stolen? The notices of stolen equipment are usually several months old when published. As a service to the profession, Lewis & Lewis Surveying Equipment is establishing a stolen equipment hotline. If your equipment is lost or stolen, let them know and it will be placed on the list. If you have an opportunity to buy something, call them first and see if it is on the list. Lewis & Lewis will be announcing the details in the near future.

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*(Continued on page 20)*



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# Letters to the Editor

Editor: Having come to a temporary impasse on my 1982 federal income tax forms, I managed to run across Mr. Denson's letter. Looking for somewhere to vent the spare rage available, I decided to add my own calm, unbiased, and completely neutral comments on this subject.

First I would like to make Mr. Denson aware that he is not alone in his genocidal thoughts of how one deals with this type of "neanderthal mentality." Any public official employed by a public agency should be able to explain the rules which govern his area of governmental expertise. His knowledge of his subject and area of his administration is his stock in trade. That is what he is hired for and that is the basis on which private practitioners and the public in general expect to deal with him.

This logic often goes astray when the official so charged fails to admit or understand he is out of his depth in the comprehension of his task. When the very people he is supposed to advise, ask questions and expect answers concerning which he hasn't the foggiest solutions (except "No"), you would think he would look for other employment. It doesn't even phase our man though. Our man is known as the "Demon Staffer" or "DS" for short. "DS" relies on that old saying in public service. . . "The best defense is a good offense!" This has been honed through long use by adding: ". . . and be as offensive as possible!". It is quite often possible to find entire governing bodies which work very successfully on this principle alone. If it's in the book, it must be right. Of course, not all of us can read. . . but no matter.

What "DS" refuses to recognize (or maybe doesn't know) is that the law is written for the average citizen—John Q. Public—you and me, no less. Therefore the meaning of the language is that which John Q. Public understands it to mean. It is not the technical gobbledegook or dark nuance of political pontification which can be taken anyway you wish. Listen to a ma-

yor political speech. As soon as it ends, the network anchor man tells you what was said in a speech which ended one minute before and every word of which was heard by you. Who needs a translation when the whole thing was in English? You do, Turkey! You don't speak English! Don't you understand that yet? If "DS" is one of the annointed, he will explain to you and me what the law says because after all, we are a part of the unwashed masses who just don't know. I have had such sturdy chaps look me right in the eye and say: "We might not have the right to do this but we certainly stop a lot of people!" Such sage assessments are, to borrow a phrase, "the food on which revolution thrives". Speaking of revolution, if you plan to revolt, use "DS"'s approach—be as revolting as possible!

Rules and regulations are usually promulgated for the purpose of "maintaining the peace". In planning and public works it means you keep similar uses in selected areas—brickyards are not allowed in subdivisions; industrial, commercial, residential, etc. are all segregated to considerable extent. Planning is usually a broad-brush activity done in freehand style, similar to children stacking blocks. . . all the red here, the green there. The constraints are general and ever changing with the gradual variations of use by the citizens of the area. Nothing is finite! Planning is subject to constant variation as better uses are found for given areas.

Once a use has been assigned to an area, then finite limitations may be established—for example, the "two acres minimum" limitation Mr. Denson met. Question—Why is such a minimum area assigned to a specific location? Answer—probably the desire to have a specific population density. This could be based on any number of criteria—water, fire protection, or someone likes that arbitrary number. The end product is known as ZONING.

ZONING is defined as the division of an area by legislative regulation into districts and the

prescription and application in each district of regulations having to do with structural and architectural designs of buildings and regulations prescribing use to which they may be put. (see Black's Law Dictionary, Rev. 4th Ed.) The purpose of ZONING is the protection of the health, safety, and welfare of the general public—you and me, again.

How is this protection extended to us? Someone simply says you need a minimum area of two acres for a building site! Is this a viable means of protection? Considered with all other circumstances, probably yes—alone, no! Florida is replete with similar lots. . . some in swamps. . . some under 10 feet of water. . . some extremely valuable building sites! If two acres is good, 40 acres should be 20 times better—right? Wrong! Talk to someone who owns a "Jack Rabbit Homestead" in California, Nevada, New Mexico or Arizona.

Why use the figure "two" or "2" as a criteria here? It is a good round figure, simple, and almost everyone understands its meaning. Its selection was probably based on the considered application of the "broad-brush" principles of planning. . . it's a nice place to put "2's"—it's quite ingenuous.

What is "2" or "two"? The dictionary defines it quite simply, as a cardinal figure or 1+1. Don't you feel dumb?

What is an acre? Again the dictionary provides a definition of 1/640th square mile or a common variable unit of measure, now equal in the U.S. to 43,560 square feet. Putting these figures through my abacus (I don't have a WANG or HP 85A) I come up with a value for "two" acres as being 1/320th square mile or 87,120 square feet. Since I don't know the exact wording of the Lyon County ordinance, I will presume it states ". . . minimum two acres. . ." This could mean 1/320th square mile or 87,120 square feet. Beginning with 1/320th square mile and working to the nearest significant figure, anything smaller than 1/319.49999. . . 9999th square mile

and above 1/320.5000. . .01th square mile is the practical equivalent of 1/320th square mile. Now the WANG and HP 85A may differ with me on the number of decimals, since my abacus is worn and needs repair—the rods are bent, the frame is cracked and the little buttons are dirty. . .but I figure we are dealing with two acres, plus or minus approximately 135 square feet. If you use the approach of “two acres” being 2 x 43,560 or 87,120 square feet, then the area required is between 87,119.500000. . .01 square feet and 87,120.49999. . .99 square feet.

“DS” here is claiming failure to meet the requirement of “two acres” by 0.00005 acres which is approximately 2 square feet.

So you can see, if “DS” uses the concept of 2 x 43,560 square feet in an acre, Mr. Denson is not justified and loses. If the definition of 2 x 1/640th square mile is used, Mr. Denson is justified and wins. Of such stern stuff are noble arguments made—e.g. How many angels can dance on the head of a pin?—Which came first, the chicken or the egg?—Who is on first?—Who cares?

Consideration of this entire matter points up the sorry state we are all in. The real question is not whether 2 square feet can be added through the use of more decimal places or whether 87,118 square feet is or is NOT two acres. The real question is whether there is *substantial compliance with the intent of the ordinance enacted to protect the citizens of Lyon County*. Can the staff of DPW of Lyon County or the members of its Planning Commission show in any fashion that this miniscule variation is a danger to the health, safety, or welfare of the citizens of that county? If they can show there is a danger, then they are perfectly entitled to deny Mr. Denson's map on that grounds! They have done their job. But if the lack of 2 square feet is used for no other purpose than as an autocratic exercise of power by an uneducated, egocentric, and elitist group of individuals, it is dumb and ill-advised! I cry SHAME on you. Can you measure this on the ground? A paper change is wishful thinking if the full scale

ground dimension remains unchanged. From what point on the hub tack do you make this adjustment from? Where on the tack do you move it to? Do the surveyors have equipment on inventory with which they can measure this change? This is the one chimpanzee of all the thousands given typewriters, who writes Shakespeare. Because this chimp writes it, is he the simian equivalent? If he is, why are not all chimps equal to Shakespeare?

One of my personal experiences along this line was dividing a parcel 250' x 120' into three parcels, each containing 10,000 square feet. I used frontage dimensions of 83.33', 83.33' and 83.34'. The parcels contained 9,999.6 sq.ft., 9,999.6 sq.ft. and 10,000.8 sq.ft. The ordinance read, “minimum 10,000 square feet”. My map was rejected as not meeting ordinance requirements. After much discussion, it was agreed that if I made the frontages, 83.333', 83.333' and 83.334', respectively, the requirements would be met. However this still leaves two lots containing only 9,999.996 sq.ft. They will never contain 10,000 sq.ft.

The recorded dimensions are 83.3333', 83.3333' and 83.3334'. There are also two notes thereon—the first states that two lots are deficient in area. The second stated that the lots were laid out on the ground to the required county standard of closure for field work, that of 1:5,000. This allows me 0.08' of error in staking each lot. Question: What are the standards in Lyon County?

Ridiculous standards lead to avoidance. Where maps may once have been freely recorded, silly requirements dampen enthusiasm to share knowledge with others. Discovery of an error may not be made known on the public record. That is poor policy on everyone's part. But why ask for trouble? Under old California law, there was no charge for checking a record of survey. Today, that charge ranges (within my knowledge) from \$100 to \$900 for the same map in different counties. Is this protection of the public or generation of revenue? Is it a genuine concern or “makework”? What passes in one

county will bring a “blood-bath” of red pencil in another. To send in a check print with no errors is tantamount to inviting a Saturday night massacre. To leave your north arrow off allows you to get away with almost anything. The map checker is so delighted to find a “dummy” he misses everything else.

Finally, to those in the public sector with whom I deal on a daily basis of fact and logic, please overlook my indiscretions here. They are not meant to reflect on the honest and genuinely concerned public employees who can recognize the futility of reading non-existent requirements into vague and ambiguous laws merely for the purpose of muscle-flexing. Without you pointing out my errors, Grimm's Fairy Tales would occupy a far larger set of volumes than they do.

And now, back to the IRS. . . anyone for tennis?  
William W. Grimm,  
Boy Surveyor  
P.S. to “DS”—Just keep looking over your shoulder, Dude. I don't get mad, I get even!

Editor: I wish to reply to a letter from Lewis Soloff in the Summer/Fall 1982 Edition (No. 69). Mr. Soloff is concerned that the test prepared by the CLSA for the 1982 L.S. Exam did not cover a broad enough spectrum and seemed to concentrate on a potential Licensee's knowledge of the law pertaining to Boundary control.

I am sympathetic to Mr. Soloff's concerns in that we must have people in our profession who are proficient in the areas mentioned by Mr. Soloff, i.e.: Astronomy, California Coordinates, Triangulation, etc., but I think that he erred grievously in glossing over the law relating to boundary resolution. I submit to you, Mr. Soloff, and to any prospective licensees, that we, as a profession, will find ourselves in more trouble over a lack of knowledge in boundary control than in any of the areas mentioned by Mr. Soloff. A knowledge of the mathematics and mechanics of surveying is important but unless a person has knowledge of:

1. The correct position of the property on the ground.

(Continued on page 24)

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LIETZ TS-6 or T-60D one minute theodolite	20.00	12.00	8.00
LIETZ TS-20A or NIKON NT-1 one minute construction theodolite	15.00	9.00	6.00
LIETZ BT-20 twenty second transit with optical plummet	10.00	6.00	4.00
NIKON (Schneider) TT-400 one minute utility transit	7.00	4.20	2.80
NIKON (Schneider) BD-7F five minute utility transit	6.00	3.60	2.40
LIETZ B-1 or NIKON AS engineers 32x auto level (2nd order)	10.00	6.00	4.00
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LIETZ B-2A (30x) or NIKON AE-5 (30x) automatic level	7.00	4.20	2.80
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HP-85A systems with disk drives and/or printers available upon request			
HEWLETT PACKARD 9815-S (3841B) with surveying software	25.00	15.00	10.00
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SPECTRA PHYSICS LT-3 transillite w/fan beam attachment	20.00	12.00	8.00
SPECTRA PHYSICS 611 laser on a 20 second transit	15.00	9.00	6.00

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AMERICAN PAULIN M-2 surveying altimeter 0-10,000 ft. 2 ft. grad.	8.00	4.80	3.20
KERN #173W tripod with centering leg	2.00	1.20	.80
WIDE FRAME tripod 5/8 x 11 or 3 1/2 x 8	1.00	.60	.40
TRIBRACH with optical plummet	2.00	1.20	.80
TRIBRACH/prism swivel adaptor	.50	.30	.20
100 ft. add chain	1.00	.60	.40
200 ft. add chain	1.50	.90	.60
300 ft. add chain	2.00	1.20	.80
LEVEL RODS	1.00	.60	.40
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# Of Interest

## WFPLS 1983 LAS VEGAS CONFERENCE

Those who failed to attend the 1983 Western Federation of Professional Land Surveyors joint regional conference in Las Vegas March 27-31 missed some very good presentations by very knowledgeable people. Subjects and speakers were quite diverse but with a common interest that was best expressed by the remarks of the opening speaker, President of ACSM Walter G. Robillard. He said one of his goals as ACSM President was to leave the profession in a better state than he found it and that concept was reflected by speakers throughout the conference. Walt said he sees four important elements in accomplishing that goal; **education** in which both formal college degree programs and continuing education programs are becoming a must for the professional surveyor; **legislation** which we must become involved in to enable us to continue working as professionals within the political framework; **cooperation** with other professions and other disciplines by extending our support and expertise to them as they will to us; and **inspiration** such that the need and desire is instilled in us to reach out and take advantage of the education and legislation that is being made available to us. Failure to do so places us in a category referred to by an attorney friend of Mr. Robillards, who considers surveying a profession but not many surveyors as professionals.

Tamsin Barnes, Vice President of ASP, reported on the legislative efforts of the joint ASP-ACSM program. In a little over a year since the program started there have been a number of accomplishments in the field of government affairs. In Federal Procurement of surveying and mapping services legislative language has been added to require military agencies to use the Brooks Bill method in negotiating contracts for surveys and maps needed for military construction projects or for military land acquisition. A final decision is near with the Corps of

Engineers on use of the Brooks Bill for surveying and mapping procurement related to the Corps civil works projects. Another focus of the joint endeavor is on legislation to clarify our position with civilian agencies by putting surveying and photogrammetry under the Brooks Bill where it belongs. Tamy also reported that we are well on our way to resolving the matter of the US Department of Labor's inclusion of Land Surveyor and Photogrammitist on the list of apprenticable occupations. Underscoring the ASP cooperation in these matters they have approved a \$10,000 increase in their 1983 contribution to the Joint Government Affairs Program and the Professional Practices Division of ASP has recommended ASP join the ACSM-NSPS Political Action Committee and this latter matter will be brought before the ASP Board in Salt Lake City this fall.

Albert Hebrank, President of NSPS also brought us up to date on various legislative concerns and reported the Technician Certification program is much nearer to becoming a reality, that two new NSPS committees have been formed, the Mining and Mineral Surveying Committee (formerly under ACSM), and the Forum for Women in Surveying which was started with over thirty women at the Washington ACSM Conference. NSPS is anticipating establishing, on a part time basis, a position for public relations and we will be hearing more about that. The ACSM-ASP consolidation plan No. 3 will be sent out this summer for vote accompanied by arguments for and against. A straw vote that has been conducted of both memberships shows 75% for consolidation. This summer two-thirds of the vote, separately for each organization, must be in favor for the measure to pass. Al spoke out strongly warning that both apathy and over reaction are threats to our profession's future and urged an informed electorate to consider the consolidation proposal carefully and cast their vote accordingly.

The technical papers presented

at the conference were very informative and timely in regard to current needs of the profession. The information presented, however, would receive a much broader hearing if proceedings of the conference were published. Exposure to the valuable expertise represented by the speakers is limited, for the most part, to those few attending the conference. Perhaps this can be remedied in the future. Regardless of that minor consideration, the WFPLS Conference in Las Vegas was another important milestone on the upward path of professionalism in surveying and mapping.

## COLLECTION PROGRAM ENHANCED WITH LITIGATION OPTION

I.C. System has introduced a new option to compliment the mail and telephone procedures used to collect bad debts for members. That new option is litigation, and it is available to all who join the program on or after January 1, 1983. Here is how the system works.

As in the past, the company will contact each debtor by mail and telephone for six to eight months. They use persuasion in a persistent manner that complies fully with both the Federal Fair Debt Collection Practices Act and with all applicable state laws wherever the debtor lives. In addition, their technique is tempered with an eye to collecting without damaging your image in the community.

As the months go by, I.C. system's efforts get stronger. If the debtor turns a blind eye and a deaf ear to these efforts for six months, the company releases the account back to you with a recommendation that you refer the account to an attorney with full authority to collect.

Under the new program, I.C. System proceeds as it has in the past, with one major addition. If you do not have an attorney who handles collection work, or if the debtor lives outside the area where your attorney is authorized to practice, I.C. System will put you in touch with a qualified at-

(Continued on page 25)





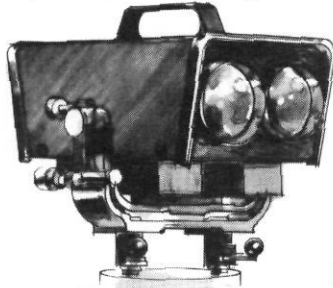
The AUTORANGER III EDM with its on-board microprocessor translates slope to horizontal distances and calculates coordinates. You won't find that time-saving feature on many other EDMs around.

K&E has packed this shortrange EDM with a host of great features that let you handle a wide variety of field tasks as conveniently as if you were sitting in your office.

easy-to-use instrument mounts to most theodolites. And there's no waiting either for the instrument to warm up . . . when you're ready to start shooting, so's the AUTORANGER III EDM.

Stake out is a matter of pushing a button. Just enter the preset horizontal distance and vertical angle, and AUTORANGER III EDM will display the difference between the preset and calculated distance.

AUTORANGER III EDM delivers the full range of electronic muscle that lets you do a better job in the field. And backing up this instrument is a decade of experience in building the world's most extensive and dependable line of EDMs.



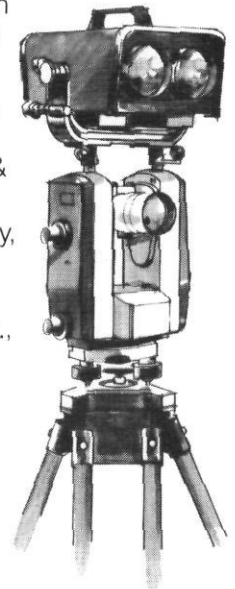
- Range up to 3.6km (2 mi) with an accuracy of  $\pm(5\text{mm} + 2\text{ppm})$
- Calculate horizontal distance and vertical height
- Calculate

northing and easting coordinates or latitude and departure.

The AUTORANGER III EDM weighs in at a mere 8¼ lbs (3.7 kg). That includes the yoke and an on-board battery which allows 500 measurements on a single charge. This lightweight,

For more information on this rugged reliable unit, contact your K&E Branch or Dealer, or write Keuffel & Esser Company,

Instrument Group, 20 Whippany Rd., Morristown, NJ 07960.



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# News Briefs

## 1983 CALIFORNIA CONFERENCE

The 1983 ACSM/ASP California Conference will be held October 13-15, 1983.

**Theme:** "With Our Feet on the Ground and Our Heads in the Stars".

**Site:** Monterey Conference Center and Double Tree Inn; Monterey, CA; Portola Plaza 93940.

### Workshops:

1. "Marketing Professional Services for Surveyors and Photogrammetrists"; Wed., October 12.
2. "The 1983 North American Datum Adjustment and the California Coordinate System"; Sat., October 15, 1983.

**Plenary Sessions:** Thurs. & Fri., October 13 & 14, 1983.

**Demonstration:** Global Satellite Positioning (GPS) equipment.

**Registration:** Steve Wilson; 550 Lighthouse Ave., Suite F, Monterey, CA 13940; Phone (408) 372-7901.

**Exhibits:** Myron Lewis, 31457 Hugh Way, Hayward, CA 95444; Phone (415) 581-2345 Ext. 287.

### Fees:

1. Advance Registration
  - a. Students - \$5.00
  - b. Others - \$40.00
2. On-Site Registration
  - a. Students - \$15.00
  - b. Others - \$50.00

**Sponsors:** American Society of Photogrammetry (ASP) and American Congress on Surveying and Mapping (ACSM).

Some timely topics to be presented during the plenary sessions are:

1. "Global Satellite Positioning by Radio Interferometry" by James Collins, with live demonstration.
2. "Marine Boundary Surveying".
3. "Stereo X-Ray Imaging for Making Prostheses".

4. "Terrestrial Photogrammetry".

5. "Photogrammetric Bridge-Site Surveys".

The two workshops have been, or are being, developed by the national organization of ACSM/ASP and by the National Geodetic Survey.

For more information, contact David A. Goodman, Conference Chairman, 4810 Zube Court, Carmichael, CA 95608; Phone: (916) 445-5024 (work), (916) 481-9065 (home).

P.S. Funds for scholarships for full-time surveying students are being solicited, so more can attend the 1983 California Conference. Anyone who would like to help a student should contact David Goodman at the above address or phone numbers.

## 1984 ENGINEERING SURVEYS CONFERENCE

March 10-13, 1984, Washington, D.C. in conjunction with the ACSM-ASP Annual Convention—March 11-16, 1984.

Plans are in progress for the 1st International Engineering Surveys Conference in the United States.

Under the auspices of F.I.G. Commission 6, the conference is being scheduled so that participants will be able to attend the 1984 ACSM-ASP annual convention which will also feature an international atmosphere in celebration of the 50th anniversary of ASP.

The Engineering Surveys Conference will provide a very comprehensive program embracing Deformations—Construction—Photogrammetric Application to Design and Layout—Underground Utilities—Gyrotheodolites—Education, and, of course, any new techniques and equipment that may come on line between now and March 1984.

If you would like to have a paper considered for this conference, please submit the following information:

1. Title of Paper
2. Brief Summary of Paper
3. Name and Address
4. Position

Send to: **In the United States** Harry R. Feldman, P.E., 3610 S. Ocean Boulevard, Palm Beach, Florida 33480, U.S.A. **In Europe** J. R. Smith, Secretary, 24 Woodbury Avenue, Petersfield, Hants, United Kingdom.

## CONTINUING EDUCATION

The Engineering Department of the City College of San Francisco will offer in the Fall semester 1983 the following courses:

**LAND SURVEYING ET 192** -3 credit units-on Tuesdays 6:00 PM-9:00 PM. A study of original surveys, resurveys, subdivision surveys, land-survey descriptions, and legal aspects of the practice of land surveying. Instructor: Mr. Robert Hoerger, LS, Attorney at Law.

**PHOTOGRAMMETRY ET 196** - 3 credit units—Two lectures and four laboratory hours, on Mondays and Wednesdays, 6:00 PM-9:00 PM. A study of principles of aerial photogrammetry, geometry of photographs, flight planning, ground control, single and double image photogrammetry and photogrammetric mapping. The college has 3 Balplex and 2 Kelsh plotters and other equipment for about 15 students. Instructor: Dr. Engr. D.E. Slavoj.

Tuition is free. Both courses are essential for L.S. examination. For persons engaged in surveying practice, no prerequisites are required.

The necessary forms for enrollment can be obtained from: Registrar Office, City College of San Francisco, 50 Phelan Ave., San Francisco, CA 94112, after July 1, 1982-Tel. (415) 239-3285.

The instruction begins on August 15, 1983 and ends on December 21, 1983. Location/Transportation: Interstate 280 & Ocean Ave. Freeway Exit; within walking distance of the Balboa Park BART station; and by MUNI.

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After over ten years servicing of Hewlett Packard civil engineering products, Steve Langham will be opening Langham Instruments in Fremont, CA on June 15, 1983.

While at Hewlett Packard, Steve's superior technical skill and product knowledge earned him the position of Senior Service Specialist. When Hewlett Packard closed its manufacturing plant in Colorado, Steve was given the responsibility of doing all factory repairs.

Hewlett Packard has pledged to give full support to its civil engineering products for five years, and as parts are available

thereafter. The exception to this is the 3820A which they have pledged full support for ten years. To stay with Hewlett Packard, Steve would eventually have to make a career change. He does not wish to do so. He enjoys working on EDM's and dealing with the people in the civil engineering field.

Steve's goal is to build the finest instrument service company on the West Coast and to provide each customer with personal, professional and quality service. He soon hopes to expand his business into sales and service of other major manufacturers of electronic instrumentation.

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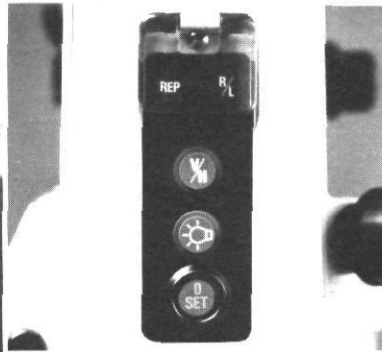
with nitrogen gas. There's an optical plummet, a detachable tribrach and two on-board battery sources for a total of 35 hours of continuous use.

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# Committee Reports

## EDUCATION COMMITTEE

In 1982, Charles Moore, then C.L.S.A. president, and Dr. Fareed Nadar discussed having persons from the Land Surveyor community teach some classes on Land Surveying at California State University Fresno. Due to budget restrictions, it has been hard to hire an experienced instructor to teach Land Surveying and boundary control. James Matheny, Dean of the School of Engineering was offered the services of Land Surveyors from C.L.S.A. to develop and teach a Boundary Surveying class. The offer was accepted with great interest and in consideration that the instructors would be from the practicing Land Surveyor.

Letters explaining the proposed class and request to teach survey forms were mailed to the Land Surveyors of C.L.S.A. The response to the survey form was

excellent and the number of persons willing to teach turned out to be great. Many ideas for the class outline came forward from the surveyors completing the form. The class set up was to be taught in the Spring 1983 semester. It would be held one day a week for 3 hours and would be taught for 15 weeks. A total of 13 subject areas were chosen and instructors contacted to teach those classes. Some of the class subjects were: The small business surveyor; The surveyor in court; Boundary calcs and map presentation; G.L.O. retracement; Earthquake problems; Water boundary; Map checking; Government approach to retracement; Spanish land grants; Mineral surveys; and Federal Land Systems.

At the time of this article, the class is in progress. The students and Fresno State are very enthusiastic and the instructors

have been excellent. A follow-up article will be written upon completion of the class.

Richard P. Siegmund

## LEGISLATIVE COMMITTEE

The Legislature is busy, as usual, and the Legislative Committee is trying to keep up. To date we have reviewed 200 bills, and are supporting or following 38 bills, with many more to come.

The Committee has caused five bills to be introduced, two of which are due for action. The first, Senate Bill 258, will, if enacted, include Land Surveyors under the provisions of the State Procurement Code (Government Code, Section 4525 et seq). The second, Senate Bill 427, proposes changing the name of the State Board to "State Board of Registration for Professional

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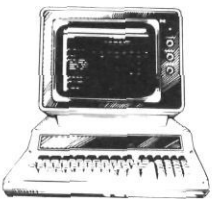


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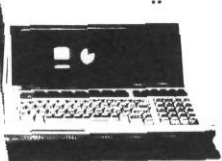
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914/279-5095

## THE LEGISLATIVE TREE- WHO KNOWS WHOM?

This legislative tree program provides the means by which our membership can become directly involved (both as CLSA members and constituents) in contacting their elected officials on specific issues of great importance to our profession. This governmental contact program, like the proverbial chain, is only as strong as the individual links from which it is forged. We must have key people who know either the freshman and/or the returning members of our legislature and can contact them on the Association's behalf when called upon to do so. (Members of our Legislative Tree always retain the option to decline on any issue, of course, if special circumstances are involved.)

We have attached a Legislative tree form for your convenience at the bottom of this column. We urge you to take a moment from your schedule to fill this out and return it to us if you know your Assemblyman or Senator. If you know more than one legislator, simply make additional copies of this form.

The information contained herein will be deemed confidential.

## LEGISLATIVE TREE

Name of Legislator \_\_\_\_\_

Your Name \_\_\_\_\_

Your Business Address \_\_\_\_\_

Your Business Phone \_\_\_\_\_

Area Code

Your Home Phone (optional) \_\_\_\_\_

Area Code

Political Party Affiliation (optional) \_\_\_\_\_

Please check the word or words best descriptive of the basis of your relationship with this legislator.

- Blood or Marriage Relationship
- Personal Friendship
- Business or Professional Relationship
- Social Contacts
- Political Campaign Involvement
- Fraternal, Service Club, etc.

With respect to this degree of this relationship, would you describe the association as:

- Close
- Casually
- Moderately Close

Approximate number of years of association \_\_\_\_\_

Any comment and/or name of a close friend or employee of the legislator you may wish to add: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Return to: CALIFORNIA LAND SURVEYORS ASSOCIATION, P.O. Box 9098, Santa Rosa, CA 95405, Tel.: 707/539-3633.

## Legislative Committee

(Continued from page 19)

Engineers and Surveyors". If you wish to read the full text of these measures, you may obtain a copy free from your local legislator.

As California's Legislature continues to sit and discuss the problems of the state, your Legislative Committee will monitor and review copious quantities of proposed enactments. We will endeavor to keep the membership informed, and will request assistance in the form of letters, telegrams, phone calls and personal visits, as necessary.

Harold B. Davis, L.S.,  
Chairman,  
Legislative Committee

## Coot

(Continued from page 10)

everything from forestry to ranching. Options for the Coot range from an outboard motor that boosts its speed in the water to a small portable drilling rig.

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**Adverse Possession**  
(Continued from page 8)

all "improvements" in sight belong to the house, the Court decided that our neighbors paid the taxes on our property for the required five years. This is in spite of the fact that our neighbor's records indicated that they had only been taxed for improvements for two years, not the five years required.

At great expense to us we have fought these injustices, the legal way, for over 12 years. Because we can no longer afford to carry on this battle we will have to give our neighbors our land. It is a shame that this case will set a precedent for people to legally steal their neighbor's land. I fear that between neighbors, maybe even violence, because the law will not uphold property rights.

I think it is about time the blindfold was removed from Justice's eyes. Justice needs to use all of the available senses and not just listen to those who happen to have a glib tongue and a way of twisting the truth and manipulating the law.

# New Members

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# Chapter News

## SAN JOAQUIN VALLEY

The San Joaquin Valley Chapter of the California Land Surveyors Association conducts its meetings on the last Tuesday night of each month. To encourage members' attendance, we have offered excellent programs related to the various aspects of Land Surveying. Some were mainly educational, while others were quite entertaining. However, all were very interesting.

Some of the programs included guest speakers, slide presentations, movies and personal experiences of local surveyors. One of the guests, a local attorney, spoke on the subject of "Adverse Possession". Another guest, from Sacramento County, came to help us organize and establish a base line for the calibration of EDM equipment. (This project is currently being worked on.) We were entertained one month by a representative of the National Forestry Service who gave a slide

presentation showing old surveying instruments and tools. At another meeting, our attention was captured by a remake of a 1923 movie showing the original survey of the Colorado River through the Grand Canyon. (That was unbelievable.) One other slide presentation, from the Bureau of Land Management Cadastral Surveys, depicted some problems caused by overlaps, hiatuses, and Junior/Senior surveys. In addition, our own Chapter Representative has kept us informed of the Blue Ribbon Committee's recommendations and updates of Proposed Legislation and changes of Senate Bill No. 2.

Meetings such as these draw in members from near and far. Some travel over 45 miles to attend. Our program chairman is working to provide more excellent presentations for 1983's meeting.

We are looking forward to having a larger membership and helping these members to grow professionally through the California

Land Surveyors Association.

Peter Cohrs  
Secretary

## RIVERSIDE-SAN BERNARDINO



Have you ever heard of Planning fees or County map checking fees going down? It happened March 16, 1983 in San Bernardino County. The Riverside-San Bernardino CLSA together with the California Council of Civil Engineers and Land Surveyors worked with the County Surveyor and Planning Department reviewing the Parcel Map waiver policy and County fees.

The review process for a Minor Subdivision re-subdividing a lot in a Tract or a parcel of a Parcel Map was found to be much less than that of other parcels. Once the parcel boundaries of a lot or parcel are recorded on a map, the checking does not normally require checking with adjoining deeds. This savings in checking time is now realized in a lower


(Continued on page 2)

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1"	I.D. x 18"	.71 each
1 1/2"	I.D. x 18"	1.09 each
2"	I.D. x 18"	1.38 each
3/4"	I.D. x 24"	.63 each
1"	I.D. x 24"	.88 each
1 1/2"	I.D. x 24"	1.37 each
2"	I.D. x 24"	1.74 each
3/4"	I.D. x 30"	.75 each
1"	I.D. x 30"	1.05 each
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Continued from page 14

torney to represent you.

Once having helped you establish a satisfactory relationship with the attorney, I.C. Sysem steps aside. In each case, you decide whether to follow through with litigation or to drop the matter.

Members who joined the program prior to 1983 may add the litigation option, or remain under their existing program which recovered \$52.8 million for creditors during 1982. Contact the Association office for more information.

### SURVEYORS IN THE COMPUTER AGE

Most surveyors are afraid to go to the local computer on a Saturday afternoon. You may feel lost when the jargon there includes such terms as Winchesters, Visicalc, dBase II, and Word Star, bytes, multi-tasking, electronic disks, and buffers. The computer age is here, and some very important programs are Visicalc, Word Star, and dBase II.

Visicalc is a trademark of Visicorp. Similar versions of the same program are Supercalc and Context MBA. Visicalc is sometimes called an electronic spreadsheet. It contains rows and columns, which can contain words, numbers, and formulas. Consider a payroll program. The first column contains all employee names or numbers. The second column contains hours, the third, the employee's rate, etc. The fourth column will contain the gross wages, which is the second column times the third column. As soon as the second and third columns are filled, the fourth column is automatically calculated. At the bottom of the worksheet, there will be totals for the week, month, or year. If any single entry is changed, the entire worksheet will be recalculated. Some of the main-frame people call this batch-processing, which is a very powerful feature. Some other applications of Visicalc may be estimating, general ledger, accounts receivable aging, earthwork, DMD sheets, traverse sheets, job costing, etc.

Word Star is a trademark of Micropro. It is a powerful and

popular program that is available on the majority of micro-computers. It has several features—tabbing, centering, etc. (word processing).

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The surveying computer age is here and every day is a new educational process. If readers have a comment or question, please direct your inquiries to Keith Houseman, Houseman & Associates, 12337 Jones Road, Houston, Texas 77070.

### NEW STUDY GUIDES

To assist candidates in preparing for NCEE's Fundamentals of Engineering (FE) Examination, NCEE has published a book entitled "Fundamentals of Engineering Sample Examination-1983". The 109-page, soft cover, 8½" x 11" volume contains a sample morning and afternoon Fundamentals of Engineering Examination prepared in accordance with current examination specifications. The volume includes content specifications with typical subdivisions of major subjects for both morning and afternoon sections. Using the sample

examination answer sheets, a candidate could use the volume as a "practice examination" and would be able to check his answers against the correct answers, which are included in the volume.

In addition, all NCEE's Typical Question pamphlets have been revised recently. The Fundamentals of Engineering Typical Questions pamphlet was revised in 1982; and the Principles and Practice of Engineering and Land Surveying Fundamentals/Principles and Practice pamphlets were revised in January 1983. All study guide publications are available from NCEE headquarters. Contact: NCEE, P.O. Box 1686, Clemson, South Carolina 29633-1686.

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