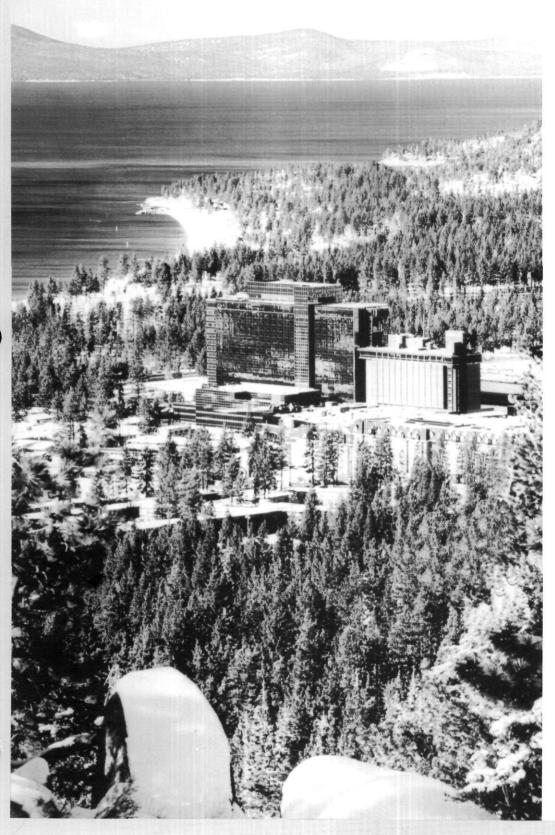
Institutional Affiliate of American Congress on Surveying and Mapping.

The California Surveyor

WINTER 1996

The Voice of the Land Surveyors of California

NO. 111



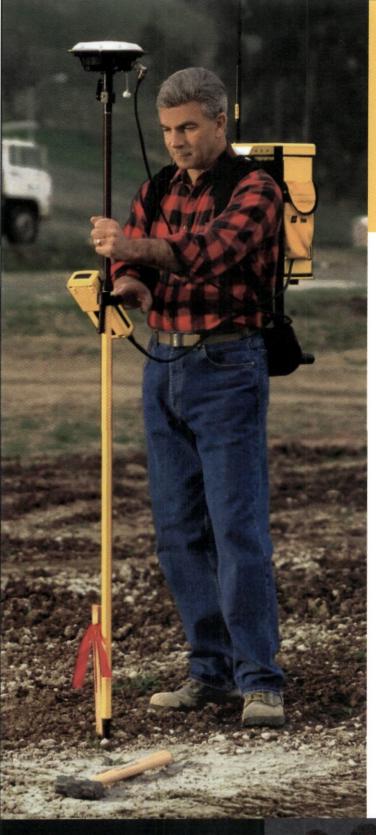
CLSA/NALS JOINT CONFERENCE

MARCH 14-16, 1996

AT

HARVEY'S RESORT HOTEL/CASINO

LAKE TAHOE



Why is the Trimble GPS Total Station today's hottest-selling new survey instrument?

Why? Because it delivers big benefits for everyday tasks. Benefits like major increases in productivity and dramatic cost savings. Ultra-quick job mobilization and exceptional accuracy and repeatability. Hundreds of organizations worldwide are already reaping these benefits.

Now, thanks to Trimble technology, surveyors can perform their everyday work with the logistical and productivity advantages of GPS. That means you can do topographic, boundary, detail, control, and even everyday stakeout work without pointing an instrument or needing line-of-sight. And you can do it with fewer setups and greater range, in any weather. The Trimble® GPS Total Station™ provides virtually instantaneous, 3-D, centimeter-level coordinates in the field as you survey the point. There's no more waiting for GPS post-processing!

Discover what the excitement's all about. For the location of your nearest dealer and a field-to-finish demonstration, call today.



Trimble

Surveying & Mapping Products 645 North Mary Avenue Sunnyvale, CA 94088-3642 (408) 481-8940, North & South America +44-1256-760-150, Europe +61-7-262-8880, Australia +65-296-2700, Singapore

The California Surveyor

is the quarterly publication of the California Land Surveyors Association, Inc. and is published as a service to the land surveying profession of California. It is mailed to all Licensed Land Surveyors in the State of California as well as to all members of California Land Surveyors Association, Inc. *The California Surveyor* is an open forum for all surveyors, with an editorial policy predicated on the preamble to the Articles of Incorporation of the California Land Surveyors Association, Inc. 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."

PERSONNEL

OWNER

California Land Surveyors Association, Inc. CENTRAL OFFICE P.O. Box 9098, Santa Rosa, CA 95405-9990 EDITOR Tom B. Mastin, P.L.S.

ASSISTANT EDITORS

Michael McGee, P.L.S. • Linda Richardson, P.L.S.

ADVERTISING

Commercial advertising is accepted by *The California Surveyor*. Advertising rates and information can be obtained by contacting CLSA Central Office, P.O. Box 9098, Santa Rosa, CA 95405, (707) 578-6016, Fax (707) 578-4406. Circulation: 4,800.

SUSTAINING MEMBERSHIP

Membership in the California Land Surveyors Association, Inc. 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 CLSA Central Office, P.O. Box 9098, Santa Rosa, CA 95405, (707) 578-6016, Fax (707) 578-4406.

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, Inc. Contributions submitted on floppy diskette medium is encouraged. For compatibility, disks should be 5.25 or 3.5 inch, MSDOS (IBM compatible) format. We can accept ASCII text files or word processor files from the following programs: WordPerfect, Microsoft Word.

EDITOR'S ADDRESS

Tom Mastin, P.L.S. P.O. Box 9098, Santa Rosa, CA 95405 The California Surveyor

DEADLINE DATES

Spring January 10, 1996	Fall July 10, 1996
Summer April 10, 1996	Winter October 10, 1996

Articles, reports, letters, etc., received after the above mentioned date will be considered for the next edition.

Opinions expressed by the editor or individual writers are not necessarily endorsed by the California Land Surveyors Association officers or its Board of Directors. Original articles may be reprinted with due credit given to the source and written notification to the California Land Surveyors Association.

Table of Contents

FEATURES

Why Belong to CLSA? By Steve C. Wilson, PLS 8
CSU, Fresno CLSA Student Chapter By Robert Nielsen
California Mechanic's Liens and Other Remedies
No Surveys Required? No Surveyors Required
By Nancy E. Conklin, PLS
By Nancy E. Conklin, PLS
<u>DEPARTMENTS</u>
DEPARTMENTS CLSA Officers and Board of Directors 4
DEPARTMENTS CLSA Officers and Board of Directors
DEPARTMENTS CLSA Officers and Board of Directors 4 From the Editor 5 Letters to the Editor 6

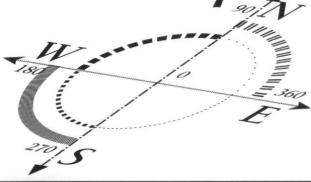
Index to Advertisers

Association Administrators and Consultants 9
Cross Land Surveying, Inc
Desert Engineering Group, Inc 4
Lewis & Lewis Enterprises
McGee Surveying Consulting
Nikon Surveying Instruments 18
PafMap Consulting
StarPlus Software
Surveyors Service Company (SERVCO) 27
Surv-Kap
Trimble Navigation 2
TRW-REDI
Carl Zeiss, Inc

On the Cover:

Photo of South Shore Lake Tahoe, site of the 1996 CLSA/NALS Biennial Conference.





SURVEY MARKERS



MONUMENTS REBAR CAPS PIPE CAPS **BENCH MARKS**



FOR CATALOG CALL (520) 882-7363 or 1-800-323-4578 **OR WRITE:**



SURVEY MARKERS & MONUMENTS

A Division of Desert Engineering Group, Inc. 3162 E. 46th Street, Tucson, Arizona, 85713

CLSA Officers 1996

Frederick W. Kett, P.L.S. • President Gary T. Lippincott, P.L.S. • President-Elect Darrell T. "Skip" Harness, P.L.S. • Secretary Steven C. Wilson, P.L.S. • Treasurer Billy Martin, P.L.S. • Immediate Past President Dorothy C. Calegari • Executive Director

Board of Directors

Chapter Representatives

Bakersfield

Glynn D. Parker, P.L.S.

Central Coast

William Finfrock, P.L.S. • Robert Reese, P.L.S. Tom Mastin, P.L.S.

Central Valley

Keith Spencer, P.L.S.

Channel Islands

Alfonso Echarren, P.L.S. • Mark Lloyd, P.L.S.

Desert Chapter

James R. Dorsey, P.L.S.

East Bay

Harold B. Davis, P.L.S. • Patrick J. Tami, P.L.S. Paul A. Kittredge

Gold Country

Marc R. VanZuuk, P.L.S.

Humboldt

David J. Ryan, P.L.S.

Lake/Mendocino

Wayne Hanson, P.L.S. Thomas Herman, P.L.S.

Los Angeles

> Florentino Ferrer, P.L.S.

Marin

Michael Brogan, P.L.S.

Monterey Bay

Jeffrey S. Nielsen, P.L.S. • Daryl Whitcher, P.L.S.

Mother Lode

Russell "Frank" Walter, P.L.S.

Northern Counties

Robert Grimm, P.L.S.

Orange County

William "Alan" Brooks, P.L.S. • Bill Carr, P.L.S. Roger A. Frank, P.L.S. • Patrick Mercado, P.L.S.

John R. Strawbridge, P.L.S.

Riverside/San Bernardino

Raymond Mathe, P.L.S. • Gerald Stayner, P.L.S.

Sacramento

Reed Bekins, P.L.S. • Christopher Russell, P.L.S.

San Diego

Michael Butcher, P.L.S.

Dale Greenhalgh, P.L.S. • LeRoy C. Hennes, P.L.S.

John "Jack" Hill, P.L.S. • Dana M. Sequin, P.L.S.

San Joaquin Valley

Samuel Diaz, P.L.S.

Santa Clara/San Mateo

Paul Lamoreaux, P.L.S.

Bruce D. Woodworth, P.L.S.

Sonoma County

Ralph H. Thomas, P.L.S. • Brian K. White, P.L.S.

FROM THE EDITOR

WRITER'S BLOCK

By Tom Mastin, PLS

writer's block lately, as opposed to putting out a *California Surveyor*. When I was young, I thought writer's block had something to do when the left guard pulled in football. As I got older, I thought it was a place on West 14th Street in New York, next to Greenwich Village. (As a side note, Greenwich Village got it's name when an infamous surveyor miscalculated the longitude by 90).

Now as I've gotten older albeit no wiser I have come to see that we all get writers block in some form or another. Writers, being what they are, are

always willing to write about their experiences, which is why they give their own name to that inability to maintain a high level of productivity. This lack of productivity is caused by a lack of confidence in one's ability. As a youth, although always energetic and willing to learn we usually have no high level of productivity and no fear of inability. This is why you never hear of beginning writers having

writers block, they just aren't writers yet.

If there is a point to this article, it had better be made clear before I lose the audience (Hi mom). The writer's block in our profession that I see most; concerns individuals active in the profession. By that I mean those that are working to improve the profession of land surveying. Although I am a spry young chap, I have been sitting and watching the activities of C.L.S.A., N.S.P.S., and the Board of Registration for a number of years now. I have seen many fine surveyors work hard at

improving their profession. I have seen many of these women and men work year after year after year trying to help the profession with little or no recognition from the surveying community at large. At some point the effort put forth by these individuals drops off considerably. The typical explanation is burn out. I think this is a valid explanation for the most part, however I think there is more to it.

I believe these people suffer from a form of writers block. It is what we call in the surveying psychoanalysis business "hebee jebees" or "Lemming's syndrome". This is caused by toiling

When I was young,
I thought writer's block
had something to do when
the left guard pulled in
football.

towards some goal to benefit the land surveying profession, responding time and again to concerns and criticisms of others only to see the issues shuffled off into the survey neverland. After having this happen once or twice an individual starts to think that maybe those silent lazy masses are right and that it will all work out if we stick our collective heads in the ground. These people know better, but cannot bring themselves to face that rejection again by the profession. I could buy the state of Rhode Island if I had a nickel for every time I've seen this happen.

The question is why does this happen time and time again. The answer is apathy. The surveying profession in California consists of a small group of people; the surveying profession in the United States consist of a small group of people; the surveying profession in the world consists of a small group of people. Small groups of people can and do change the world. We need to act as a small group of people that want to change the world not a group of lemmings. I know that most cannot or are not willing to devote their time to working for the profession on a national level or a state level or

even a local level. That does not prevent you from supporting those that are willing to make the effort. Associations are not formed so that a few can beef up their resumes; they are formed to act in the best interest of the group they represent. If you are not a member of C.L.S.A. then become a member; if you are a member then thanks for your support and think about other ways you might be able

to help your profession. If you are not a joiner then this Association is for you. If you think that C.L.S.A. is going 180 to the way you know it should go, then join (you'll make a great officer). If you can't see any direct benefit you personally derive by joining (grew up in the '70s) then join and demand those benefits. If you are tired of the profession and are thinking about becoming night manager at 7-Eleven then join right now by phone. Last but not least, if you are sick and tired of these pseudo-folksy editorials join and start writing.

LETTERS TO THE EDITOR

OPPOSITION TO METRIC SYSTEM FOR SURVEYS

The lack of considered response to my letter in the Spring 1995 California Surveyor opposing the adoption of the metric system for surveys in California suggests that I failed to adequately state my case so I'll take another shot. First of all, the term "conversion" to metrics is inappropriate because it connotes the replacing of one thing with another. Inasmuch as the billions of documents relating to real property in our state - township plats, surveys, field notes, record maps, deeds, mortgages, leases, wills, court partitions, title insurance policies, etc. — are described in foot-units and will continue in full legal force forever, the meter can never "replace" the foot. Those who subscribe to the fanciful scenario whereby the survey-foot is gradually replaced by the meter until it finally disappears altogether — just another quaint relic of bygone days - should re-examine their premise. Metrication won't result in the substitution of one measurement system for another but create a dual system necessitating cumbersome double-dimensioning in perpetuity.

A surveyor must be part detective, part lawyer, and part archaeologist in order to ferret out evidence, interpret legal documents and re-create the past. He questions every map, conveyance, and monument and accepts nothing without verification. When surveying a property created by sequential conveyance, he traces the chains of title of the property and its adjoiners back to their origins to determine prior rights and analyses every document for discrepancies. He studies record maps and makes a field survey to locate existing monuments. Using the evidence he's collected he re-establishes lines of title by the judicious application of relevant principles of common law. He's liable for errors and omissions in his work which gives him enough to worry about without the additional burdens created by metrication.

I'm aware of no public clamor for metrication and its only proponents appear to be self-serving public agencies at every level who would be its primary, if not sole, beneficiaries. Their arguments touting the "conversion" never mentions the extra work it would require (isn't that, after all, the whole idea?) or how it would actually work. Rather than relating metrication to surveying, they wander afield to deplore the "inch" in construction work (I quit using inches on my record maps in 1987), champion global conformity (real property is

rarely transported across national boundaries) and snidely squelch those pathetic opponents who've yet to see the light and ascent to technological nirvana.

Data on our future surveys can be represented in feet or in feet and meters... but not in meters alone. That being so, why not simply stick with the foot with which, after all, the most powerful, most advanced, and most envied nation on Earth was built? Jewellers weigh their wares in carats, sailors express speed in knots, and astronomers cite distances in light-years and nobody seems to object. Metrication, at worst, could prove calamitous, and at best, "a cure for which there is no disease." I had the good fortune to have the wise counsel of the late Gurdon Wattles both during my decade in title insurance and after I entered the surveying field. Our association, not surprisingly, spawned by abiding interest in boundaries, easements, title matters, and the body of case law that defines them. I've been in surveying long enough to appreciate technical advances (I had, in fact, already worn out one copy of Dr. J. Peters' trig functions when the first traversing Olivetti was introduced) and I recognize them as valuable tools, but only tools. I'm concerned today with the surveying community's preoccupation with metrication and other technology that seems to have shifted the emphasis from that aspect of surveying that put the "P" in "P.L.S.," the re-establishment of boundaries. I hope I'm wrong.

I won't comment on the two letters in the Summer 1995 issue because they didn't address the issues I raised but simply dismissed them with personal vilification and labored sarcasm.

William J. McGee, Land Surveyor

[Editor's Note: I want to thank Mr. William McGee for keeping the issue of metrics alive; and I want to remind readers that Mr. McGee is no relation to Michael McGee, PLS, Past President of CLSA.]

RESPONSE TO FILING A RECORD OF SURVEY

I am responding to a curiously unsigned letter titled "When To File A Record of Survey" in the Fall 1995 issue. The letter, whose tone suggests it might have been written by a member of the Enforcement Section of the State Board of Professional

The California Surveyor Winter 1996

Engineers and Land Surveyors, repeats, word for word, the text of Section 8762 of the Land Surveyors Act. Surveyors in this State have had the litany of why they must file Records of Surveys when appropriate shoved down their collective throats for several years now. What could possibly be the motive for repeating this information once again in the pages of this magazine.

I wish to take exception to the comment made that "it is in the best interest of the public and the profession for records of survey to be filed..." Must I, practicing in a small business environment, agree with this sentiment; in fact, I do not. It is my opinion, and my experience, that the record of survey requirement, as it now exists, neither benefits the public, nor me, nor the firm for which I work.

I want to digress for a moment to refer to one of CLSA's stated goals: that being that "CLSA 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." I fear that this lofty goal is not achievable as long as the current Record of Survey criteria remain in place.

The economic health of the private practice land surveyor has suffered dramatically over the past few years. I refer specifically to the practitioner whose work is oriented towards the property owner who needs a single line staked, or a house located, or a topographic survey of a vacant lot, or a boundary dispute resolved. When you include the cost of a Record of Survey, none of these projects would be affordable to the property owner. The cost of some of these projects would not exceed the Record of Survey filing fees in some counties. Property owners are not having surveys performed as a result of price quotations that can reach 200 or 300 percent of the survey cost.

I would argue that such occurrences do not benefit the public, and they certainly do not benefit the surveyor. How can CLSA protect the profession of land surveying when a law is causing economic havoc and eliminating profit within the private sector of the profession?

I would like to suggest that the California Surveyor offer its pages as a forum for debate and discussion between land surveyors throughout California with respect to modifying Section 8762 of the Land Surveyors Act. The goal should be to relax the requirements for many situations where filing currently is required. The result would be affordable surveys for many consumers, and would give the small businessman a chance to make a reasonable return on his investment.

Please enlighten your readers with the author of the unsigned letter.

Jeffrey D. Black, Licensed Land Surveyor

[Editor's Note: Through my omission, I did not identify the letter referred to in the Fall 1995 issue. The letter was a reprint of a response from the Board of Registration to a letter requesting clarification to the issue. We printed it because we do wish to see the California Surveyor used as a forum of debate and discussion. My apologies for the confusion; and keep those letters coming in.]

THE SURVEYING ENGINEERING PROGRAM

The Surveying Engineering Program at California State Polytechnic University, Pomona (Cal Poly Pomona) was accredited ABET under EAC in August 1994. The surveying program contains a National Center of Excellence in Mapping Sciences, supported by Intergraph and Trimble. This Center contains 93 Intergraph TD2 and TD3 computers, 12 ImageStations, an Intergraph photoscanner, three Trimble 4000SSE Geodetic Receivers with antennas and RTK Systems, two Trimble GPS Pathfinder Pro XLs, and four Trimble GeoExplorers. All hardware is fully supported with data collection, GIS and design software. Additional information may be obtained from Dr. Howard Turner, Director, Mapping Sciences Center of Excellence, California State Polytechnic University, Pomona, CA 91768. Phone: (909) 869-2445, fax: (909) 869-4370.

Howard Turner, Ph.D., L.S.

MORE ON THE SURVEYING ENGINEERING PROGRAM

The Surveying Engineering Program offered at California State Polytechnic University, Pomona (Cal Poly Pomona) has been accredited by ABET under EAC guidelines since August 1994. The Surveying Engineering Program contains a National Center of Excellence in Mapping Sciences, supported by Intergraph and Trimble. Both the Surveying Program and the Center of Excellence are supported by the California Foundation for Land Surveying Education.

Jon Sollie, President CFLSE

Continued on page 23

(ANNOUNCEMENT)

SURVEYING ENGINEERING PROGRAM

CAL POLY POMONA

- EAC Surveying Engineering Accredited
- Intergraph Maping Sciences
 Center of Excellence
- Trimble Mapping Sciences
 Center of Excellence

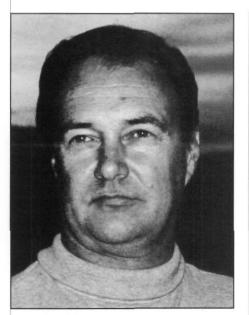
A COLLEGE OF THE FUTURE ... YOUR COLLEGE OF CHOICE.

Additional Information:

Dr. Howard Turner, P.L.S. Professor of Surveying Engineering (909) 869-2219 or (619) 951-2042 fax (619) 951-2861

WHY BELONG TO CLSA?

By Steve C. Wilson, PLS



Steve C. Wilson, PLS, the new 1996 CLSA Treasurer

IRST, I THANK the voting members of the California Land Surveyors Association for electing me Treasurer for 1996. The competition for this position during the past several years has been among some highly motivated and qualified Professional Land Surveyors who want to contribute to their profession and to CLSA. This is very desirable for CLSA and for the well-being of the profession.

I have been working in the surveying profession since 1966. During the past three decades I have observed almost a total change in the type of equipment and technology that we use routinely in our work. I have tried to think of one piece of equipment that I use today that was also used in 1966. After some thought, it appears the only tools that I use now with the same regularity as I did then are the round-

point shovel, chisels, hammers, etc. Yes, I do still own a Philly Rod, Linker Rod, Steel Tapes, Plumb Bobs, Wild Level, my trusty T-1, and I won't give up my drafting table. I sit at it daily, and occasionally dust off the Bruning Accu-Trak drafting machine that is still mounted to it. The biggest advantage of the drafting table these days is that its big enough to hold a lot of stuff at one time. To be competitive one must take advantage of the technological advances that are available to us. The old surveying methods are rapidly becoming a "lost art".

The technological advances that we see in land surveying also are taking place in all of the industrialized world. A growing and stable society allows for specialization and diversification. Instead of expending most of our time providing food, shelter and security for ourselves, we are able to find employment in a wide variety of occupations. Someone else can gather the food. The limits of our knowledge and technical know-how are steadily being expanded.

For the land surveyor one of the few lasting elements in our work has been the connection between what is in the ground and what is shown on a map or described in a deed. I pride myself as being a boundary sleuth with a full assortment of high-tech (and low-tech) tools at my disposal. I might even use satellites for positioning along with electronic sensing of angles, electronic data collection and computers. We seem to have this sense of security about this particular element of the land surveyors work. Don't bet on this being the case forever unless we have a strong presence.

While the technological know-how

and accessibility to new products grow, many see technology as a tool to accomplish their needs, which may not be consistent with what is best for the Professional Land Surveyor. Probably the most obvious of these is in the area of GPS technology as it is related to GIS/LIS. With few exceptions, the GIS/LIS systems are being developed under the control of the planners. Couple that with the fact that any "trainable" person could learn to operate a mobile GPS receiver, on-board data collector, and computer software with accuracies to one centimeter! Only the most complacent of us would not recognize that we may have a real problem. Consider that the state, counties, local agencies, architects, planners and engineers also have their own agendas to influence the legislature into a multitude of bills. These groups are well organized, and are ambitiously expanding their influence.

There is only one organization in California that only represents the Professional Land Surveyors' best interests; the California Land Surveyors Association. CLSA is comprised of Professional Land Surveyors and only those others who have a vested interest in Land Surveying. We have members across the board in the private, public and government sectors. The strength of the California Land Surveyors Association is derived from the members that it represents. Presently, about one-third of the Licensed Professional Land Surveyors are Corporate Members of CLSA. The American Institute of Architects is a similarlypositioned organization, that has become synonymous with licensure. We have work to do.

The California Surveyor Winter 1996

Within our organization, many volunteers devote their valuable time to make the organization function. There are several things that CLSA does that is impractical or impossible for any one of us to do individually. The committees of CLSA keep current with the happenings at the Board of Registration, the Legislature (both reactive and pro-active), with local agencies, counties, and with the state. The Education Committee organizes seminars and workshops. We have Advanced Technologies and Professional Practices Committees. We communicate with all Professional Land Surveyors licensed to practice in California via the California Surveyor. We organize an annual conference with an excellent program and good participation from the vendors. This is all possible because of the membership behind CLSA. Every member is very important.

To become a Professional Land Surveyor, one must have education, experience and an aptitude to understand the science and art of surveying. As professionals, we must be constantly evolving or we will be left behind. As the Membership Committee Chairman for 1995, I have given much thought to why we should belong to CLSA. In spite of all the other possible incentives, one truth exists. How can a person who is genuinely interested in Land Surveying afford to not belong to CLSA?

California Land Surveyors are Professionals.

They Deserve Professional Service.

AA&C/Acordia

At AA&C/Acordia, we view Land Surveying as a profession with unique insurance needs.

Our Business Insurance Division is ready to provide you with service-oriented:

- Professional Liability Insurance
- Office Package/General Liability Insurance
- Commercial Automobile Insurance
- Equipment Floaters

Professional Land Surveyors deserve professional service from a broker with experience.

Call us today

Alicia K. Igram, AAI
Assistant Vice President
AA&C/Acordia
3 Park Plaza, Suite 1200
Irvine, California 92714
(714) 660-4700 • (800) 854-0491

After only one week of using AutoNGS, the very first user had this to say:

"This has already saved me more in money and frustration than I paid for it"
(Tony Sanders, Aero-Dynamics Corp., Charlotte, NC)



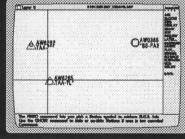
Registered Application Developer

AutoNGS is not an Autodesk product and is not warranted by Autodesk, Inc.

No more calls to Uncle Sam for Geodetic Control Info!

With AutoNGS you

find it FAST- and in your own office, on a DATASHEET CD-ROM from NGS, via the AutoCAD(R) graphics screen.



See all Stations in any US county (or in a custom search circle) on the AutoCAD^(R) screen. "Pick" a Station's symbol on the screen to bring up the literal **NGS** DATASHEET: step through it on the screen, or get a printout. Zoom to a Station by its Name (DESIGNATION), or by text on a Marker Disk, or by PID. Tell Station classification from graphic symbol, color, and attribute text. Define a window in AutoCAD^(R), and batch print only DATASHEETS for selected Station classifications in that window. Hide conflicting graphics. Many more features!

AutoNGS is still only \$495 - Contact: Karl Kleinn (713) 785-6053 PafMap Consulting, 11140 Westheimer Rd., Suite 340, Houston, TX 77042

CLSA/NALSJOINT CONFERENCE

March 14 - 16, 1996

Harvey's Hotel/Casino Lake Tahoe, NV

Reservations: 800/427-8397 Room Rate \$99.00 (single or double)

PRELIMINARY PROGRAM

ptq	TOPPINA MANAGEMENT CONTRACTOR	00000004 1 9457		
	Thursday,	March	14. 19	996

- **Registration Open**
- Spouses Hospitality Room Open
- Opening Ceremonies/Keynote Address Walt Robillard
- **Opening of Exhibits**
- Land Title From a Title Perspective James R. Dorsey
- Steve Parrish
- Sufficiency of Monument Evidence
 Brett K. Jefferson
- Thursday Luncheon
- The Future of Survey Education
 James Crossfield & Fareed Nader
- Perspectives California Board of Registration

Howard Brunner & George Shambeck

- Nevada Board of Registration Rita Lumos
- Recent Developments under the Subdivision Map Act

Robert E. Merritt

Effects of (NRS 278)

Brett N. Lane

Exhibitor Sponsored Cocktail Party/

Friday, March 15, 1996

- Registration Open
- Spouses Hospitality Room Open
- GPS Panel Discussion
 Michael R. McGee, Greg Helmer,
 Don D'Onofrio, David Paul Johnson
- **Exhibits Open**
- Friday Luncheon

Early Topographers of California and Nevada Roy Minnick

- CAD vs. GIS What's the Difference?
 Rudy Stricklan
- The Surveyors Connection to GIS
 Bruce Joffee
- Clark Co. A Case Study Dave Edwards & Bob Kelly
- Surveyors & GIS: Past, Present, and Future?

David Paul Johnson

- **GIS Panel Discussion**
- Friday Entertainment

Saturday, March 16, 1996

- Public Lands History Litigation
 Walt Robillard
- Presidents Closing Message

CLSA / NALS JOINT CONFERENCE • 1996

MARCH 14 - 16, 1996

Harvey's Resort Hotel/Casino, Lake Tahoe, Nevada

REGISTRATION FORM

PLEASE TYPE OR PRINT LAST NAME FIRST NAME (As you wish it to appear on your name badge)				INITIAL					
ADDRESS									
CITY					STATE			ZIP	
SPOUSE'S FIRST NAME (If attending, as you wish it to appear on the r					DE _		E TELEPHO	NE	
EMPLOYMENT		JAME]-[_[
EN	MPLOYMENT			PROF	ESSIONAL LICENSE		ME	MBERSHIP	
Proprietor			L.S.I.T. □ E.I.T. □ Non-Member *		ember				
REGIST	RATION	Price per person	No.	Amount	SOCIAL ACTIVITIES	S	Price per person	No.	Amount
		\$125.00 \$160.00			THURSDAY LUNCHEON FRIDAY LUNCHEON		\$ 20.00 \$ 20.00		
	ed by February 16, 1996) I after February 16, 1996)	\$150.00 \$185.00			FRIDAY SHOW (Dick Clark's American Band Stand Recreated SKIING HEAVENLY	d)	\$10.00 \$38.00		
POUSE ncludes Thursday Co	locktail Party/Auction)	\$25.00			(Wednesday, March 13, 1996) SUBTOTAL FEES: Registration & Activities \$				\$
TUDENT \$25.00 \$2 Donation to Support Stu			\$2 Donation to Support Studer	nts to th	ne Conferen	ice (Optional)			
OCIAL ACTIVI	TIES cannot be guaran	nteed unless	reservati	ions are	TOTAL FEES				\$
	h 5, 1996 due to limite				PAYME	NT II	NFORMA	TION	
		_			☐ Check Enclosed				
OTEL AT WHICH YOU PLAN TO STAY? Harvey's United Other			(Make check payable to: CLSA	A / NAI	LS 1996 Join	nt Conference	:)		
Harvey's	G Other				CHARGE TO: □ Visa	а	☐ Mastero	card 🗆 A	mex
fail To: CLSA / NALS 1996 CONFERENCE P.O. Box 9098			Card No						
	Santa Rosa, CA 954	105			Expires:				
elephone: (707) 578-6016 ax: (707) 578-4406 (Transmission by FAX may be used for registrations by bank card or government purchase only.)				Name as it appears on card:Authorized Signature:					

CSU, FRESNO CLSA STUDENT CHAPTER

By Robert Nielsen

INCE 1972, the Surveying Engineering Program at California State University, Fresno has sponsored a large and active California Land Surveyor's Association Student Chapter, currently the only "student chapter" in California. Numbering more than sixty members (Spring 95), the chapter offers a broad spectrum of activities and social events; though its official function remains representation at the local and state levels. These duties are discharged through regular monthly meeting (third Monday of the month), committees, and representation on the state board of directors.

The previous year (Fall 94-Spring 95) saw tremendous action by the chapter in several areas. For the first time the chapter assessed itself dues, secured funding from the CSUF Association Students, and opened a bank account — to support chapter activities. In April the chapter proudly sponsored a speech by Robert Goodner, L.S. on "How to Run a Surveying Business Without Getting Rich," a tongue and cheek title for an engaging expose on survey business ownership. On the educational front, the chapter continued its support of the surveying engineering tutoring program; supplying seniors to coach the underclassmen in the intricacies of such disciplines as computer programming and geographic information systems.

At the state level, representatives are sent to the quarterly state board meetings (as well as the state CLSA conference) allowing the chapter to be informed and active politically; as well as exposing the students to their professional duties. Through its geographically diverse membership, the chapter maintains its ties to the other chapters of the state with students attending their 'home' chapter's meetings whenever possible.

The Fresno State Chapter has an important role in the social lives of its members as both a platform for developing professional relationships and a welcome respite from

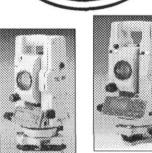
the classroom. Each year several "mixers" are planned, this last year being no exception. In conjunction with our fellow associations (SPSA, ACSM, & ASPRS), the school year began with a membership drive pizza party, which was followed in October by a Saturday picnic and football game. The rest of the year saw three house parties, another pizza party and another picnic.

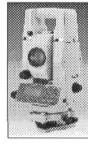
With education having an increasing importance within the surveying community, the Fresno State Student Chapter of CLSA continues to provide a strong, dynamic link between CLSA and California's future surveyors.



CLSA members Eric Cantrell and Tim Verneywon "Promising Surveyor" awards at the 1995 Fresno Conference.

LEWIS & LEWIS SURVEYING SYSTEMS Sales & Rentals





Total Staion w/ Data Collector PACKAGE PRICES

TOPCON		DAILY RAT	<u>MONTHLY</u>		
	TOPCON	<u>1-10 days</u>	<u>11+ days</u>		
	GTS-4A (One second)	\$85.00	\$51.00	\$1500.00	
	New GTS-500 (One sec.)	\$85.00	\$51.00	\$1500.00	
	GTS-301 series (2 sec.)	\$75.00	\$45.00	\$1350.00	
	GTS-302 series (3 sec.)	\$70.00	\$42.00	\$1200.00	
	GTS-303 series (5 sec.)	\$55.00	\$33.00	\$ 990.00	
1	GTS-304 (5 sec.)	\$50.00	\$30.00	\$ 900.00	
	New GTS-203 (10 sec.)	\$40.00	\$24.00	\$ 700.00	

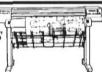
RENTAL-PURCHASE AGREEMENTS AVAILABLE ON NEW AND USED INSTRUMENTS AND

ACCESSORIES.....Call for a complete Rental rate sheet, used equipment list, and complete info on Rental-Purchase terms and 12 MONTH PURCHASE AGREEMENTS...

GPS.....Sales & Rentals,



DESIGNJET PLOTTERS LASERJET & DESKJET PRINTERS **VECTRA COMPUTERS & FAX's** CALCULATORS & SUPPLIES



QUALITY PRODUCTS, SERVICE, AND SUPPORT

ALSO AVAILABLE: ELECTRONIC THEODOLITES, AUTOMATIC LEVELS, TRANSITS, LASERS,

TRIPODS, RODS, PRISMS, ETC.....

CALL TOLL FREE FOR A COMPLETE RENTAL RATE LIST.

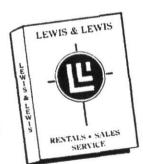
800-342-3607





with Alum. Tripod PACKAGE PRICES





FREE L&L CATALOG

Call, Write, or FAX for more information about our products and services, and a FREE L&L Catalog with Price Guide

OUALITY PRODUCTS



TOPCON













Home Office:

P.O. Box 1328 1600 Callens Rd. Ventura, CA 93003 Ph: (805)644-7405 Fax: (805)642-3970

Branch Office:

540 S. Andreasen, Ste. A Escondido, CA 92029 Ph: (619)747-8823 Fax: (619)480-5778

January 1, 1995

CALIFORNIA MECHANIC'S LIENS AND OTHER REMEDIES

This is an article from a talk given by Joseph C. Malpusuto, Esq., at the 1995 CLSA Conference. For further information, contact Gill and Baldwin, Glendale, California.

the statutory rights and remedies available to California material suppliers and subcontractors as of January 1, 1995. Significant changes have taken place recently which require changes in administrative procedures of Mechanic's Lien, Stop Notice and Bond claimants. Changes are set forth below.

I. PRIVATE WORKS OF IMPROVE-MENT.

The two most commonly utilized remedies to secure payment for work performed or materials furnished to a private work of improvement are the foreclosure of a Mechanic's Lien and a Private Payment Bond if the owner has required the general contractor to furnish such a Bond. The Mechanic's Lien, Stop Notice and Bond rights are separate and cumulative, that is, you may seek to perfect one or all of the remedies.

A. Mechanic's Lien.

(Civil Code §§ 3110 - 3154)

1. Preliminary 20-Day Notice. (STEP 1)

Unless you have a contract directly with the Preliminary 20-Day Notice in order to be able to pursue the Mechanic's Lien remedy. One cannot overemphasize the importance of this Notice (It is also a prerequisite to Stop

Notice and Bond claims as explained below.) Unless the 20-day notice is prepared and served in strict compliance with the California statute, you will forfeit your rights, no exceptions! Note: Even if your contract is with the owner, if there is a construction lender you must give a 20-day Notice.

The Notice must have a general description of the labor or materials to be provided, your name and address, the name and address of the person who contracted with you for the labor or materials and an estimate of the total price. You must be as accurate as possible.

First, you need the name of the owner. That is most often available from the general contractor. He is obligated by statute to provide it to you. If you are the general contractor, the owner is usually the person with whom you are dealing. However, whether you are a general or a sub, you should take care to learn whether the person you know as the "owner" actually owns the property (known as the "fee" interest) or is only a lessee. If the general contractor provides you with the name of the owner you can generally successfully proceed with your Mechanic's Lien remedy even if the name given you is wrong. If the general contractor does not provide you with the owner's name, you must make a good faith effort to obtain the owner's name, that is, check the building permit. Also even though you may rely on the identity of the owner supplied by the general, it is unclear as

to whether you may rely on the address given to you by the general contractor. Therefore, you may wish to ascertain the correct address of the owner by an alternative and reliable means (i.e., contact the owner directly, check the phone book, review recorded documents).

You also want to make sure you have the name of the construction lender, if there is one. On private jobs, it is absolutely essential that you include the construction lender on your 20-Day Preliminary Notice if (1) the construction lender's name is known to you, (2) it is made available to you by either the owner or general contractor, (3) it is listed on the building permit or (4) a Construction Trust Deed has been recorded in the county recorder's office and it shows the name of the construction lender.

While checking all of those sources may seem impractical, if the building permit or recorder's records show the name of the lender, your failure to give a 20-Day Preliminary Notice to that lender will clearly invalidate any Stop Notice which you attempt to serve and may invalidate any Mechanic's Lien which you record.

You are also required to serve the Preliminary 20-Day Notice on any subcontractor with whom you have contracted.

If you are a subcontractor, every contract which you enter into with other subcontractors must include the name and address of the owner, the original contractor, and any

construction lender.

The Preliminary 20-Day Notice must be served no later than 20 days after you first furnish materials or services to the job site. If the Notice is served later than 20 days after the first delivery of materials, etc., you will not lose the Mechanic's Lien right, but your Lien covers only goods or services supplied 20 days preceding the service of the Notice and any goods or services furnished thereafter. If no Preliminary 20-Day Notice is served, you will have no Mechanic's Lien or Stop Notice rights.

The Preliminary 20-Day Notice is served by personal service or by mailing the Notice first-class, registered or certified mail to the owner or reputed owner, original contractor or reputed contractor, to any subcontractor with whom you have contracted and to the construction lender or reputed construction lender. Type on each mail receipt before it is sent, "Preliminary 20-Day Notice" and the name of the addressee. Retain this receipt.

Keep a copy of the Preliminary 20-Day Notice, including the filled out portion of the proof of service affidavit or receipt by certified mail. It is essential that you keep the original return receipt (green card) after it has been returned to you from the post office. The green card is extremely important. You will need it to prove service at the time of trial. Even if the owner admits receiving the Preliminary

20-Day Notice at trial, if you do not have your green card you will lose your Mechanic's Lien or Stop Notice case. If for some reason your green card is lost you may be able to obtain a photocopy of the record of delivery from the post office. The courts have accepted this as a substitute for the green card. Unfortunately, the post office only keeps records for about 6 months following delivery.

Should the Preliminary 20-Day Notice be sent back to your office as unclaimed or indicating a wrong address you should keep the envelope unopened and further investigate as to whether the address you used was correct.

You can record the Preliminary Notice with the recorder's office of the county in which the job is located. The recorder will then make a good faith effort to send to you any Notice of Completions or Notice of Cessations recorded with the county recorder. Should the county recorder not do so however, it will not relieve you of the time deadline for recording a Mechanic's Lien or serving a Stop Notice.

If you do not have a contract directly with the general contractor and you fail to file a Preliminary 20-Day Notice, you can be subject to disciplinary action by the Contractors State License Board if the amount of your work exceeds \$400.

2. Recording the Mechanic's Lien. (STEP 2)

(Civil Code §§ 3115 - 3117)

A Mechanic's Lien must be recorded with the recorder in the county in which the real property is located. If the owner or general contractor has recorded a valid Notice of Completion or Notice of Cessation of Labor, the Lien must be recorded within 30 days from that date. If the Lien is recorded 31 days after a valid Notice of Completion or Notice of Cessation of Labor has been recorded, the Lien is invalid.

If no Notice of Completion or Notice of Cessation of Labor has been recorded or the Notices are invalid, you have 90 days after the "completion" of the work to record the Liep.

This 90-day period starts to run if any of the following occur: (a) the owner or his agent occupies the real property and that occupation is accompanied by a cessation of labor, (b) the owner or his agent accepts the work or (c) there is a continuous cessation of labor on the project for a period of 60 days.

To avoid any problems on the question of when the work was completed, if you are unpaid and have decided to protect your position, your Lien should be filed between 60 and 85 days after you last furnished goods and/or services to the project, provided a Notice of Completion or Notice of Cessation of Labor has not been recorded with the county recorder's office.

In some cases, you can determine whether a Notice of Completion or Notice of Cessation of Labor has been recorded by calling the customer service department of a major title company. The title company, if given the address of the property and the name of the owner, if known, may inform you free of charge as to whether these notices have been recorded.

Standard Mechanic's Liens forms are available from any number of sources and are fairly easy to fill out. However, be careful in preparing the signature block. If you are signing on behalf of a partnership or corporation, you must sign in a representative capacity and that capacity must be shown on the document. If there is a defect in either your signature block or the verification, the county recorder will refuse to accept the Mechanic's



New Edition Combines GPS Vectors! -

around today, with an edition perfect for your operation!

STAR*NET-LIGHT Full 2D/3D plane adjustments, survey

networks up to 200 stations. Fully independent weighting. **STAR*NET** Adjusts up to 1000 stations with reductions to NAD27/83/UTM. Preanalysis and Instrument Library.

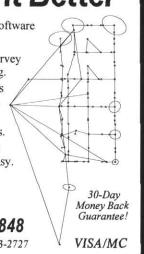
STAR*NET-GPS Combines conventional observations with Trimble, Ashtech, Leica & Geodimeter GPS vectors. DOS-Extended handles thousands of stations in minutes. STAR*LEV Adjusts differential level-loop networks, easy.

Call today for free technical product literature

or to order \$10 fully-working demos!

STARPLUS SOFTWARE 1-800-446-7848

460 Blvd. Way, Oakland, CA 94610, 510-653-4836, Fax 510-653-2727



Lien. That is not to serious a problem unless you are running out of time in which to file.

If you are within two weeks of the end of the recording period, it is good practice to have someone hand deliver the Mechanic's Lien to the recorder's office. That will let you know immediately if there is any problem with the recording and will give you an opportunity to make necessary changes. You should also deliver a photocopy of the Mechanic's Lien to the recorder with the request that it be "conformed" and returned to you immediately. You will not get the original document back for between three and six weeks, depending on the backlog of the county recorder where you filed. A conformed copy will give you the proof that you filed on a certain date in the event the recorder or the U.S. mail loses the original document, and it will let you proceed to protect your rights immediately without having to wait for return of the original document.

3. File a Lawsuit. (STEP 3) (Civil Code §§ 3144)

The final step in perfecting a Mechanic's Lien is filing suit to foreclose the Lien. The lawsuit must be filed no later than 90 days from the date the Mechanic's Lien was recorded with the county recorder's office unless a recorded credit is given which can extend the time up to one (1) year. The suit must be filed in the same county as that in which the Lien was recorded.

B. Stop Notice Remedy.

(Civil Code §§ 3083, 3103, and 3159)

The Stop Notice remedy allows you to make a claim against construction funds held by the lender or owner.

1. Preliminary Notice.

(STEP 1) (Civil Code §§ 3097 and 3160)

A Preliminary 20-Day Notice must be served under the same conditions, in the same way, and at the same time as that described above for the Mechanic's Lien remedy.

2. Filing and Serving the Stop Notice. (STEP 2) (Civil Code §§ 3158 – 3159)

You can serve a Stop Notice on a private job without attaching a bond. An unbonded Stop Notice will require an owner who is directly funding the construction to withhold funds. However, on private jobs, an unbonded Stop Notice does not require a construction lender to withhold funds. To require the construction lender to withhold, you must file a Bond with the Stop Notice in an amount 1½ times the amount of the Stop Notice.

A Stop Notice must be served within the time required to record a Mechanic's Lien. You may serve the Stop Notice by personal service or by registered or certified mail. The persons served with a Stop Notice differ from those served with a Preliminary 20-Day Notice.

- (i) If the owner is holding the funds and he has an architect, you can serve the Stop Notice on the owner or his architect.
- (ii) If you are serving a construction lender, the Stop Notice must be served at the branch office disbursing the funds, and you must serve the manager or the person at the branch responsible for holding or administering the construction funds. In order to locate the branch office disbursing the funds, call the bank in question and request to speak to the

construction loan department. You are not required to serve the general contractor with a Stop Notice, but, as a practical matter, we recommend it. If a bank is the holder of construction loan funds, the bank is not obligated to withhold monies to satisfy a Stop Notice unless the Stop Notice is served with an accompanying bond. A Stop Notice bond may be obtained from a surety company and must be in an amount equal to 125 percent of the principal claim on the Stop Notice. In an action against an owner or construction lender to enforce payment of a claim stated in a bonded Stop Notice, the prevailing party is entitled to collect attorneys' fees and interest at the legal rate figured from the date of service of the Stop Notice on the owner or construction lender.

(iii) If the owner or construction lender complies with the recording requirements of Civil Code §§ 3235 by recording a payment bond before any Stop Notice is filed, you have no Stop Notice rights but you have substituted rights to claim against the bond. (Payment Bond claims will be discussed later.) The owner or lender is required to send you a copy of such a bond if you included a written request for the bond and a self-addressed stamped envelope with the Stop Notice.

3. Filing Suit on the Stop Notice. (STEP 3)

(Civil Code §§ 3172)

A suit to enforce your Stop Notice cannot be filed sooner than 10 days after the Stop Notice has been served and must be filed no later than 90 days following the time within which a Mechanic's Lien must be recorded.

4. Notice of Commencement of Proceedings. (Civil Code §§ 3172)

Within five days after the suit is filed, your attorney will serve all people named in the Stop Notice with a notice that a suit has been commenced.

5. File Both a Mechanic's Lien and a Stop Notice.

There is no reason why you should not file both a Mechanic's Lien and a Stop Notice on a particular project. While you can only collect the amount due a single time, you are entitled to proceed along both lines as well as against the original entity with



CROSS LAND SURVEYING, INC.

Consulting Land Surveyors

GPS-Global Positioning System Surveys

Earl R. Cross, President Calif. P.L.S. 3242 Nevada R.L.S. 3623 Arizona R.L.S. 26052

2210 Mt. Pleasant Rd. San Jose, Calif. 95148 (408) 274-7994 whom you are dealing until you receive payment in full. This is especially true because the Stop Notice will intercept only funds that are due or to become due to the general contractor at or after the time a Stop Notice is received. If the job is almost complete, there may be relatively little money left for you to reach. Because Mechanic's Lien claimants and Stop Notice claimants take pro rata, if there is a shortfall either in the value of the property or in the amount of construction funds available, you will only collect a portion of the money due to you from each source. Since the remedies are independent, you can use all of the separate sources of funds to attempt to collect in full.

C. Payment Bond Remedy.

(Civil Code §§ 3241 - 3242)

The owner of a private work of improvement may have required the general contractor to furnish a Payment Bond. Such bonds specifically protect those who supply goods and services to the project. Payment Bonds may or may not be recorded in the recorder's office of the county in which the project is located. A subcontractor may now be a principal on a private works Payment Bond, as may an owner or an original contractor.

In addition, where a work of improvement is a subdivision, the government entity issuing the permits for the work of improvement often requires the owner or developer to post subdivision Payment Bonds.

1. Bond Notice.

(Civil Code §§ 3097, 3241 and 3242)

No action may be maintained against the Bond unless the claimant has served either a 20-Day Preliminary Notice or a written notice as described in Civil Code §§ 3241 and 3242. A claimant is no longer required to record a Mechanic's Lien or give the written notice required under the repealed §§ 3240. If you give a proper Preliminary 20-Day Notice you do not have to give any other notice to preserve your Bond claim.

The Notice to the surety and the principal on the Payment Bond must contain your name, a general description of the work materials or services, the name of the contractor or subcontractor to whom you furnished the materials or labor, the location of the job site and the amount already furnished or to be furnished.

It is essential that you serve either a Preliminary 20-Day Notice or a Section 3241/3242 Bond Notice to enforce a claim on a private works Payment Bond if the Bond is recorded with the county recorder. We suggest that you follow the same procedure with unrecorded private works Payment Bonds.

Service of the Section 3241/3242 Bond Notice must be by personal delivery, certified mail or registered mail, postage prepaid. If you serve the principal by mail, send it to the principal's last known address. If you serve the surety by mail and the surety is an individual, mail it to his or her residence, or business, if known, otherwise to the county clerk in the county where the bond has been recorded. You may serve a corporate surety at the office or representative's office shown on the bond, at the office of or in care of any officer of the surety in the state or at the office of or in care of the statutory agent of the surety within the state.

If you are giving the Section 3241/3242 Notice you must do so within 15 days of the recordation of a Notice of Completion or, if there is no recorded Notice of Completion, within 75 days after completion of the work of improvement.

2. Filing Suit on the Bond. (Civil Code §§ 3239)

To preserve your cause of action against the Bond it is necessary that a Complaint be filed within six months from the date of completion of work of improvement.

II. PUBLIC WORKS OF IMPROVE-MENT – STATE AND LOCAL.

The Mechanic's Lien remedy is not available on public projects.

A. Stop Notice Remedy.

(Civil Code §§ 3103, 3181, and 3184)

1. Preliminary 20-Day Notice. (STEP 1) (Civil Code §§ 3098 and 3183)

If you are supplying materials or performing work on a public works project, you have to serve a Preliminary 20-Day Notice unless your contract is directly with the general contractor.

To be most effective, a Preliminary 20-Day Notice must be served within 20 days after you first supplied goods to or performed work on the project. All work or materials furnished to the project would be covered. You may now serve a Preliminary 20-Day Notice after the initial 20 day period expires but your Stop Notice or Bond claim will only include the value of labor, equipment or material delivered within 20 days of the date of service of the Notice.

The Preliminary 20-Day Notice must be served on the general contractor, the subcontractors with whom you have contracted and on the public agency. If the public agency is Caltrans or the State Department of General Services, serve the Preliminary Notice on the disbursing officer. If it is a City project, serve the Preliminary Notice on the City Controller. For filing with other public agencies, serve the individual who acts as the controller.

If you do not have a contract directly with the general contractor and you fail to file a Preliminary 20-Day Notice, you can be subject to disciplinary action by the Contractors State License Board if the amount of your work exceeds \$400.

2. Serving the Stop Notice. (STEP 2) (Civil Code §§ 3184)

If a Notice of Acceptance or Completion is recorded by the public agency, the Stop Notice must be served within 30 days after the recording. If the Notice of Acceptance of Completion is not recorded, the Stop Notice may be served within 90 days after "completion" or of the work.

You should contact the agency involved to find out whether a Notice of Acceptance has been recorded.

Serve the Stop Notice either personally or by certified or registered mail. However, the individuals served are different. If you are working on a Caltrans project, serve the Stop Notice on the director or someone in Caltrans who has been designated by him to accept service. You can call Caltrans and they will tell you who should be served with the Stop Notice. If the owner is an entity such as the City of Los Angeles, Los Angeles County Road Department or Los Angeles Board of Public Works serve the Secretary of the

Commission, Clerk of the Board of Supervisors or the Controller of the City of Los Angeles. For other public agencies serve the person who acts as the controller.

Unlike a private work of improvement, a claimant need not serve an accompanying Bond with a public works Stop Notice in order to obligate the owner to withhold construction loan funds.

3. Enforcing the Stop Notice. (STEP 3) (Civil Code §§ 3210)
Suit must be filed within 90 days from the date the Stop Notice filing period ends.

B. Statutory Bond Remedies. (Civil Code §§ 3247 - 3253)

The most effective method of ensuring payment is to perfect your remedy against the Statutory Labor and Materials Payment Bond. Such bonds are required by California law to be filed by the general contractor on all public works projects over \$25,000 to ensure that subcontractors and suppliers are paid.

If it is necessary to sue the bonding company on the public works Labor and Materials Payment Bond, you are entitled to recover attorneys' fees in addition to the value of the unpaid balance for work or materials.

1. Bond Notice.

(Civil Code §§ 3098, 3252, and 3253)

The old "90-Day Public Works Preliminary Bond Notice" has been eliminated. The statute has been repealed. In order to perfect your right against the bonding company, you must now serve either a proper 20-Day Preliminary Notice or serve a notice under Civil Code §§ 3252 and 3253 if you do not have a direct contract with the general contractor. If you give a proper Preliminary 20-Day Notice you do not have to give any other notice to preserve your Bond claim.

The Notice to the surety and the principal on the Payment Bond must include your name, a general description of the work, materials or services, the name of the contractor or subcontractor to whom you furnished the materials or labor and the dollar amount already furnished or to be furnished.

Service of the Section 3252/3253 Bond Notice must be by personal delivery, certified mail or registered mail, postage prepaid. If you serve the principal by mail, send it to the principal's last known address. If you serve the surety by mail and the surety is an individual, mail it to his or her residence, or business, if known, otherwise to the county clerk in the county where the bond has been recorded. You may serve a corporate surety at the office or representative's office shown on the Bond, at the office of or in care of any officer of the surety in the state or at the office of or in care of the statutory agent of the surety within the state.

If you are giving the Section 3252/3253 Bond Notice you must do so within 15 days of the recordation of a notice of completion or, if there is no recorded notice of completion, within

Nikon DTM-700 Series Field Station with new enhanced software collects, displays and *verifies* data right in the field!

The DTM-700 Series Field Station is the only instrument of its kind that offers on-screen mapping for instant, on-site data verification. By doing so, it saves time, reduces human error, and offers you greater accuracy and productivity than ever before possible.

Exclusive MS-DOS® compatible software lets you perform and verify a full range of calculations. It also facilitates transfer and management of massive volumes of data.

Famous Nikon optics and other outstanding performance features put the DTM-700 Series in a class by itself.

For a demonstration, call 1-800-231-3577.





75 days after completion of the work of improvement.

2. Filing a Lawsuit on the Bond.

(Civil Code §§ 3249)

The suit to enforce your rights against the Statutory Bond must be filed within six months after the time to file a Stop Notice expires.

III.PUBLIC WORKS OF IMPROVE-MENT — FEDERAL.

There are no provisions for filing Stop Notices or Mechanic's Liens on federal public works projects. Instead, you may have rights under the Miller Act to bring a claim against a bond required to be posted by the general contractor.

A. Claimants.

(40 U.S.C. §§ 270 et al.)

An important distinction between State Bonds and Federal Miller Act Bonds is that only first and second tier subcontractors and material suppliers to a prime contractor or a subcontractor may file claims on a Miller Act Bond. Lower tiers are not included and, therefore, have only their contractual rights against the organization with which they have dealt directly to protect their interests.

B. 90-Day Notice. (STEP 1)

If you do not have a direct contractual relationship with the prime contractor, you must give written notice within 90 days after you last furnished labor, equipment, services or materials to the project.

You must serve the general contractor and should serve the bonding company. Service can be made by the U. S. Marshall or by registered or certified mail.

C. File a Lawsuit. (STEP 2)

A lawsuit to enforce your Miller Act claim must be filed in the appropriate federal court within one (1) year after your last delivery of labor, services, equipment or materials to the project.

Miller Act Bond claimants in California do not have a right to collect attorneys' fees in suits to enforce their claims unless their contract with the general contractor so provides.

IV.CONTRACTOR'S LICENSE BOND CLAIMS.

The penal amount of a General Contractor's Bond is \$5,000 (\$7,500 for renewals and new licenses) and a Swimming Pool Contractor's bond is \$10,000. This is the most that the bonding company can be forced to pay. All claimants must share pro rata. Because of the small amounts involved, this remedy is rarely adequate but should be kept in mind. In addition to the principal amount of the Bond, a successful claimant on an action on a Contractor's License Bond is also entitled to interest from the date of filing of the Complaint and its reasonable costs (excluding attorneys' fees).

V. STATUTORY RELEASES.

Civil Code §§ 3262 provides that the owner or original contractor cannot waive, affect or impair the claims and liens of other persons. However, the code goes on to state that such liens cannot be affected or impaired except by written consent of the third person whose consent is given when and if a subcontractor or materialman executes and delivers a waiver and release in conformity with the forms set forth in the code.

The code also provides that if such a waiver and release is signed, it not only releases the owner and construction lender from a Mechanic's Lien and Stop Notice but releases a claim against a surety on a labor and material Payment Bond as well. If you make a mistake you may end up with only a right to sue your customer for breach of contract.

A. Selecting Between Conditional and Unconditional Releases.

A subcontractor or materialman who executes a Conditional Release is not considered to have released his right to a Mechanic's Lien, Stop Notice or claim against a Payment Bond unless there is evidence of actual payment to the claimant. Evidence of actual payment can include the claimant's endorsement on a single or joint check which has been paid by the bank upon which it is drawn or by an actual written acknowledgment of payment given by the claimant.

However, if a materialman and/or subcontractor has not been paid but signs an Unconditional Waiver and Release for work performed on a work of construction as an inducement to obtain payment at a later date, he has, in effect, given a written consent under Civil Code §§ 3262. Accordingly, if the prime contractor does not make payment at a later date, the materialman and/or subcontractor, will have waived the right to a lien or claim against a lien claim, Stop Notice claim or Payment Bond claim to the extent of the value of work or materials provided to the project under the original contract and signed extra work orders through the cutoff date on the Release (if it's a Progress Payment Release) or for all work on the project (if it's a Final Payment Release).

If you are a subcontractor or materialman, we recommend that you do not sign an Unconditional Release unless you have received all payments due as of the effective date of the release in the form of cash or a cashier's check.

B. Conditional Waivers on Progress Payments.

A lien claimant should exercise the utmost caution in executing a

GPS SURVEYS

PROJECT COORDINATION TRAINING & ASSISTANCE

Project coordination utilizing your staff and our equipment or we provide everything. "Down to Earth" training in planning and organizing a GPS survey, running the software and analyzing the results. Datums and concepts such as geoids and ellipsoids made clear. Call for information, references or to estimate the feasibility of using GPS on a project.

- •
- Project Management
- On The Job Training
- ◆ GIS and High Precision Surveys
- → High Production Methods
- Quality Control
- Seminars

McGEE SURVEYING CONSULTING

Michael R. McGee, PLS 5290 Overpass Road Ste. 107 Santa Barbara, CA 93111 Tel: (805) 964-3520 Conditional Waiver and Release upon progress payment. This is due to the fact that the Statutory Form Conditional Waiver document releases all Mechanic's Lien rights and Potential Mechanic's Lien rights for work performed and materials furnished to the project under the original contract and signed change orders up through and including the date delineated in the Conditional Waiver Release form. Therefore, one should double check to make certain that the dollar amount set forth in the Conditional Waiver and Release upon progress payment accurately reflects all amounts due and owing, including compensation for work performed and/or the materials furnished to the site (whether incorporated into the project or not) through the date indicated on the Release. If you are not being paid for everything (because you can't bill for it until the item is complete, for example), you should consider adding the following language to the Release:

Because work may have been performed or items furnished prior to the date of this release for which payment has not been made and for which payment is not included within the amount set forth in this release, this release does not cover any rights based upon work performed or items furnished under the original contract or written change orders which have been fully executed by the parties prior to the date of this release except as to the amount actually paid pursuant to the release.

C. Unconditional Waivers and Releases.

A lien claimant should be aware that executing an Unconditional Waiver and Release upon either progress payment or final payment unconditionally extinguishes all rights that the lien claimant had with respect to the labor, services, equipment or materials which were the subject of the Unconditional Waiver and Release. As with the Conditional Release will relate to work performed and/or materials furnished to the site (whether incorporated into the project or not) through the date indicated on the release. One should always insist on

a cashier's check or payment in cash prior to executing an Unconditional Waiver and Release form. If the other party insist on payment by company or personal check, one should insist on executing a Conditional Waiver and Release form which becomes effective only upon the check clearing the bank.

D. Continuing Deliveries/ Performance of Work After Delivery of Releases.

When you expect to continue to provide more work or more materials on the job, the proper Release to use is the Progress Payment Release. Such a Release only eliminates your job rights through a certain period of time for a certain amount of money. It is extremely important that you are accurate with the dates and amounts. If vou miss an invoice or some other amount you will be giving up your job rights for those monies. Be careful not to have more than one unpaid Progress Payment Release out on a job at the same time. If you are waiting to be paid for \$5,000 worth of materials through the end of January, and you have not received that money and subsequently the customer asks you to submit a Progress Payment Release in the sum of \$5,000 for the month of February, unless the February Progress Payment Release indicates the total amounts owed for January and February, you will be releasing all of your rights through the end of February for the sum of \$5,000. You should ask your customer to return the first Conditional Release and prepare the second one with both figures combined covering through the end of February.

E. Representing Two Customers on the Same Job Site.

If you are servicing two customers on the same job site be extremely careful in executing releases. Within the Releases there is no clause protecting you and indicating that you were releasing your job right as to only one customer. As such it is necessary that you fill in additional language on the bottom of the Release indicating that that release applies to only the one customer to which it is intended to apply. Otherwise the owner can assert that your Release applies to both of the customers.

VI.PROMPT PAY REQUIREMENTS (PROGRESS PAYMENTS).

A. Private Works of Improvement.

1. Owner.

An owner must pay undisputed progress billings to a prime contractor within 30 days after demand. An owner may withhold up to 150 percent of amounts disputed in good faith. The penalties associated with failing to comply with these statutory provisions are that the prime contractor may include in its prayer of damages 2 percent per month of the improperly withheld amounts in lieu of any other interest, and attorneys fees. These statutory requirements may be modified by contract, and this statutory scheme applies only to those contracts executed on or after January 1, 1992.

2. Prime Contractors and Subcontractors.

Prime contractors and subcontractors must pay undisputed progress billings to subcontractors within ten days after receipt from owner, prime contractor or higher tiered subcontractor. Prime contractors and subcontractors may withhold up to 150 percent of the amounts disputed in good faith. Failure to comply by these statutory requirements will subject the prime contractor or subcontractor to 2 percent per month of improperly withheld amounts in addition to any other applicable interest and attorneys fees. These statutory requirements may be modified by contract and the statutory scheme applies to all contracts in effect on or after January 1, 1991.

B. Public Works of Improvement.

1. State Agencies.

State Agencies must pay undisputed progress billings to prime contractors within 30 days after request or engineer's estimate. State agencies must pay 10 percent per annum interest on late payments. There are no other penalties. This statutory scheme applies to all contracts in effect on or after January 1, 1991.

2. Local Agencies, University of California and California University Schools.

No statutory requirements apply to these entities to make prompt payment to prime contractors.

The California Surveyor Winter 1996

3. Prime Contractors and Subcontractors.

Prime contractors and subcontractors must pay undisputed progress billings to subcontractors within 10 days after receipt from the owner, prime contractor or higher tiered subcontractor. Prime contractors and subcontractors may withhold up to 150 percent of amounts disputed in good faith. The consequence of failing to abide by these statutory requirements is that the prime contractor and subcontractors are subject to 2 percent per month penalty of improperly withheld amounts in addition to any other applicable interest and attorneys' fees. The statutory requirement may be modified by contract and this statutory scheme applies to all contracts in effect on or after January 1, 1991.

VIL PROMPT PAY REQUIRE-MENTS (FINAL PAYMENT/ RELEASE OF RETENTION).

A. Private Works of Improvement.

1. Owners.

Owners must release undisputed retention to a prime contractor within 45 days after the issuance of a Certificate of Occupancy. An owner may withhold up to 150 percent of the amounts in question if a bonafide dispute exists. The penalties for failure to comply with this statutory scheme are that the owner is subject to a 2 percent per month penalty of improperly withheld amount in lieu of any other interest and attorneys fees. This statutory scheme may not be modified by contract and it applies only to those contracts signed on or after July 1, 1991.

2. Prime Contractors.

Prime contractors must release undisputed retention to sub-contractors within 10 days after receipt from the owner. A prime contractor may withhold up to 150 percent of amounts in bonafide dispute. A prime contractor is subject to a 2 percent per month penalty of improperly withheld amounts in lieu of any other applicable interest, and attorneys' fees. This statutory scheme may not be modified by contract and it applies only to those contracts signed on or after July 1, 1991.

3. Subcontractors.

No statutory requirements apply to subcontractors for prompt release of retention.

B. Public Projects.

On all contracts entered into after January 1, 1993, the public entity must pay retention to the original contractor within 60 days after the date of completion. Failure to do so gives rise to a 2 percent per month penalty in lieu of interest and attorneys' fees and costs. An original contractor must pass the retention payment through to its subcontractors within 10 days of receipt. Failure to do so also results in 2 percent per month penalties in lieu of interest, and attorneys' fees and costs.

VIII. MECHANIC'S LIEN RELEASES.

The act of recording a Release of Mechanic's Lien extinguishes the Mechanic's Lien upon which such claim was based as well as numerous rights not evident on the face of the Release of Mechanic's Lien. For example, the recording of a Release of a Mechanic's Lien will impact upon the priority of a Mechanic's Lien claimant who performs additional work on the project subsequent to the recording of the Mechanic's Lien Release.

Therefore, to protect ones priority position and other lien rights, a Mechanic's Lien claimant should consult an attorney prior to executing any release document unless one's work on the project is complete and full payment is received.

The matters contained in this document are for informational purposes only and should not be relied on in reaching a conclusion in a particular area. You should seek competent legal advice for any particular situation. If you have any questions regarding this guide feel free to contact us at Gill and Baldwin.

IX. SPECIAL SURVEYOR'S LIEN.

Surveyors are design professionals as defined by Civil Code ° 3081.1 and, as such, have a right to a special lien when contracting directly with the owner. The applicable Civil Code Sections can be inspected at any law library.



Showing The Way To High-Speed Precision Measuring.

New Rec Elta 13C/14C DOS Total Stations.



- Integrated DOS & software library
- PCMČIA memory card
- User programmable
- Graphics screen

New Elta 50 High-Performance Total Station.

- Easy 7-key operation
- Onboard resection
- Stake-out software
- TDS package available



New DiNi 10 & 20 Digital Precision Levels.



- Full line calculation
- Measuring range from 1.5 to 110 m
- Integrated memory
- New leveling & adjustment software

For more information on our full line of total stations & automatic levels & the name of your local Zeiss dealer, call **(800)873-6277** or fax (914)681-7472.

Carl Zeiss, Inc.

Surveying Division One Zeiss Drive Thornwood, NY 10594

NO SURVEYS REQUIRED? NO SURVEYORS REQUIRED

By Nancy E. Conklin, P.L.S.

RECENT "DOONESBURY" comic strip depicted the typical suspicious neighbor that surveyors often encounter. We are often met with somewhat hostile thoughts of being escaped convicts, prowlers, trespassers, and agents for those "evil" mega corporations bent on raping the land and upsetting the nature of the community by building "Wal-Marts" and "Disneylands" Land surveyors are suffering from a bad rap. Developers consider us expensive, realtors envision us as a necessary evil in order to close a sale, the general public sees us as somewhat less than professional, as grubby men and women who cause traffic to slow down, dogs to bark and neighbors to gripe. Worst of all, municipal officials don't really acknowledge land surveyors at all, but lump us together with project engineers, who don't make boundary decisions, prepare subdivision plats, nor perform deed and plat research.

In fairness, not all citizens view surveyors in this negative manner. But the lack of public awareness about the land surveying profession is definitely detrimental to our livelihoods and the future of land surveying. Already we have seen the use of survey affidavits and even the elimination of the survey requirement for mortgage closings put a bite on our budgets. The use of old, outdated surveys, for which we are still liable, has increased considerably. Building officials allow, and even encourage, homeowners to use old surveys, with proposed improvements sketched on, in order to obtain building permits. The municipalities add requirements to plats and plans, without consulting the profession. The subdivision has now become a "bill-board" for notes, rules and easements which are or can be documented elsewhere. The actual subdividing, drawing and dimensioning of the lots has become of minor importance to the government officials reviewing and approving these plats. Plats are reviewed by planners and engineers but almost never does a land surveyor review a plat prior to recordation. This in itself is an indication of the lack of awareness and recognition of the need for the technical expertise of surveyors.

Land surveyors must become more vocal. We must take it upon ourselves to educate the public, the country supervisors, planning commissions, city and town councils, municipal planners, engineers and building officials. We must let municipal officials know that there is a surveying profession, that we are educated, experienced and knowledgeable, and that we have justified opinions as to what information belongs on subdivision plats, and in ordinances and policies which pertain to our profession. We need to request that the profession be advised when ordinances and policy changes are beginning to be discussed. We should request that if a review of our work is necessary, it should be conducted with the inclusion of a land surveyor on the review team.

In order to insure our future as land surveyors, we must speak to realtors, lawyers and legal assistants, title and escrow companies and mortgage companies. We must emphasize the importance of a current, accurate survey. We should question those who suggest a survey is not necessary for a home buyer's protection, simply

because it may cost a couple of hundred dollars (a fraction of the cost of the investment). A recent advertisement from Stewart Title Guaranty Company screaming "NO SURVEY" required for coverage is a shocking marketing tool which endangers our profession. We must inform homeowners and attorneys of the dangers and problems which may arise from closing without a current survey. Building officials, homeowners, and contractors should be educated about issuing permits and building garages, additions and pools without a current survey and title report which may show utility easements in a proposed construction area. Similarly, the homeowner should be advised of the problems that arise from erecting fences without using professional to establish the property lines. We should request the legislature limit our liability with regards to the use of old surveys.

Land Surveying is a complex, varied, ever-changing profession. Those of us involved may relish its diversity, but our days may be numbered. Land surveying has been a quiet, go-aboutyour business profession. Unfortunately, the world and the rules have changed considerably, and the control and importance the surveyor once held are eroding. Only by education, public awareness and visibility will land surveyors and their profession gain the consideration and respect we deserve. Land surveying is an indispensable profession — we must insure that it remains so.

Reprinted from The Nevada Traverse, Vol. 22, No. 1, 1995.

The California Surveyor Winter 1996

Letters to the Editor (continued from page 7)

SURVEYING EDUCATION @ CSU FRESNO

The Field of Surveying

The professional surveyor has the option of working outdoors while earning an excellent salary. The Land Surveying collects, archives, correlates and analyzes all aspects of land, resource and environmental spatial information. From one millimeter satellite geodesy point positioning precision to one acre sized pixel raster area wide data, the Surveyor measures, locates, maps and positions our society with respect to the ground.

Surveying at CSU, Fresno

Within the Surveying Program at CSU, Fresno, all students receive a solid grounding in the fundamentals associated with each of the following areas: Boundary Surveying, Geographic Information Systems, Mapping, Surveying Programming, Geodetic Surveying or Geodesy. Since each surveying graduate is required to complete over 60 semester hours of **Surveying** course work, each graduate will have great depth of coverage in all aspects of surveying.

A Fresno graduate is truly recession proof.

Careers in Surveying

Four hundred fifty five Fresno surveying graduates have enjoyed unlimited career opportunities. More than half of all Surveying Engineering graduates are employed by Surveying or Engineering consulting firms. Many graduates find work with federal, state, or local government agencies. A fair number of additional graduates have found work with utilities. Many Surveying Engineering graduates move into management positions, or establish their own business after attaining professional land surveying Licensure. More than half of all graduate have attained their professional license. Fresno surveying graduates passed the 1995 California Land Surveying Exam at twice the rate of other examinees.

Future Education

The B.S. degree in Surveying Engineering at CSU, Fresno should prepare the student for graduate school (M.S. or Ph.D. degrees) at any university with a Surveying Engineering or related

Engineering curriculum. Surveying Engineering students who successfully pass the Fundamentals of Land Surveying (FLS) examination before completing their degree are required to complete two years of responsible land surveying training before being allowed to sit for the California Land Surveying Examination. Surveying graduates are encouraged to participate in lifelong learning, both to benefit themselves professionally and to provide society with efficient and effective surveying engineering products.

General Preparation

The basic skills and characteristics needed for success in the surveying engineering major include: an aptitude for geography, computers, mathe- matics and science. Students should possess an independent work ethic while being able to function well on a team. Written and oral communication skills are important. A love for maps and a desire to work in an outdoor environment are important indicators of future Surveyors.

James K. Crossfield

 \oplus

The Marin Chapter of CLSA

Presents

"LAND TITLES AND BOUNDARY RETRACEMENT"

with

James Dorsey, PLS

Where:

Holiday Inn -

San Rafael, CA

When:

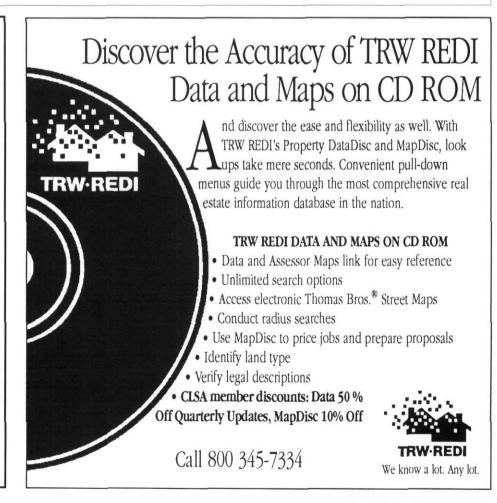
Saturday,

March 2, 1996

Cost:

\$80.00

For more information contact: David Harp (415) 924-7760





Here's Some Important Information About CLSA

The goal of the California Land Surveyors Association is to promote and enhance the profession of surveying, to promote the common good and welfare of its members, to promote and maintain the highest possible standards of professional ethics and practice, and to elevate the public's understanding of our profession. CLSA represents all land surveyors, whether they are employees or proprietors, whether in the public or the private sector.

Representation

■ LOCAL: Your local chapter represents you in local issues. Through your chapter representative to the State Board of Directors, the individual member can direct the course CLSA will take. ■ STATE: The surveyor is represented at the state level through an active legislative program, legislative advocate, and liaison with the State Board of Registration.

REGIONAL: CLSA is an active member of the Western Federation of Professional Land Surveyors. This federation is composed of associations throughout the western United States and addresses regional issues. NATIONAL: Through institutional affiliation with the National Society of Professional Surveyors and the American Congress on Surveying and Mapping, CLSA is represented at the national level.

Education Opportunities

CLSA presents annual conferences which provide technical and business programs, as well as exhibits of the latest in surveying and computing technology. Seminars and workshops are presented to assist in continuing education. CLSA publishes the *California Surveyor* magazine and the *CLSA News* to keep the membership abreast of changing legislation, legal opinions, and other items which affect our profession.

Business and Professional Services

CLSA provides a fully staffed central office which is available to answer questions or to provide up-to-date referrals concerning legislation, educational opportunities, job opportunities, or other issues concerning our membership. Health and professional liability insurance programs are available to members.

oin CLSA Today!

Application for Membership in the California Land Surveyors Association

Mail Your Completed Application To:

CLSA Central Office P.O. Box 9098 Santa Rosa, CA 95405-9990

Questions?

Phone (707) 578-6016 Fax (707) 578-4406

* First year's annual dues are to be prorated from date of application

Name		Work Phone ()
Firm or Agency		Home Phone ()
Mailing Address		Suite or Apartment No.
City	County	State Zip
Signature		PLS , PS, CE, or LSIT No.
□ \$159.00 CORPORATE M □ \$ 79.50 AFFILIATE MEM □ \$ 79.50 ASSOCIATE MEM □ \$ 15.90 STUDENT MEM	ncipal) Private (employee) EMBER: Shall have a valid Calif. F BER: Any person, who in their pro MBER: Any person who holds a va BER: A student in a college or un	Public Retired Professional Land Surveyor or Photogrammetric license. fession, relies upon the fundamentals of land surveying. this certificate as a Land Surveyor in Training. Iniversity actively pursuing the study of land surveying. To or corporation desirous of supporting the association.
Dues (prorated* from above)	\$ + Entranc	ce Fee \$15.00 = Total Amount \$
☐ Check enclosed I aut	horize charge to my \(\square\) Maste	r Card Visa Expiration Date
Card Number	Sig	gnature

Product News

PacSoft

WOODINVILLE, WA — PacSoft's CivilMaster 95-1 update cuts design time for terrain modeling intensive projects in half. The update also contains extensive enhancements affecting most other areas of PacSoft's flagship civil engineering and surveying software.

New, highly interactive site design functions save time and increase design flexibility by allowing users to add points, lines and ditches with graded side slopes to the terrain model on the fly. Building pads with graded side slopes may also be added in one simple step.

CivilMaster's coordinate geometry has been augmented by the six best fit line and curve solutions covering virtually all conditions. Setback distances and building envelopes are handled easily by a new Variable Offsets routine.

For more information, contact PacSoft Incorporated, P.O. Box 888, Bothell, WA 98041, or call (206) 489-1530.

Trimble

SUNNYVALE, CA, August 10, 1995 — Trimble (NASDAQ:TRMB) today announced its new 4600LS SurveyorTM system. Trimble's 4600LS is an affordable, easy-to-use, 3.7 lb. GPS system capable of delivering centimeter

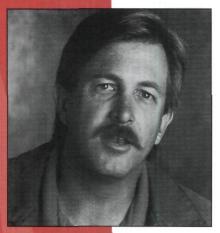
accuracy and high productivity for diverse surveying and mapping applications. The 4600LS's innovative design allows first time GPS survey users the ability to take full advantage of a complete system that costs less than a typical total station. The 4600LS will be available October 1995.

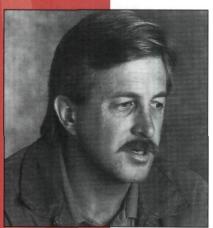
"The 4600LS is an innovation result of Trimble's 8th generation GPS surveying technological advances," said Jim Sorden, Executive Vice President of Trimble's Surveying and Mapping Division. "Surveyors who thought they could never afford to use a GPS system, can now reap the benefits of GPS."

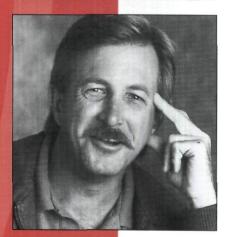


CLSA PUBLICATION ORDER FORM	Member Price	Non-Member Price	Quantity	Total	
1996 Complete Package including PLS Roster, Pre-'82 CE Numerical Listing, PE & PLS Act with Board Rules, Subdivision Map Act & Binder	\$28.00	\$42.00	•		
1996 Complete Package as above plus disk with PE & PLS Act with Board Rules, and Subdivision Map Act	\$38.00	\$57.00			
1996 Refill Package including PLS Roster, PE & PLS Act with Board Rules, and Subdivision Map Act	\$22.00	\$33.00			
1996 Refill Package (as above) plus disk	\$32.00	\$48.00			
PE Act & PLS Act with Board Rules - 1996 publication (51/2 x8 1/2)	\$8.00	\$12.00			
Subdivision Map Act - 1996 publication (51/2 x 81/2)	\$8.00	\$12.00			
California Coordinate Projection Tables - NAD '83 by Ira Alexander, C.E. PLS and Robert J. Alexander, PE	\$8.00	\$12.00			
Right of Entry Cards (minimum order is two)	2/ \$3.00	2/ \$6.00			
Corner Record Forms - FORM PWA-102 (8/88) (minimum order is 25)	\$10.00 (25)	\$15.00 (25)			
Land Surveying Brochure (minimum order is 50)	\$15.00 (50)	\$30.00 (50)			
Standard Contract Forms - Agreement for Professional Services	\$6.00 /pad of 25	\$12.00 / pad of 25			
Land Surveying for the Land Owner and Real Estate Professional	ф0.00 /рас от 23	ψ12.007 pad 01 23			
by Daniel E. Beardslee, P.L.S.	\$8.00	\$12.00			
Easements and Related Land Use Law In California - 2nd Edition By Donald E. Bender, J.D.,L.S.	\$20.00	\$30.00			
CLSA 25th Anniversary Commemorative Belt Buckle - Bronze					
CLSA 25th Anniversary Commemorative Belt Buckle - Silver	\$20.00	\$30.00			
COMPUTER SOFTWARE	\$80.00	\$90.00			
Cadastral Survey Measurement Management System Three ring binder documentation and three disks	\$50.00 / set	\$75.00 / set			
GEOID93 - Calculates estimated geoid heights	\$20.00	\$30.00			
VERTCON - Calculates estimated difference between NGVD29 and	Ψ20.00	Ψ00.00			
NAVD88	\$20.00	\$30.00			
CORPSCON - Calculates geodetic and SPC transformations in NGVD	***				
27 and NAD83 (includes Nadcon) HPGN - HPGN-D State wide data file - includes all data submitted to	\$20.00	\$30.00			
NGS through the Northridge earthquake survey with Seeker	\$30.00	\$45.00			
 Member Prices are only available to State members of the of California Land Surveyors Association Fax orders accepted with Mastercard or Visa only at (707) 578-4406 		Subtotal of all items Shipping & Handling Up to \$20.00 add \$3.75 \$20.00 to \$40.00 add \$ \$40.01 to \$60.00 add \$ Over \$60.00 add 10% (up) Next Day Air Shipping	64.50 66.00 to maximum of \$10.00)		
■ Mail your order form and payment to:		Add additional \$20.00			
CLSA Central Office		Subtotal including shipping 7.5% California Sales tax on above TOTAL			
P.O. Box 9098					
Santa Rosa, CA 95405					
Phone: (707) 578-6016 Fax: (707) 578-4406					
Name	Payment Enclosed				
Company (if company is mailing address below)		Account Number			
Street Address (we cannot ship to P.O. Box)		Expiration Date			
City/State/Zip		Name on Card			
Daytime Telephone		Authorized Signatur	е		

We Surveyed Our GPS Customers...







"We switched from Trimble to Leica GPS. The price was right. The learning curve on the dual-frequency equipment and the Windows-based software is a lot shorter. Cabling and laptop downloading are lightning fast. And Leica's local support is always there. Nothing else we compared came close."

Bruce Hunsaker Hunsaker & Associates Riverside, California

...and They Told Us We Were Right on the Mark.

SURVEYORS SERVICE COMPANY

2942 CENTURY PLACE, COSTA MESA, CA 92626 800-938-0606 714-546-9724 (FAX)

4317 NORTH 16TH STREET, PHOENIX, AZ 85016 800-938-0608 602-274-3740 (FAX)

505 MONTANO ROAD, ALBUQUERQUE, NM 87107 800-938-0609 505-345-3499 (FAX)

Sustaining Members



ASSOCIATION ADMINISTRATORS & CONSULTANTS, INC.

Serving the Business Insurance needs of Land Surveyors since 1972.

3 Park Plaza, Suite 1200 Irvine, California 92714

(714) 660-4700 (800) 854-0491



SURVEYORS SERVICE CO.

800-938-0606

COSTA MESA, CA 92628 P.O. Box 1500



HANS I. HASELBACH (Jr.)

HASELBACH SURVEYING INSTRUMENTS

SURVEYING SYSTEMS . SERVICE . GPS

HEERBRUGG



(800) 462-8181 (415) 348-7247 1447 Rollins Road Burlingame, CA 94010



Steve Carlon

Branch Manager 3380 Industrial Blvd., Suite 105 West Sacramento, CA 95691

(800) 500-8575

President

(916) 374-8575 FAX (916) 374-8329



4

David Paul Johnson, P.L.S.

Surveying & Mapping Technical Support

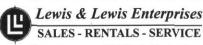
645 North Mary Avenue Sunnyvale, CA 94088-3642

408-481-2207 Phone 408-481-6885 Fax 800-827-8000 Internet: david_iohnson@trimble.com



4155 Oasis Road Redding, CA 96003 (916) 225-8155

Fax (916) 225-8162 1-800-824-4744



Call Toll Free (800) 342-3607 Quality

Products Service & Support TOPCON

PACKARD &



RD VENTURA, CA 93003 FAX (805) 642-3970 P.O. BOX 1328 1600 CALLENS RD (805) 644-7405



Surveying Systems, Sales and Training

Surveying Systems, Equipment & Supplies Builders Instruments and Laser Systems





Engineering Supply Company

5700 Imhoff Dr., Suite C Concord, Calif. 94520 Phone: 510/680-4701 Phone: 800/788-3307 Fax: 510/680-2504



Trinity Capital Corporation

475 Sansome Street, 19th Floor San Francisco, California 94111

Nicholas J. Gibbens National Accounts Manager Phone (415) 956-5174, Ext. 140 (800) 841-4433, Ext, 140 Fax (415) 956-5187





TrimbleNavigation

Sacramento • Fresno • Marin • Redding (916)344-0232 • (800)243-1414 • FAX (916)344-2998



Paul F. Hahn

Marketing Manager Geodimeter Division

Spectra-Physics

Geotronics of North America, Inc. 911 Hawthorn Drive, Itasca, IL 60143 Ph: (708) 285-1400 Fax: (708) 285-1410 Mobile Ph: (708) 347-3636

The California Surveyor

Published Quarterly by the CALIFORNIA LAND SURVEYORS **ASSOCIATION** Post Office Box 9098 Santa Rosa, Ca 95405-9990

ADDRESS CORRECTION REQUESTED

BULK RATE U.S. POSTAGE PAID Permit No. 635 Santa Rosa, CA