

Institutional Affiliate of American Congress on Surveying and Mapping

## THE VOICE OF THE LAND SURVEYORS OF CALIFORNIA

NO, 37

SPRING

UIIV

1975

## EDUCATION COMMITTEE'S 1975 GOALS FOR C.L.S.A.

At the January 18, 1975 C.L.S.A. Board of Directors meeting Chuck Wooldridge, Chairman of the Education Committee, outlined the goals of that committee. Based on past Board of Directors discussions as to the purposes and direction of the Association, the following long range educational goals were presented:

1. Help formulate and make readily available an adequate degree program in land surveying.

2. Ensure that every licensee has ready access to opportunity for remaining current in all aspects of the broad land surveying profession and to broaden his field of expertise.

3. Require a B.S. in Land surveying as a prerequisite for the L.S.I.T. examination or greater time as a substitute therefore. (For instance, a B.S. Degree in a related field plus two years or high school and eight years might be an adequate substitute for the Land Surveying B.S.)

4. Require every licensee to continue his professional development as a condition of license renewal.

5. Prohibit anyone not meeting the above conditions from practicing land surveying.

It was then suggested that several small subcommittees working individually on one year programs would have a much greater potential for production. Keeping a goal of immediate attainment of tangible results in mind, the following educational activities were suggested:

1. Coordinate and cooperate with the Legislative Committee to change the L.S. Act emphasis from experience to education.

2. Work with the universities to evolve a more realistic and practical B.S. curricula.

3. Work with the junior colleges to develop realistic curricula for both the terminal program and the transfer student requirements.

4. Entice our membership into recruitment efforts at the high school level to obtain students for these programs.

5. Assist all schools with placement of students for summer employment and graduates for positions worthy of their achievements, which we have (or should have) helped shape.

6. Attempt to influence the apprenticeship program to develop professionals as well as technicians.

7. Establish a program of lectures, seminars and workshops to be presented at the chapter level as a joint state-chapter effort.

8. Develop criteria to assist the Board of Registration in the evaluation of schools applying for recognition under the L.S. Act.

Callitorni

Chuck Wooldridge concluded the presentation with the statement that "many of the programs are too large for completion in a one year time frame. But if they can be initiated, the scope and steps defined and direction ascertained, we will have made progress.

"I envision one, two or three man committees— each taking on one of the topics. It is doubtful in my mind that the Education Committee will meet as such. Telephone and mail will cover most of the needs. Each of the areas can pretty well stand alone, and correspondence can provide most of the coordination of effort.

"Help is always needed though. If you chance on any one interested in any aspect of this effort, I would appreciate knowing. There's a big job ahead. It is much needed and worthy of our efforts. It's one that CLSA should be doing and can accomplish. I appreciate the opportunity to be a part of it."

## LEAGUE OF CALIFORNIA SURVEYING ORGANIZATIONS – NORTH SECTION by Myron A. Lewis, L.S.

#### Chairman, Northern California Section A.C.S.M.

The Northern California Section of the American Congress on Surveying and Mapping met on February 21, 1975 at 8 p.m. at the Police Building in Hayward for the first meeting of the Northern Region of the League of California Surveying Organizations. With the help of the California Land Surveyors Association over fifty invitations were mailed to surveyoriented groups within the proposed Section One. Section One will include the agencies, cities, survey organizations, railroads, title and utility companies within the following 13 counties:

Alameda	Mendocino	San Francisco	San Benito
Contra Costa	Monterey	San Mateo	Santa Clara
Lake	Napa	Sonoma	Santa Cruz
Marin			

The response to the meeting was good and hopefully we will be able to have meetings on a regular basis. The second meeting is tentatively set for March 21. Section One intends to begin





"When establishing my business I didn't feel I could afford this LUXURY, now I can't see how I stayed in business without this NECESSITY."



"Professional surveying requires good people using good equipment. Occasionally we have difficulty finding good people, not so the equipment, thanks to HP."

## Now you can lease the new HP 3805 Distance Meter for less than \$108\* per month.

Cost-conscious surveyors want measurement equipment that will give them fast, profitable production. But many are stymied by the high cost of investment capital. And that's where HP's new lease plan comes in. It gives you immediate access to the most advanced measurement equipment with no large outlay of precious working capital.

How the plan works. Suppose you want the HP 3805 Distance Meter, the automatic readout meter that cuts measurement time to six seconds—and cuts measurement costs by as much as 50%. Here's what the lease arrangements would be:

Down payment – First monthly payment.
Monthly payment - 2.778% of list price during
years 1 through 3.
-2.2% during 4th and 5th year.
Period – 5 years.
Purchase Option $-46\%$ of list price after 3 years,
5% after 5 years.
Example: HP 3805A Distance Meter \$3,595.00
Optional battery pod and
recharger 290.00
Down payment, monthly payment
(2.778%  of  \$3,885) = \$ 107.93
HEWLETT

Sales and service from 172 offices in 65 countries. P O Box 301 Loveland Colorado 80537

Lease all the HP surveying equipment you need. The example mentions the HP 3805 because it just happens to be our most popular distance meter. Probably because it has a built-in computer that averages 3,000 measurements in six seconds and a built-in battery that eliminates awkward cablesand a display that lets you read distance in either feet or meters at the flip of a switch. But you can also choose the HP 3800-which many surveyors consider unsurpassed for repeatable, first-order accuracy in shots up to 10,000 feet or 3,000 meters. In addition to distance meters and accessories, the lease plan may include the surveying calculators and peripheral equipment that can help you build a more profitable operation. For full details, call your local HP Sales Office or send us the coupon.

HP Civil Enginee	ring Division veland. Colorado 80537	CA
	b lease the HP 3805A Dist	tance Meter.
	demonstration of HP Sur e Meters	
Please send m Surveying Pro	e more information on HI ducts.	P Calculators and
Name		
Title	Phor	ie
Company		
City	State	Zip

## BOARD OF DIRECTORS MEETING

by Michael K. Welch, L.S. The Board of Directors Meeting was called to order at 10:00 a.m. Saturday, October 26, 1974 at the Airport Marina Hotel, Burlingame, California.

The following members & guest were present: President, Joseph J. Scherf Vice-President, Harold B. Davis Secretary, Michael K. Welch Treasurer, Donald E. Bender Immed. Past Pres., Eugene Lockton Executive Secretary, James E. Adams Director, Robert L. Carpenter Director, Larry Cloney Director, A.E. Griffin Director, Roy Watley, Jr. Chapter Representatives Bakersfield, Donald E. Ward Central Coast, Robert H. Leger East Bay, Ray J. Peters Feather River, John H. Ashbaugh Fresno, W.O. Gentry Lake/Mendocino, Clark Post Monterey Bay, James M. Prendergast Sacramento, Donald N. Dackins San Diego, Bill Karn San Diego, Charles A. Wooldridge Santa Clara/San Mateo, Paul W. Lamoreaux, Jr. Sonoma County, Ray Carlson Riverside/San Bernardino, Jim McGillvray Guest Reno, Gene Lafferty

The minutes of the July 20, 1974 meeting were approved as submitted.

President Scherf asked Ed Griffin to present the legislative program for the next year prior to getting into the Treasurers report and the budget.

Ed proposed a five pronged program for next year as follows:

- I CSPE's Bill Keep our provisions in that bill
- II ACSM National's New Model Act
- III AB 977Amendments probably
- IV Attempt to remove Div. of Hwys. exemption
- V Ventura Bill Remonumentation We will re-submit if someone else doesn't.

The Treasurer's report was considered and Don Bender referred to his written report submitted with the agenda. Don stated that our financial summary to date overall income \$40,000 plus. Out total expenditures to date are \$32,000 plus with a net income over expenditures of \$8,000. Don felt that our overall financial situation was good.

Don Bender commented that our organization should have an audit committee to establish more controls such as more than a single signature on checks. One side benefit of such a committee could be a training for future Treasurers.

The Executive Secretary's Report was given by Jim Adams. A discussion followed concerning dropouts or non-payment of dues. Joe Scherf asked that we send monthly reminders and copies of this list to be distributed to Chapter Representatives with minutes. Gene Lockton said that he felt a good way to promote membership was by personal contact with each Chapter including advance notice and a program.

Larry Cloney described the accounting procedure for the Joint Venture Convention with the Nevada Land Surveyors Organization. There is a draft of an agreement between CLSA and the NLSA. Some items in the agreement are as follows:

- 1. Share according to registration
- 2. Share profit or losses
- 3. Convention Co-Treasurers
- 4. Joint Convention account
- 5. 30 Day closing account & report

Next year there is a possibility that the Surveyor General or State Surveyor discussion will come up. CSPE's Law will be submitted. Cal Council will either try to change CSPE's bill or they will submit "Plan-A."

The County Engineers Association will have a bill that has to do with remonumentation or preservation of monuments.

President Scherf said that he would amend the Legislative Budget to \$8,000.

Professional Matters Report was given by Hal Davis. Hal stated that nothing has happened with the Department of Labor. He also said that he suggested that all liason be dropped with the exception of liason with the Board of Registration. This effort could be better spent with the League of California Surveyors.

Hal said that he thought that a new committee to work with the Board of Registration in the preparation of the Land Surveyors Exam would be worthwhile.

The Education Committee Report was given by Jim Adams who indicated that Chuck Wooldridge will accept the Chairmanship of the Education Committee next year. Some of the things that are possible next year are a one day seminar and leadership training throughout the state. The committee will be looking at the State Master Plan of all the State College and University systems including off-campus activities.

The Education Committee will be discussing educational goals for CLSA and Land Surveyors. President Scherf again asked the question about membership.

Bob Carpenter (Administrative Division) indicated that there was a written report and that Paul Lamoreaux, Jr. would give the first part of the FAM Committee Report. Paul stated that the FAM Committee has been looking at how this board could function better. Some of the things they have looked at are Professional Management, Team or Group Management. Their conclusion was to have a Team Building Conference with a 1975 Board Meeting put on by an expert in management.

It was moved and a second received to obtain Sherry Berger to conduct a team building conference in conjunction with a 1975 Board Meeting, perhaps April 25, 1975. The motion carried.

A discussion ensued that considered the very large size of our organization and the advantages and disadvantages of various types of representative systems. It was a consensus of the members present that our present system is too large and chances are that it will only get larger. President Scherf asked to have this subject brought up as an item on the agenda for the next board meeting.

## C.L.S.A. ANNUAL REPORT MEMBERSHIP STATUS

Members as of January 1, 1974		441
Regular Members Associate Members Affiliate Members Student Members	323 44 12	
Members as of April 1, 1974		486
Regular Members	357 56 14 59	500
		500
Regular Members Associate Members Affiliate Members Student Members	364 60 17 60	
Members as of October 1, 1974	5	538
Regular Members Associate Members Affiliate Members Student Members	388 69 22 59	
Members joined as of December 31, 1974		12
Regular Members Associate Members Affiliate Members Student Members	3 5 3 1	
*Members dropped as of December 31, 1974		64
Regular Members Associate Members Affiliate Members Student Members	33 8 3 20	
Members as of January 1, 1975		486
Regular Members         Associate Members         Affiliate Members         Student Members	358 66 22 40	

## DEADLINE DATES FOR THE CALIFORNIA SURVEYOR

May 17, 1975 Summer Edition . . . . . . .

Fall Edition . . . . . . . August 16, 1975 Articles, Reports, Letters, etc., received after the above mentioned date will be placed in the next edition. Editor

## **BOARD OF DIRECTORS MEETING**

(Continued from page 3)

Bob Carpenter continued with the General Status of the Ad-Operations manual Professional management Present constitution and By-Laws will be reviewed. Nominating committee will get an earlier start next year. Coordinating committee mailing Historical committee incorporation The question of if we should publish a roster was discussed A motion was made to recommend that the Education Com-The next meeting will be January 18, 1975 at the Airport Ma-President Scherf wants written comments by the next Board The meeting was adjourned. EAST BAY CHAPTER ELECTS OFFICERS by Laura Gee

Another item that was discussed should also be on the next agenda and that was the possibility of Having a North and South Chapter at large to pick-up any members that are not covered by a local Chapter.

A motion was made and a second was received to accept Resolution 74-07, the motion carried.

It was moved and a second was received to temporarily suspend the Board Rule 69-3 to allow the nominating committee to submit their report. The motion carried.

A motion was made to approve the new San Bernardino Chapter's Constitution and by-laws. A second was received and the motion carried unanimously.

ministration Division. Some of the things that the Administration is working on are as follows:

- 1.
- 2.
- 3.
- 4

5.

6.

New Business

and if so should in include name, county, work affiliation? It was also discussed that in order to have a roster ready by convention time we could not include much more than a list. President Scherf asked to have the roster question on the next agenda.

mittee put together a West Coast Version of the Legal Seminar with ACSM. A second was received and it carried.

rina Hotel, 1380 Old Bayshore Highway, Burlingame, California.

Meeting on how the Board Members think the FAM Committee's method of running this organization this year is working. Could it be improved?

On Friday, December 6, 1974, the East Bay Chapter of the California Land Surveyors Association held their annual Christmas Dinner and Election of Officers at the Dublin Corral in Dublin, Calif. Approximately 30 members and wives attended. Officers elected for 1975 are: President, Benny Floyd; Vice President, Michael McKissick; and Secretary-Treasurer, Melvin A. Gee.

The highlight of the evening was the awarding of door prizes to the members present. Prizes were donated by local firms and the chapter. Included in the prizes were hand levels donated by East Bay Blue Print and Supply and Lietz which were won by Hal Davis, City of Hayward, and Gary R. Freitas employed by Melvin A. Gee. Everyone had a great evening and the officers of the East Bay Chapter are looking forward to a very active program for the membership for the ensuing year with plans for several activities already in the works.

# We rent profits, not just equipment.

We probably don't have to tell you that renting pays off. But.what we would like to tell you is that Lewis & Lewis offers one of the fastest, most flexible rental programs you'll find anywhere, including overnight delivery to any of the fifty states, low rates (especially on short-term rentals) and complete recovery of rental costs on selected equipment through later purchase. Check our price list and try us next time — you'll see why we're really renting you profits, not just equipment!

EQUIPMENT	1st 10 DAYS PER DAY	AFTER 10 DAYS PER DAY	AFTER 90 DAYS Per day
CUBIC DM-60 CUBITAPE DISTANCE METER — Including power supply, altimeter, thermometer, two Kern tripods, one single prism assembly	\$ 25.00	\$ 15.00	\$ 10.00
HEWLETT-PACKARD H.P. 3805 DISTANCE METER — Including power supply, altimeter, thermometer, two Kern tripods, one single prism assembly	25.00	15.00	10.00
HEWLETT-PACKARD 3800A DISTANCE METER — Including power supply, altimeter, thermometer, two Kern tripods, one single prism assembly	25.00	15.00	10.00
RETRO-RAY TRIPLE PRISM ASSEMBLY FOR H.P. 3800A OR DM-60 CUBITAPE — Including Kern tripod with adaptor	3.75	2.25	1.50
RETRO-RAY SINGLE PRISM ASSEMBLY FOR H.P. 3800 OR DM-60 CUBITAPE — Including Kern tripod with adaptor	2.25	1.35	0.90
CUBIC DM-40 AUTOTAPE – Basic system including interrogator and two responders, tripods	300.00	150.00	100.00
AUTOTAPE THERMOELECTRIC GENERATOR — Propane power, 12 volts, 60 watts	20.00	9.00	6.00
MOTOROLA RANGE POSITIONING SYSTEM (RPS) - Basic system including two coded			
transponders	250.00	120.00	80.00
MOTOROLA MINI-RANGER — Basic system including two coded transponders	200.00	90.00	60.00
ADDITIONAL RPS OR MINI-RANGER CODED TRANSPONDERS	30.00	15.00	10.00
AUTOTAPE, RPS OR MINI-RANGER PRINTER — Automatically prints out ranges at three	15.00		
second intervals or upon command	15.00	6.00	4.00
<b>RPS OR MINI-RANGER THERMOELECTRIC GENERATORS</b> — Propane powered, 24 volt, 20 watts <b>RAYTHEON DE-719 RECORDING FATHOMETER</b> — Portable, 12 VDC or 115 VAC,	10.00	4.50	3.00
410' depth range	25.00	15.00	10.00
<b>RAYTHEON DE-119D RECORDING FATHOMETER</b> – Portable, 12 VDC, 240' depth range	20.00	12.00	8.00
CUBIC DM-20 ELECTROTAPES - Two units including tripods, psychrometers and altimeters	40.00	24.00	16.00
ELECTROTAPE TILTING HEADS — Two units	2.50	1.50	1.00
SPECTRA-PHYSICS LT-3 LASER TRANSIT-LITE — Including fan beam attachment			
12 VDC-115 VAC power supply and tripod	20.00	12.00	8.00
ASKANIA A-2e 1" DIRECTIONAL THEODOLITE - Including tripod	15.00	9.00	6.00
ASKANIA A-1e 20" REPEATING THEODOLITE - Including tripod	10.00	6.00	4.00
AMERICAN PAULIN MODEL M-2 SURVEYING ALTIMETER - 0 to 10,000 feet, 2 foot graduation	4.00	2.40	1.60
20" SURVEYORS TRANSIT - Including tripod	4.00	2.40	1.60
AUTOMATIC LEVEL — Including tripod	3.50	2.10	1.40

Minimum rental charge: \$10.00 exclusive of shipping charges. Rental charges commence on the day the equipment leaves Ventura, California, and terminate on the day the equipment is returned or shipped for return from lessee's location. Lessee pays all round trip shipping charges on rented equipment. Rates for longer periods available on request. Rates subject to change without notice.

C

**surveying equipment** 271 S. Hemlock St., P.O. Box 820 Ventura, Ca. 93001 • (805) 643-8673

Lewis & Lewis

51 41 31 263

## RETRACEMENT WORKSHOP BY SAN DIEGO CHAPTER IN '75

The San Diego Chapter of C.L.S.A. has established a Retracement Seminar Committee to arrange for a retracement workshop in the San Diego area in 1975. The committee has met twice and tentatively made arrangements for the Royal Inn at The Wharf in San Diego on October 9-11, 1975.

The workshop will be done along American Congress of Surveying and Mapping guidelines. The only material departure from the outline of the November 1974 Sacramento workshop is the inclusion of two lunches and a dinner. It is anticipated that this can be added and still keep participation fees at, or below \$100.

The details of the workshop will be made available after formal approval is obtained from the three parties to this joint venture (A.C.S.M., C.L.S.A. and the San Diego Chapter).

The committee chairman is Chuck Wooldridge and the committee members are Bill Karn, Don Smith, Bill Nothomb, Don Fordney and Chuck Safford.

## **MOONLIGHTING?**

How and when is moonlighting ethical to the Land Surveyor? Webster defines moonlighting as "A person holding two jobs." Webster defines ethics as "The principles of conduct governing an individual or a group, and ethical as conforming to accepted professional standards of conduct."

We believe it is ethical for a land surveyor to contract and accomplish land surveys at any time he wishes regardless of his regular employment, but with the following reservations:

- We believe it is unethical for the land surveyor to use his position with a city, county, or state agency to obtain surveys, to use city, county, or state time, or equipment to accomplish the land survey.
- 2. We believe it is unethical for a land surveyor to accept employment from any employer where a condition of employment allows the land surveyor to obtain and to accomplish land surveys on the employer's time and/or use of equipment for the sole gain of the land surveyor or as a supplement to his regular salary.
- 3. We believe it is unethical for a land surveyor to employ city, county, state, or survey technicians for an hourly rate less than his regular salary or for an employee to accept employment for a salary less than his regular hourly rate.
- 4. We believe there are areas in (Texas) where the only available registered land surveyor is an employee of the city, county, or state. We recommend in such areas where the registered land surveyor does not own his equipment for surveying that he have the approval of city or county commission and that a reasonable and just fee be charged for the use of such equipment and survey.

- Chairman of Ethics Committee, Kansas Society of Land Surveyors (from the Kansas Surveyor, March-April, 1974.)

## **NEWS FROM THE BOARD**

#### by Ray Thinggaard L.S.

At the January 10th meeting of the Board of Registration for Professional Engineers in Sacramento they elected Roy Johnston, Civil and Structural Engineer, President, and John Winzler, Civil Engineer, Vice President.

In one of the more profound actions effecting land surveyors in recent memory, the Board on the advise of their legal counsel, repealed Board Rule #470 which pertained to using the title "Consulting Engineer." The rule required the applicant to submit evidence "that he has five years of independent control in furnishing consulting photometric services in geodetic, topographic or consulting surveying in connection with fixed works as defined in Section 6731," whereas the law, Section 6732.2 merely requires the necessary experience to be in one of four areas (1) Photogrammetric, (2) Geodetic, (3) Topographic, or (4) Consulting Surveying services in connection with fixed works as defined in Section 6731.

What this apparently means is, until the Board formulates and adopts a new Rule #470 they will be administering applications for the title Consulting Engineer on the basis of the existing law. Consequently, those that have been denied the title under the old rule may now qualify.

## C.L.S.A. ANNUAL REPORT 1974 FINANCIAL STATEMENT

Gross Dues & Assessments	\$19,124.67	(
Convention Registration	11,486.36	
Exhibitor Fees	2,700.00	
Advertising	2,092.00	
Interest	196.38	
Sale of Lapel Pins	90.00	
Gross contributions, Gifts, Etc.	369.58	
TOTAL		\$36,058.99
EXPENDITURES		
Composition & Printing	\$2,727.63	
Secretarial Services, Supplies,		
Etc.	5,287.04	
Postage & Mailing	2,813.57	
Lapel Pins	401.98	
Reproduction	1,018.78	
Subscriptions	100.49	
Travel & Meetings	14,057.48	
Legislative Consultant	3,000.00	
Scholarships	300.00	
Telephone	2,592.87	
Professional Fees	2,562.30	
Refunds	685.06	
TOTAL	685.06	
		\$35,547.20

NET INCOME	\$511.79
BALANCE FROM 1973	5,667.72
NET WORTH END OF 1974	6,179.51

## The new low cost portable Microranger EDM meter. For instant measurements up to 1 mile.

**Compact & Lightweight:** Here's an unusual electronic distance measuring system with true portability. The head unit weighs just 3 pounds. The control unit, just 4. Power Pack—5 pounds. That makes 12 pounds—easy to carry, even over the roughest terrain.

**Unique Design:** The Microranger conveniently mounts on most theodolites, transits and levels. Permits angular sightings and distance measuring without time-consuming dismounting and mounting procedures.

**Proven Accuracy:** Within seconds, it will provide distance measurements of 3 feet to slightly more than 1 mile. And with an accuracy of  $\pm 0.02$  ft.  $\pm 2$  ppm.

**Fully Automatic:** With this new low cost EDM instrument you simply dial in your correction factors— there are no calculations to contend with. Momentary interruptions of the light beam such as traffic and wild-life, have no effect on the digital display readout. And an auto-ranging feature is built-in at no additional cost.



**Rechargeable Power-Pack:** The Microranger comes with a 12-volt rechargeable nickel-cadmium battery. Or can be powered with a standard 12-volt storage battery.

Measurements in either Feet or Meters: Conversion from one unit of measurement to the other is no problem. Simply change a switch position, the display adjusts.

Simple Operation: A quick 10-minute training course is all that's needed. Sight the head unit on the retro-reflector, adjust the attenuators, push the range button: Instant measurement.



And Much, Much More: The Microranger comes with a number of other assets, including a price that makes it practical for any surveyor to take advantage of an EDM instrument. But study the facts at your leisure. For complete details, just write to us at Keuffel & Esser Co.

For measuring 3 feet to 1 mile, we know this Microranger will measure up to your highest expectations. Only from K&E.



223 Lawrence Ave. South San Francisco, Calif. 94080 ● Phone: 415 873-6850

1327 South Olive St. ● Los Angeles, Calif. 90015 Phone: 213 747-7601



## **EDITORIAL COMMENTS AND LETTERS**

by Michael S. McKissick, L.S.

C.L.S.A. began taking steps last year to consolidate the efforts of its many committees and to get more Board of Director control over those committees. To this end, the Board established six divisions into which all committees would be placed and consequently fall under the direct supervision of an officer of the Association.

The work load involved in each division is far too great for any single officer to handle. And even for those committees which had chairmen, there seemed to be a lack of communication with the division chairman coupled with no real understanding of what the division meant or the goals that the division had.

This is not to say that the action taken was not a big step forward; it's just that it needs to be extended and broadened with the personnel necessary to see that all divisions will function effectively. The problem requires a greater commitment on the part of all CLSA members.

It would seem that not only could the Board of Directors give the Association a firmer direction but also get more involvement from Chapter Representatives and from the chapters themselves.

I would suggest that the divisions first be firmly established and standing committees within the divisions be designated and their purposes clearly stated. Following are the six divisions and the committees comprising those divisions:

I. Administration:

- A. Constitution and By-Laws
- B. Nominating
- C. Coordination and Information
- D. Fiscal and Administrative Matters
- II. Education:
  - A. Bachelor of Science Curricula
  - B. Associated Arts Curricula
  - C. Student Employment and Recruitment (Scholarships)
  - D. Union Liason for Professional Development
  - E. Continuing Education
- III Legislation:
  - A. Monitoring
    - B. Support and Opposition
  - C. Formulation (New)
- IV. Membership Services:
  - A. Membership Development
  - **B.** Public Relations
  - C. Publications
  - D. Historical
- V. Professional Matters:
  - A. Interprofessional Relations
  - B. Liason
  - C. Ethics
  - D. Professional Status Improvement
- VI. Convention:
  - A. Future Planning
  - B. Immediate Convention

All of these divisions and most of these committees have already been established by the Board of Directors. The Divisions are already theoretically headed by either the Vice President or one of the Directors-at-Large and this is a good idea in order to assure that the Boad will have direct control over the direction of each division.

The basic suggestion to improve upon the present system is for all chapter representatives to be made chairman of standing committees. A committee chairman should be someone who is responsible as a voting director of CLSA and who is attending Board of Directors meetings.

The committee chairman would then be directly responsible to the head of his division and serve as a member of that division. It would then be possible to get a better feeling for how the committees were actually working if, in the morning session of the Board of Directors meetings, there were meetings of division heads and their committee chairmen. These meetings would allow for the detailed discussion of the specific problems of each committee and an opportunity to better define the direction of each committee.

Under the present meeting structure it is virtually impossible to get extended discussion on specific committee problems and input on a constructive level. At each Board Meeting it would then be possible for the head of a division to give a concise report on his division in the afternoon session or simply submit a written report to be distributed with the minutes of the meeting. That way the Board as a whole would be dealing only with those questions which required Board approval and thus freeing itself from the tedium of committee reports without substance.

The Board should also consider requiring that each chapter designate at least two members to serve on standing committees, not requiring them to attend board meetings, in order to insure adequate manpower in the committees.

I think that just making these changes in the operation and staffing of committees will contribute to greater progress by CLSA in representing and working for land surveyors in California.

### League of California Surveying Organizations

#### (Continued from page 1)

work by analyzing the reports prepared by the Southern Region Group. The minutes from our meetings and any other comments will be mailed to the southern region group to help them in preparing information for the manual on Surveying and Mapping Practice.

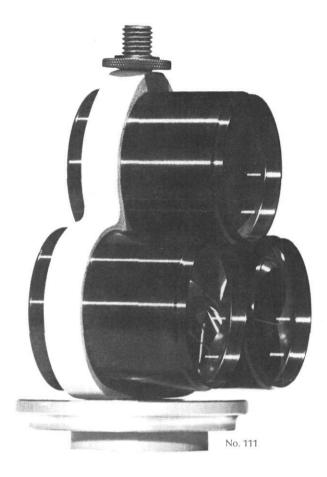
Copies of the manual can be obtained by writing to the League Chairman. The cost is \$10 and includes all revisions and additions during the calendar year 1975. Cost for subsequent years revisions and additions will be \$3 per year. Please make checks payable to the League of California Surveying Organization.

## Mail to:

**Northern Section** 

League of California Surveying Organizations c/o Vernon Q. Jones, Deputy County Surveyor Ventura County Public Works Agency 597 East Main Street Ventura, California 93001

The League is not another organization for Surveyors to join. Its membership is intended to consist of one representative from each existing survey-oriented organization in California. John Pedri of the State Registration Board deserves a lot of thanks for requesting to have this group formed.



# We think this is the best retro prism buy on the market, but you don't have to buy it.

Lewis & Lewis Retro-Ray reflectors are American made, using solid prism construction and the highest grade of optical glass available. They have guaranteed ranging capabilities, and perform as well or better than brands that cost a lot more. But the biggest advantage to a Lewis & Lewis Retro-Ray is that you don't have to buy it to find out how good it is. We'll rent it to you, and we'll even show you how to recapture your short-term rental costs if you decide to buy it later. Whether you want to buy or rent, send us a coupon now - we'll do the rest!

#### **Retro-Ray Price List:**

- Round Retro-Ray Reflectors (27%'' aperture, %'' x 11'' thread base) No. 101 (Single) No. 111 (Triple) \$145.00 \$395.00
- Lateral Retro-Reflectors (2" x 4%" aperture, %" x 11" thread base) No. 122 (Single) ..... No. 134 (Triple) ..... \$165.00
- .....\$445.00



# **CONVENTION - 1976**

## "California Land Surveyors Convention"

COMMERCIAL EXHIBITS TECHNICAL SESSIONS

... to be held at the

## SHERATON UNIVERSAL HOTEL

UNIVERSAL CITY APRIL 8-10, 1976

10 THE CALIFORNIA SURVEYOR SPRING 1975

1		SUSTAINING MEMBERS	;
	HEWLETT D PACKARD DISTANCE METERS SURVEYING CALCULATORS	I ENGINEERING	SURVEYORS SERVICE CO. P. O. BOX 1905 COSTA MESA, CALIF. 92626
		AGA Service throughout the world.	
	KEUFFEL & ESSER CO.	CIETZ	LEWIS & LEWIS surveying equipment Ventura, California

	IATE MEMBER GRADE: R.( IATE MEMBER GRADE: Wo			
a.	Name		Cοι	inty
b.	Address		Zip	
c.	Mailing Address		Pho	ne No
d.	Employment: Private	(Principal	) Retired	_ Public
	Name of Fire	m or Agency		
e.	Signature and L.S., P.S. or (	C.E. No		
f.	Recommended by (Associate	e & Affiliate Grade Only)		
Dues schedul	e: *Member \$50.00	Affiliate \$25.00	*Associate \$10.00	(*Entrance Fee \$15.

FIRST YEAR'S ANNUAL DUES ARE TO BE PRO RATED FROM DATE OF APPLICATION

## CALIFORNIA LAND SURVEYORS ASSOCIATION

OFFICIAL ADDRESS: P.O. BOX 1363, SANTA ROSA, CA. 95403

Executive Secretary - JAMES E. ADAMS, P.O. Box 11592, Santa Rosa, CA 95406

**OFFICERS** Secretary

Treasurer

DONALD E. BENDER 3359 Longridge Avenue Sherman Oaks, CA 91403

EUGENE LOCKTON 807 Fifth Avenue San Rafael, CA 94901

Immediate Past President

SAMUEL L. TAYLOR, SR. 606 Myrtle Street

Star Route, Box 68-A

Orland, CA 94963

Lake/Mendocino

RAYMOND M. BURGESS

Box 387

Gualala, CA 95445

Mother Lode

BRUCE E. DeMOTT P.O. Box A-81 Twain Harte, CA 95383

Sacramento

ROBERT D. NESS 4946 Holyoke Way Sacramento, CA 95841

San Diego

CHARLES D. SAFFORD, JR. 5620 Friars Road San Diego, CA 92110

Riverside/San Bernardino

**RICHARD P. SIEGMUND** P.O. Box 902 San Bernardino, CA 92402

San Joaquin Valley

WILLIAM O. GENTRY 4780 E. Tulare Ave. Fresno, CA 93702

#### Santa Clara/San Mateo

HENRY O. YOUNG 1027 Lucot Way Campbell, CA 95008

Sonoma

RAY C. CARLSON 1711 Terrace Way Santa Rosa, CA 95404

#### Tahoe

JERRY W. TIPPIN P.O. Box 830 Tahoe City, CA 95705

> BULK RATE U.S. POSTAGE PAID PERMIT NO. 302 Santa Rosa, Calif.

LM/PP .-

S

Robert W. Curtis, LS 805 Healdsburg Ave. Healdsburg, CA 95448

Opinions or assertions expressed in articles in the publication do not necessarily represent the official views of the Association.

## RETURN POSTAGE GUARANTEED ADDRESS CORRECTION REQUESTED

The California Surveyor

CALIFORNIA LAND SURVEYORS ASSOCIATION

Hayward, CA 94540 Roy Watley, Jr., L.S., EDITOR Michael McKissick, L.S., Assist. Editor

Published Quarterly by the

P.O. Box 3707

#### 408 Alder Street Arroyo Grande, CA 93420

East Bay BENNY F. FLOYD 1116 St. Francis Drive Concord, CA 94520

Bakersfield

FRANK E. WAGERS

109 Oakmont

BAkersfield, CA 93309

Central Coast

JERRY L. BOWSER

Eastern Sierra ROBERT P. BARON Box 213 Independence, CA 93526

Marin THOMAS H. JERVIS 174 Larkspur Plaza Rd.

> Larkspur, CA 94939 Monterey Bay

STANLEY SMITH P.O. Box 84 Aptos, CA 95003

HAROLD B. DAVIS 641 Paradise Blvd. Hayward, CA 94541 WILLIAM KARN

Vice President

Newark, CA 94650

EUGENE P. EHE

San Bernardino, CA 92415

Arroyo Grande, CA 93420

**CHAPTER PRESIDENTS** Feather River/Northern Counties GEORGE F. PRIDE

825 E. Third St.

MICHAEL K. WELCH

813 E. Mill Street Santa Maria, CA 93454

DIRECTORS AT LARGE

RAYMOND THINGGAARD 36357 Bettencourt St.

JOSEPH J. SCHERF 406 W. Standley St. Ukiah, CA 96482

President

DAN B. CHATFIELD P.O. Box 2088 Redding, CA 96001

P.O. Box 518 Fallbrook, CA 92028





Institutional Affiliate of American Congress on Surveying and Mapping

## THE VOICE OF THE LAND SURVEYORS OF CALIFORNIA

## NO. 37

SPRING

1975

## EDUCATION COMMITTEE'S 1975 GOALS FOR C.L.S.A.

At the January 18, 1975 C.L.S.A. Board of Directors meeting Chuck Wooldridge, Chairman of the Education Committee, outlined the goals of that committee. Based on past Board of Directors discussions as to the purposes and direction of the Association, the following long range educational goals were presented:

1. Help formulate and make readily available an adequate degree program in land surveying.

2. Ensure that every licensee has ready access to opportunity for remaining current in all aspects of the broad land surveying profession and to broaden his field of expertise.

3. Require a B.S. in Land surveying as a prerequisite for the L.S.I.T. examination or greater time as a substitute therefore. (For instance, a B.S. Degree in a related field plus two years or high school and eight years might be an adequate substitute for the Land Surveying B.S.)

4. Require every licensee to continue his professional development as a condition of license renewal.

5. Prohibit anyone not meeting the above conditions from practicing land surveying.

It was then suggested that several small subcommittees working individually on one year programs would have a much greater potential for production. Keeping a goal of immediate attainment of tangible results in mind, the following educational activities were suggested:

1. Coordinate and cooperate with the Legislative Committee to change the L.S. Act emphasis from experience to education.

2. Work with the universities to evolve a more realistic and practical B.S. curricula.

3. Work with the junior colleges to develop realistic curricula for both the terminal program and the transfer student requirements.

4. Entice our membership into recruitment efforts at the high school level to obtain students for these programs.

5. Assist all schools with placement of students for summer employment and graduates for positions worthy of their achievements, which we have (or should have) helped shape.

6. Attempt to influence the apprenticeship program to develop professionals as well as technicians.

7. Establish a program of lectures, seminars and workshops to be presented at the chapter level as a joint state-chapter effort.

8. Develop criteria to assist the Board of Registration in the evaluation of schools applying for recognition under the L.S. Act.

Chuck Wooldridge concluded the presentation with the statement that "many of the programs are too large for completion in a one year time frame. But if they can be initiated, the scope and steps defined and direction ascertained, we will have made progress.

"I envision one, two or three man committees- each taking on one of the topics. It is doubtful in my mind that the Education Committee will meet as such. Telephone and mail will cover most of the needs. Each of the areas can pretty well stand alone, and correspondence can provide most of the coordination of effort.

"Help is always needed though. If you chance on any one interested in any aspect of this effort, I would appreciate knowing. There's a big job ahead. It is much needed and worthy of our efforts. It's one that CLSA should be doing and can accomplish. I appreciate the opportunity to be a part of it."

## LEAGUE OF CALIFORNIA SURVEYING **ORGANIZATIONS – NORTH SECTION** by Myron A. Lewis, L.S.

Chairman, Northern California Section A.C.S.M.

The Northern California Section of the American Congress on Surveying and Mapping met on February 21, 1975 at 8 p.m. at the Police Building in Hayward for the first meeting of the Northern Region of the League of California Surveying Organizations. With the help of the California Land Surveyors Association over fifty invitations were mailed to surveyoriented groups within the proposed Section One. Section One will include the agencies, cities, survey organizations, railroads, title and utility companies within the following 13 counties:

Alameda	Mendocino	San Francisco	San Benito
Contra Costa	Monterey	San Mateo	Santa Clara
Lake	Napa	Sonoma	Santa Cruz
Marin	700		

The response to the meeting was good and hopefully we will be able to have meetings on a regular basis. The second meeting is tentatively set for March 21. Section One intends to begin





"When establishing my business I didn't feel I could afford this LUXURY, now I can't see how I stayed in business without this NECESSITY."



"Professional surveying requires good people using good equipment. Occasionally we have difficulty finding good people. not so the equipment, thanks to HP."

## Now you can lease the new HP 3805 Distance Meter for less than \$108\* per month.

Cost-conscious surveyors want measurement equipment that will give them fast, profitable production. But many are stymied by the high cost of investment capital. And that's where HP's new lease plan comes in. It gives you immediate access to the most advanced measurement equipment with no large outlay of precious working capital.

How the plan works. Suppose you want the HP 3805 Distance Meter, the automatic readout meter that cuts measurement time to six seconds—and cuts measurement costs by as much as 50%. Here's what the lease arrangements would be:

Down payment – First monthly payment.
Monthly payment - 2.778% of list price during
years 1 through 3.
-2.2% during 4th and 5th year.
Period – 5 years.
Purchase Option $-46\%$ of list price after 3 years,
5% after 5 years.
Example: HP 3805A Distance Meter \$3,595.00
Optional battery pod and
recharger 290.00
Down payment, monthly payment
(2.778%  of  \$3,885) = \$ 107.93
HEWLETT

Sales and service from 172 offices in 65 countries. P O Box 301 Loveland Colorado 80537

Lease all the HP surveying equipment you need. The example mentions the HP 3805 because it just happens to be our most popular distance meter. Probably because it has a built-in computer that averages 3,000 measurements in six seconds and a built-in battery that eliminates awkward cables and a display that lets you read distance in either feet or meters at the flip of a switch. But you can also choose the HP 3800-which many surveyors consider unsurpassed for repeatable, first-order accuracy in shots up to 10,000 feet or 3,000 meters. In addition to distance meters and accessories, the lease plan may include the surveying calculators and peripheral equipment that can help you build a more profitable operation. For full details, call your local HP Sales Office or send us the coupon. \*Domestic U.S.A. price plus applicable taxes

HE CIVIL ENGINEERING	Division	CA
P.O. Box 301. Lovelar		
<ul> <li>I would like to lea Contact me immed</li> </ul>	ase the HP 3805A Dista diately.	ance Meter.
	nonstration of HP Surv eters	
Please send me m Surveying Product	ore information on HP ts.	Calculators and
Name		
Title	Phone	e
11tte		

## BOARD OF DIRECTORS MEETING

by Michael K. Welch, L.S.

The Board of Directors Meeting was called to order at 10:00 a.m. Saturday, October 26, 1974 at the Airport Marina Hotel, Burlingame, California.

The following members & guest were present: President, Joseph J. Scherf Vice-President, Harold B. Davis Secretary, Michael K. Welch Treasurer, Donald E. Bender Immed. Past Pres., Eugene Lockton Executive Secretary, James E. Adams Director, Robert L. Carpenter Director, Larry Cloney Director, A.E. Griffin Director, Roy Watley, Jr. Chapter Representatives Bakersfield, Donald E. Ward Central Coast, Robert H. Leger East Bay, Ray J. Peters Feather River, John H. Ashbaugh Fresno, W.O. Gentry Lake/Mendocino, Clark Post Monterey Bay, James M. Prendergast Sacramento, Donald N. Dackins San Diego, Bill Karn San Diego, Charles A. Wooldridge Santa Clara/San Mateo, Paul W. Lamoreaux, Jr. Sonoma County, Ray Carlson Riverside/San Bernardino, Jim McGillvray Guest Reno, Gene Lafferty

The minutes of the July 20, 1974 meeting were approved as submitted.

President Scherf asked Ed Griffin to present the legislative program for the next year prior to getting into the Treasurers report and the budget.

Ed proposed a five pronged program for next year as follows:

- I CSPE's Bill Keep our provisions in that bill
- II ACSM National's New Model Act
- III AB 977Amendments probably
- IV Attempt to remove Div. of Hwys. exemption
- V Ventura Bill Remonumentation We will re-submit if someone else doesn't.

The Treasurer's report was considered and Don Bender referred to his written report submitted with the agenda. Don stated that our financial summary to date overall income \$40,000 plus. Out total expenditures to date are \$32,000 plus with a net income over expenditures of \$8,000. Don felt that our overall financial situation was good.

Don Bender commented that our organization should have an audit committee to establish more controls such as more than a single signature on checks. One side benefit of such a committee could be a training for future Treasurers.

The Executive Secretary's Report was given by Jim Adams. A discussion followed concerning dropouts or non-payment of dues. Joe Scherf asked that we send monthly reminders and copies of this list to be distributed to Chapter Representatives with minutes. Gene Lockton said that he felt a good way to promote membership was by personal contact with each Chapter including advance notice and a program.

Larry Cloney described the accounting procedure for the Joint Venture Convention with the Nevada Land Surveyors Organization. There is a draft of an agreement between CLSA and the NLSA. Some items in the agreement are as follows:

- 1. Share according to registration
- 2. Share profit or losses
- 3. Convention Co-Treasurers
- 4. Joint Convention account
- 5. 30 Day closing account & report

Next year there is a possibility that the Surveyor General or State Surveyor discussion will come up. CSPE's Law will be submitted. Cal Council will either try to change CSPE's bill or they will submit "Plan-A."

The County Engineers Association will have a bill that has to do with remonumentation or preservation of monuments.

President Scherf said that he would amend the Legislative Budget to \$8,000.

Professional Matters Report was given by Hal Davis. Hal stated that nothing has happened with the Department of Labor. He also said that he suggested that all liason be dropped with the exception of liason with the Board of Registration. This effort could be better spent with the League of California Surveyors.

Hal said that he thought that a new committee to work with the Board of Registration in the preparation of the Land Surveyors Exam would be worthwhile.

The Education Committee Report was given by Jim Adams who indicated that Chuck Wooldridge will accept the Chairmanship of the Education Committee next year. Some of the things that are possible next year are a one day seminar and leadership training throughout the state. The committee will be looking at the State Master Plan of all the State College and University systems including off-campus activities.

The Education Committee will be discussing educational goals for CLSA and Land Surveyors. President Scherf again asked the question about membership.

Bob Carpenter (Administrative Division) indicated that there was a written report and that Paul Lamoreaux, Jr. would give the first part of the FAM Committee Report. Paul stated that the FAM Committee has been looking at how this board could function better. Some of the things they have looked at are Professional Management, Team or Group Management. Their conclusion was to have a Team Building Conference with a 1975 Board Meeting put on by an expert in management.

It was moved and a second received to obtain Sherry Berger to conduct a team building conference in conjunction with a 1975 Board Meeting, perhaps April 25, 1975. The motion carried.

A discussion ensued that considered the very large size of our organization and the advantages and disadvantages of various types of representative systems. It was a consensus of the members present that our present system is too large and chances are that it will only get larger. President Scherf asked to have this subject brought up as an item on the agenda for the next board meeting.

## C.L.S.A. ANNUAL REPORT MEMBERSHIP STATUS

Members as of January 1, 1974		441
Regular Members Associate Members Affiliate Members Student Members	323 44 12	
Members as of April 1, 1974		486
Regular Members Associate Members Affiliate Members Student Members	357 56 14 59	
Members as of July 1, 1974		500
Regular Members Associate Members Affiliate Members Student Members	364 60 17 60	
Members as of October 1, 1974		538
Regular Members Associate Members Affiliate Members Student Members	388 69 22 59	
Members joined as of December 31, 1974		12
Regular Members Associate Members Affiliate Members Student Members	3 5 3 1	
*Members dropped as of December 31, 1974		64
Regular Members Associate Members Affiliate Members Student Members	33 8 3 20	
Members as of January 1, 1975		486
Regular Members Associate Members Affiliate Members Student Members	358 66 22 40	

#### DEADLINE DATES FOR THE CALIFORNIA SURVEYOR

Summer Edition . . . . . . May 17, 1975 Fall Edition . . . . . August 16, 1975 Articles, Reports, Letters, etc., received after the above mentioned date will be placed in the next edition. Editor

#### **BOARD OF DIRECTORS MEETING**

#### (Continued from page 3)

Another item that was discussed should also be on the next agenda and that was the possibility of Having a North and South Chapter at large to pick-up any members that are not covered by a local Chapter.

A motion was made and a second was received to accept Resolution 74-07, the motion carried.

It was moved and a second was received to temporarily suspend the Board Rule 69-3 to allow the nominating committee to submit their report. The motion carried.

A motion was made to approve the new San Bernardino Chapter's Constitution and by-laws. A second was received and the motion carried unanimously.

Bob Carpenter continued with the General Status of the Administration Division. Some of the things that the Administration is working on are as follows:

1. Operations manual

2. Professional management

3. Present constitution and By-Laws will be reviewed.

4. Nominating committee will get an earlier start next year.

5. Coordinating committee mailing

6. Historical committee incorporation

New Business

The question of if we should publish a roster was discussed and if so should in include name, county, work affiliation? It was also discussed that in order to have a roster ready by convention time we could not include much more than a list. President Scherf asked to have the roster question on the next agenda.

A motion was made to recommend that the Education Committee put together a West Coast Version of the Legal Seminar with ACSM. A second was received and it carried.

The next meeting will be January 18, 1975 at the Airport Marina Hotel, 1380 Old Bayshore Highway, Burlingame, California.

President Scherf wants written comments by the next Board Meeting on how the Board Members think the FAM Committee's method of running this organization this year is working. Could it be improved?

The meeting was adjourned.

#### EAST BAY CHAPTER ELECTS OFFICERS

by Laura Gee

On Friday, December 6, 1974, the East Bay Chapter of the California Land Surveyors Association held their annual Christmas Dinner and Election of Officers at the Dublin Corral in Dublin, Calif. Approximately 30 members and wives attended. Officers elected for 1975 are: President, Benny Floyd; Vice President, Michael McKissick; and Secretary-Treasurer, Melvin A. Gee.

The highlight of the evening was the awarding of door prizes to the members present. Prizes were donated by local firms and the chapter. Included in the prizes were hand levels donated by East Bay Blue Print and Supply and Lietz which were won by Hal Davis, City of Hayward, and Gary R. Freitas employed by Melvin A. Gee. Everyone had a great evening and the officers of the East Bay Chapter are looking forward to a very active program for the membership for the ensuing year with plans for several activities already in the works.

# We rent profits, not just equipment.

We probably don't have to tell you that renting pays off. But what we would like to tell you is that Lewis & Lewis offers one of the fastest, most flexible rental programs you'll find anywhere, including overnight delivery to any of the fifty states, low rates (especially on short-term rentals) and complete recovery of rental costs on selected equipment through later purchase. Check our price list and try us next time — you'll see why we're really renting you profits, not just equipment!

		10 12	
EQUIPMENT	1st 10 DAYS PER DAY	AFTER 10 DAYS PER DAY	AFTER 90 DAYS Per day
CUBIC DM-60 CUBITAPE DISTANCE METER — Including power supply, altimeter, thermometer, two Kern tripods, one single prism assembly HEWLETT-PACKARD H.P. 3805 DISTANCE METER — Including power supply, altimeter,	\$ 25.00	\$ 15.00	\$ 10.00
thermometer, two Kern tripods, one single prism assembly	25.00	15.00	10.00
HEWLETT-PACKARD 3800A DISTANCE METER — Including power supply, altimeter, thermometer, two Kern tripods, one single prism assembly	25.00	15.00	10.00
Kern tripod with adaptor	3.75	2.25	1.50
RETRO-RAY SINGLE PRISM ASSEMBLY FOR H.P. 3800 OR DM-60 CUBITAPE — Including Kern tripod with adaptor	2.25	1.35	0.90
CUBIC DM-40 AUTOTAPE — Basic system including interrogator and two responders, tripods	300.00	150.00	100.00
AUTOTAPE THERMOELECTRIC GENERATOR — Propane power, 12 volts, 60 watts MOTOROLA RANGE POSITIONING SYSTEM (RPS) — Basic system including two coded	20.00	9.00	6.00
transponders	250.00	120.00	80.00
MOTOROLA MINI-RANGER – Basic system including two coded transponders	200.00	90.00	60.00
ADDITIONAL RPS OR MINI-RANGER CODED TRANSPONDERS	30.00	15.00	10.00
AUTOTAPE, RPS OR MINI-RANGER PRINTER — Automatically prints out ranges at three second intervals or upon command	15.00	6.00	4.00
RPS OR MINI-RANGER THERMOELECTRIC GENERATORS - Propane powered, 24 volt, 20 watts	10.00	4.50	3.00
RAYTHEON DE-719 RECORDING FATHOMETER — Portable, 12 VDC or 115 VAC,	25.00	15.00	10.00
410' depth range <b>RAYTHEON DE-119D RECORDING FATHOMETER</b> — Portable, 12 VDC, 240' depth range	20.00	12.00	8.00
CUBIC DM-20 ELECTROTAPES – Two units including tripods, psychrometers and altimeters	40.00	24.00	16.00
ELECTROTAPE TILTING HEADS — Two units including triplus, psycholiteters and artimeters	2.50	1.50	1.00
SPECTRA-PHYSICS LT-3 LASER TRANSIT-LITE — Including fan beam attachment	2.50	1.50	1.00
12 VDC-115 VAC power supply and tripod	20.00	12.00	8.00
ASKANIA A-2e 1" DIRECTIONAL THEODOLITE - Including tripod	15.00	9.00	6.00
ASKANIA A-1e 20" REPEATING THEODOLITE - Including tripod	10.00	6.00	4.00
AMERICAN PAULIN MODEL M-2 SURVEYING ALTIMETER - 0 to 10,000 feet, 2 foot graduation	4.00	2.40	1.60
20" SURVEYORS TRANSIT - Including tripod	4.00	2.40	1.60
AUTOMATIC LEVEL - Including tripod	3.50	2.10	1.40

Minimum rental charge: \$10.00 exclusive of shipping charges. Rental charges commence on the day the equipment leaves Ventura, California, and terminate on the day the equipment is returned or shipped for return from lessee's location. Lessee pays all round trip shipping charges on rented equipment. Rates for longer periods available on request. Rates subject to change without notice.

Lewis & Lewis

271 S. Hemlock St., P.O. Box 820 Ventura, Ca. 93001 • (805) 643-8673

41 31 2168

## **RETRACEMENT WORKSHOP** BY SAN DIEGO CHAPTER IN '75

The San Diego Chapter of C.L.S.A. has established a Retracement Seminar Committee to arrange for a retracement workshop in the San Diego area in 1975. The committee has met twice and tentatively made arrangements for the Royal Inn at The Wharf in San Diego on October 9-11, 1975.

The workshop will be done along American Congress of Surveying and Mapping guidelines. The only material departure from the outline of the November 1974 Sacramento workshop is the inclusion of two lunches and a dinner. It is anticipated that this can be added and still keep participation fees at, or below \$100.

The details of the workshop will be made available after formal approval is obtained from the three parties to this joint venture (A.C.S.M., C.L.S.A. and the San Diego Chapter).

The committee chairman is Chuck Wooldridge and the committee members are Bill Karn, Don Smith, Bill Nothomb, Don Fordney and Chuck Safford.

## **MOONLIGHTING?**

How and when is moonlighting ethical to the Land Surveyor? Webster defines moonlighting as "A person holding two jobs." Webster defines ethics as "The principles of conduct governing an individual or a group, and ethical as conforming to accepted professional standards of conduct."

We believe it is ethical for a land surveyor to contract and accomplish land surveys at any time he wishes regardless of his regular employment, but with the following reservations:

- 1. We believe it is unethical for the land surveyor to use his position with a city, county, or state agency to obtain surveys, to use city, county, or state time, or equipment to accomplish the land survey.
- 2. We believe it is unethical for a land surveyor to accept employment from any employer where a condition of employment allows the land surveyor to obtain and to accomplish land surveys on the employer's time and/or use of equipment for the sole gain of the land surveyor or as a supplement to his regular salary.
- 3. We believe it is unethical for a land surveyor to employ city, county, state, or survey technicians for an hourly rate less than his regular salary or for an employee to accept employment for a salary less than his regular hourly rate.
- 4. We believe there are areas in (Texas) where the only available registered land surveyor is an employee of the city, county, or state. We recommend in such areas where the registered land surveyor does not own his equipment for surveying that he have the approval of city or county commission and that a reasonable and just fee be charged for the use of such equipment and survey.

- Chairman of Ethics Committee, Kansas Society of Land Surveyors (from the Kansas Surveyor, March-April, 1974.)

## **NEWS FROM THE BOARD**

#### by Ray Thinggaard L.S.

At the January 10th meeting of the Board of Registration for Professional Engineers in Sacramento they elected Roy Johnston, Civil and Structural Engineer, President, and John Winzler, Civil Engineer, Vice President.

In one of the more profound actions effecting land surveyors in recent memory, the Board on the advise of their legal counsel, repealed Board Rule #470 which pertained to using the title "Consulting Engineer." The rule required the applicant to submit evidence "that he has five years of independent control in furnishing consulting photometric services in geodetic, topographic or consulting surveying in connection with fixed works as defined in Section 6731," whereas the law, Section 6732.2 merely requires the necessary experience to be in one of four areas (1) Photogrammetric, (2) Geodetic, (3) Topographic, or (4) Consulting Surveying services in connection with fixed works as defined in Section 6731.

What this apparently means is, until the Board formulates and adopts a new Rule #470 they will be administering applications for the title Consulting Engineer on the basis of the existing law. Consequently, those that have been denied the title under the old rule may now qualify.

## C.L.S.A. ANNUAL REPORT 1974 FINANCIAL STATEMENT

INCOME Gross Dues & Assessments Convention Registration Exhibitor Fees Advertising Interest Sale of Lapel Pins Gross contributions, Gifts, Etc.	\$19,124.67 11,486.36 2,700.00 2,092.00 196.38 90.00 369.58	
TOTAL		\$36,058.99
EXPENDITURES		
Composition & Printing	\$2,727.63	
Secretarial Services, Supplies,	¢2,/2/100	
Etc.	5,287.04	
Postage & Mailing	2,813.57	
Lapel Pins	401.98	
Reproduction	1,018.78	
Subscriptions	100.49	
Travel & Meetings	14,057.48	
Legislative Consultant	3,000.00	
Scholarships	300.00	
Telephone	2,592.87	
Professional Fees	2,562.30	
Refunds	685.06	
TOTAL	685.06	
		\$35,547.20
NET INCOME		\$511.79
BALANCE FROM 1973		5,667.72

6.179.51

NET WORTH END OF 1974

## The new low cost portable Microranger EDM meter. For instant measurements up to 1 mile.

**Compact & Lightweight:** Here's an unusual electronic distance measuring system with true portability. The head unit weighs just 3 pounds. The control unit, just 4. Power Pack—5 pounds. That makes 12 pounds—easy to carry, even over the roughest terrain.

**Unique Design:** The Microranger conveniently mounts on most theodolites, transits and levels. Permits angular sightings and distance measuring without time-consuming dismounting and mounting procedures.

**Proven Accuracy:** Within seconds, it will provide distance measurements of 3 feet to slightly more than 1 mile. And with an accuracy of  $\pm 0.02$  ft.  $\pm 2$  ppm.

**Fully Automatic:** With this new low cost EDM instrument you simply dial in your correction factors— there are no calculations to contend with. Momentary interruptions of the light beam such as traffic and wild-life, have no effect on the digital display readout. And an auto-ranging feature is built-in at no additional cost.



**Rechargeable Power-Pack:** The Microranger comes with a 12-volt rechargeable nickel-cadmium battery. Or can be powered with a standard 12-volt storage battery.

Measurements in either Feet or Meters: Conversion from one unit of measurement to the other is no problem. Simply change a switch position, the display adjusts.

**Simple Operation:** A quick 10-minute training course is all that's needed. Sight the head unit on the retro-reflector, adjust the attenuators, push the range button: Instant measurement.



And Much, Much More: The Microranger comes with a number of other assets, including a price that makes it practical for any surveyor to take advantage of an EDM instrument. But study the facts at your leisure. For complete details, just write to us at Keuffel & Esser Co.

For measuring 3 feet to 1 mile, we know this Microranger will measure up to your highest expectations. Only from K&E.



223 Lawrence Ave. South San Francisco, Calif. 94080 Phone: 415 873-6850

1327 South Olive St. 94080 • Los Angeles, Calif. 90015 Phone: 213 747-7601

## **EDITORIAL COMMENTS AND LETTERS**

by Michael S. McKissick, L.S.

C.L.S.A. began taking steps last year to consolidate the efforts of its many committees and to get more Board of Director control over those committees. To this end, the Board established six divisions into which all committees would be placed and consequently fall under the direct supervision of an officer of the Association.

The work load involved in each division is far too great for any single officer to handle. And even for those committees which had chairmen, there seemed to be a lack of communication with the division chairman coupled with no real understanding of what the division meant or the goals that the division had.

This is not to say that the action taken was not a big step forward; it's just that it needs to be extended and broadened with the personnel necessary to see that all divisions will function effectively. The problem requires a greater commitment on the part of all CLSA members.

It would seem that not only could the Board of Directors give the Association a firmer direction but also get more involvement from Chapter Representatives and from the chapters themselves.

I would suggest that the divisions first be firmly established and standing committees within the divisions be designated and their purposes clearly stated. Following are the six divisions and the committees comprising those divisions:

I. Administration:

- A. Constitution and By-Laws
- B. Nominating
- C. Coordination and Information
- D. Fiscal and Administrative Matters
- II. Education:
  - A. Bachelor of Science Curricula
  - B. Associated Arts Curricula
  - C. Student Employment and Recruitment (Scholarships)
  - D. Union Liason for Professional Development
  - E. Continuing Education
- III Legislation:
  - A. Monitoring
    - B. Support and Opposition
  - C. Formulation (New)
- IV. Membership Services:
  - A. Membership Development
  - **B.** Public Relations
  - C. Publications
  - D. Historical
- V. Professional Matters:
  - A. Interprofessional Relations
    - B. Liason
    - C. Ethics
  - D. Professional Status Improvement
- VI. Convention:
  - A. Future Planning
  - B. Immediate Convention

All of these divisions and most of these committees have already been established by the Board of Directors. The Divisions are already theoretically headed by either the Vice President or one of the Directors-at-Large and this is a good idea in order to assure that the Boad will have direct control over the direction of each division.

The basic suggestion to improve upon the present system is for all chapter representatives to be made chairman of standing committees. A committee chairman should be someone who is responsible as a voting director of CLSA and who is attending Board of Directors meetings.

The committee chairman would then be directly responsible to the head of his division and serve as a member of that division. It would then be possible to get a better feeling for how the committees were actually working if, in the morning session of the Board of Directors meetings, there were meetings of division heads and their committee chairmen. These meetings would allow for the detailed discussion of the specific problems of each committee and an opportunity to better define the direction of each committee.

Under the present meeting structure it is virtually impossible to get extended discussion on specific committee problems and input on a constructive level. At each Board Meeting it would then be possible for the head of a division to give a concise report on his division in the afternoon session or simply submit a written report to be distributed with the minutes of the meeting. That way the Board as a whole would be dealing only with those questions which required Board approval and thus freeing itself from the tedium of committee reports without substance.

The Board should also consider requiring that each chapter designate at least two members to serve on standing committees, not requiring them to attend board meetings, in order to insure adequate manpower in the committees.

I think that just making these changes in the operation and staffing of committees will contribute to greater progress by CLSA in representing and working for land surveyors in California.

## League of California Surveying Organizations

#### Northern Section

#### (Continued from page 1)

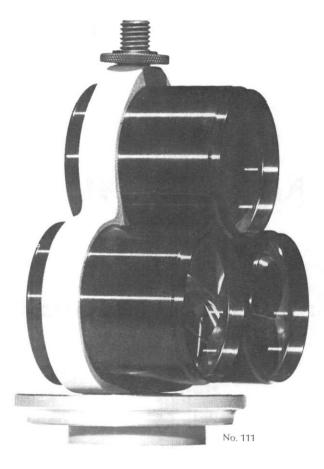
work by analyzing the reports prepared by the Southern Region Group. The minutes from our meetings and any other comments will be mailed to the southern region group to help them in preparing information for the manual on Surveying and Mapping Practice.

Copies of the manual can be obtained by writing to the League Chairman. The cost is \$10 and includes all revisions and additions during the calendar year 1975. Cost for subsequent years revisions and additions will be \$3 per year. Please make checks payable to the League of California Surveying Organization.

Mail to:

League of California Surveying Organizations c/o Vernon Q. Jones, Deputy County Surveyor Ventura County Public Works Agency 597 East Main Street Ventura, California 93001

The League is not another organization for Surveyors to join. Its membership is intended to consist of one representative from each existing survey-oriented organization in California. John Pedri of the State Registration Board deserves a lot of thanks for requesting to have this group formed.



# We think this is the best retro prism buy on the market, but you don't have to buy it.

Lewis & Lewis Retro-Ray reflectors are American made, using solid prism construction and the highest grade of optical glass available. They have guaranteed ranging capabilities, and perform as well or better than brands that cost a lot more. But the biggest advantage to a Lewis & Lewis Retro-Ray is that you don't have to buy it to find out how good it is. We'll rent it to you, and we'll even show you how to recapture your short-term rental costs if you decide to buy it later. Whether you want to buy or rent, send us a coupon now — we'll do the rest!

#### **Retro-Ray Price List:**

 Round Retro-Ray Reflectors (2%") aperture, %" x 11" thread base)
 \$145.00

 No. 101 (Single)
 \$395.00

 Lateral Retro-Reflectors (2" x 4%") aperture, %" x 11" thread base)
 \$165.00

 No. 122 (Single)
 \$165.00

 No. 123 (Single)
 \$165.00

 No. 122 (Single)
 \$165.00

 No. 134 (Triple)
 \$445.00

 Prism Carrying/Storage Bags (high-visibility orange, padded, vinyl coated)
 \$445.00

 No. 201 (Single; round or lateral)
 \$25.00

 No. 202 (Triple; round or lateral)
 \$25.00



# **CONVENTION - 1976**

## "California Land Surveyors Convention"

## COMMERCIAL EXHIBITS

:

## TECHNICAL SESSIONS

. . . to be held at the

## SHERATON UNIVERSAL HOTEL

UNIVERSAL CITY APRIL 8-10, 1976

10 THE CALIFORNIA SURVEYOR SPRING 1975

. •

\$

۶.,

HEWLETT DE PACKARD DISTANCE METERS SURVEYING CALCULATORS	SUSTAINING MEMBERS	SURVEYORS SERVICE CO. P. O. BOX 1905 COSTA MESA, CALIF. 92626
	AGA Service throughout the world.	
KEUFFEL & ESSER CO.	<b>C</b> LIETZ	LEWIS & LEWIS surveying equipment Ventura, California

APPLICATION FOR MEMBERSHIP IN THE CALIFORNIA LAND SURVEYOR'S ASSOCIATION MEMBER GRADE: Have a valid California Land Surveyor's or Photogrammetric Surveyor's License AFFILIATE MEMBER GRADE: R.C.E. or those who rely upon the principles of land surveying. ASSOCIATE MEMBER GRADE: Work in land surveying and be recommended by a member. Name \_\_\_ County \_\_\_ a \_\_\_\_\_Zip \_\_\_\_\_ b. Address \_\_\_\_ Mailing Address \_\_\_\_ Phone No.\_\_\_\_ c. Employment: Private \_\_\_\_\_ (Principal \_\_\_\_\_ ) Retired \_\_\_\_\_ Public \_\_\_\_\_ d. Name of Firm or Agency Signature and L.S., P.S. or C.E. No. e. f. Recommended by (Associate & Affiliate Grade Only) \_\_\_\_ Affiliate \$25.00 \*Associate \$10.00 (\*Entrance Fee \$15.00) Dues schedule: \*Member \$50.00 Mail application and check to: California Land Surveyor Association • P.O. Box 1363, Santa Rosa, Ca. 95403

FIRST YEAR'S ANNUAL DUES ARE TO BE PRO RATED FROM DATE OF APPLICATION

## CALIFORNIA LAND SURVEYORS ASSOCIATION

OFFICIAL ADDRESS: P.O. BOX 1363, SANTA ROSA, CA. 95403

Executive Secretary — JAMES E. ADAMS, P.O. Box 11592, Santa Rosa, CA 95406

**OFFICERS** Secretary

Treasurer

DONALD E. BENDER

EUGENE LOCKTON 807 Fifth Avenue San Rafael, CA 94901

Immediate Past President

#### DIRECTORS AT LARGE

EUGENE P. EHE 825 E. Third St.

SAMUEL L. TAYLOR, SR. 606 Myrtle Street Arroyo Grande, CA 93420

#### CHAPTER PRESIDENTS

Mother Lode BRUCE E. DeMOTT

P.O. Box A-81 Twain Harte, CA 95383

## Sacramento

ROBERT D. NESS 4946 Holyoke Way Sacramento, CA 95841

San Diego

CHARLES D. SAFFORD, JR. 5620 Friars Road San Diego, CA 92110

Riverside/San Bernardino RICHARD P. SIEGMUND P.O. Box 902 San Bernardino, CA 92402 San Joaquin Valley

WILLIAM O. GENTRY 4780 E. Tulare Ave. Fresno, CA 93702

#### Santa Clara/San Mateo

HENRY O. YOUNG 1027 Lucot Way Campbell, CA 95008

Sonoma

RAY C. CARLSON 1711 Terrace Way Santa Rosa, CA 95404

### Tahoe

JERRY W. TIPPIN P.O. Box 830 Tahoe City, CA 95705

> BULK RATE U.S. POSTAGE PAID PERMIT NO. 302 Santa Rosa, Calif.

#### Opinions or assertions expressed in articles in the publication do not necessarily represent the official views of the Association.

The California Surveyor

Published Quarterly by the

CALIFORNIA LAND SURVEYORS ASSOCIATION

P.O. Box 3707 Hayward, CA 94540 Roy Watley, Jr., L.S., EDITOR Michael McKissick, L.S., Assist. Editor

#### RETURN POSTAGE GUARANTEED ADDRESS CORRECTION REQUESTED

Bakersfield FRANK E. WAGERS 109 Oakmont BAkersfield, CA 93309

Central Coast

JERRY L. BOWSER 408 Alder Street Arroyo Grande, CA 93420

East Bay

BENNY F. FLOYD 1116 St. Francis Drive Concord, CA 94520

Eastern Sierra ROBERT P. BARON Box 213 Independence, CA 93526

STANLEY SMITH P.O. Box 84 Aptos, CA 95003

174 Larkspur Plaza Rd. Larkspur, CA 94939 Monterey Bay

RAYMOND THINGGAARD 36357 Bettencourt St.

San Bernardino, CA 92415

MICHAEL K. WELCH 813 E. Mill Street Santa Maria, CA 93454

406 W. Standley St. Ukiah, CA 96482

DAN B. CHATFIELD P.O. Box 2088 Redding, CA 96001

President

JOSEPH J. SCHERF

WILLIAM KARN P.O. Box 518 Fallbrook, CA 92028

Vice President

Newark, CA 94650

Feather River/Northern Counties

GEORGE F. PRIDE

Star Route, Box 68-A

Orland, CA 94963

Lake/Mendocino

RAYMOND M. BURGESS

Box 387

Gualala, CA 95445

Marin

THOMAS H. JERVIS

3359 Longridge Avenue Sherman Oaks, CA 91403

HAROLD B. DAVIS 641 Paradise Blvd. Hayward, CA 94541