

PLSW
P.O. Box 904
Casper, WY 82602

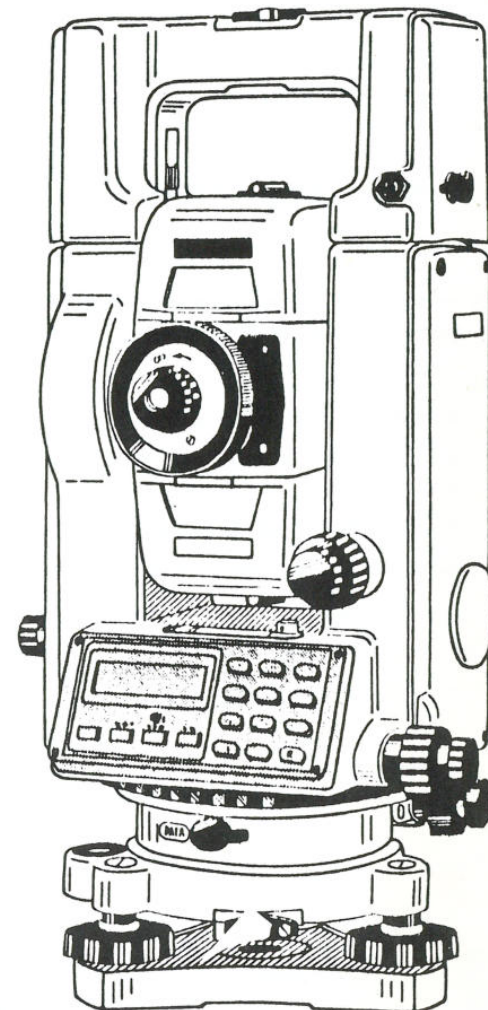
BULK RATE
U.S. POSTAGE
PAID
CASPER, WY
PERMIT NO. 208

Largest Pentax dealer in the Rocky Mtn. region.

**FREE
\$500**

worth of
Accessories
with each
PENTAX
Total Station package.

\$350 per month
Lease



Call on our many quality
products
Including our new
GPS Pole
with a constant height of 2 meters

HIXON MANUFACTURING & SUPPLY COMPANY

1400 Webster Avenue Fort Collins Colorado

1-800-762-5252



THE EQUALITY STATE SURVEYOR

LINE & POINTS



PROFESSIONAL LAND SURVEYORS OF WYOMING

AFFILIATE — AMERICAN CONGRESS ON SURVEYING AND MAPPING
MEMBER — WESTERN FEDERATION OF PROFESSIONAL SURVEYORS

ROBERT L. ST. CLAIRE, VICE-PRESIDENT

BECKY J. BRAMAN, PRESIDENT

RICK HUDSON, SEC.-TREAS.

VOLUME 4 NO. 1

MARCH 1992

1992



Who can put 5 miles of mountain road in the palm of your hand?

Lietz can. With our 3 new SET-C Intelligent Total Stations and the amazing on-board Data Memory Cards.

Slip a Memory Card into one of our SET-C Total Stations and you can see the future. A revolutionary integration of measuring and data-storage power. All in one rugged, self-contained, affordable unit.

And when you fill a Card's 32K memory (over 500 points), simply replace it with another Card and keep on shooting. If you wish, data can be fed to an SDR Electronic Field Book for added flexibility.

The only \$150 data collectors.

Our state-of-the-art Data Memory Cards are tough as well as inexpensive. Designed for weather-battered field-work, they have no contacts or sockets to bend or corrode.

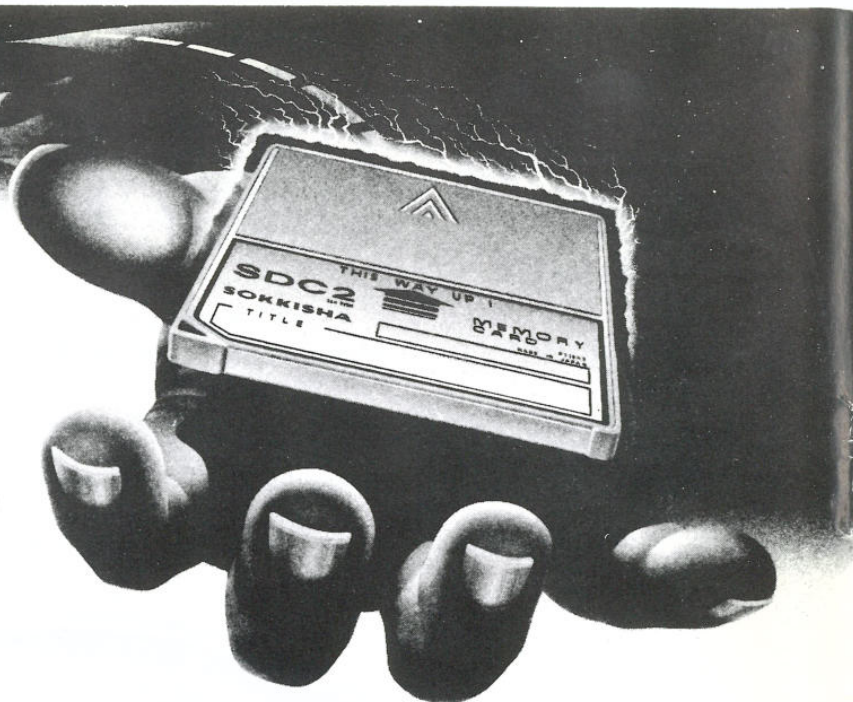
Our Dual Axis Tilt Compensator keeps your data true.

The exceptional accuracy of the SET-C series is assured even without precise leveling. This makes set-up faster than ever.

Two keyboards. No waiting.

A 15-button keyboard on each position provides fast access to all functions. Operation is simple, direct and easy to master.

SET-2C Intelligent Total Station With On-board Data Memory Card



Six lines of display and an easy-to-digest menu.

Dual dot-matrix displays on each position can simultaneously indicate horizontal angle, vertical angle and any selected distance component, plus PPM, prism constant and current operating mode.

The user-friendly menu provides plenty of prompts to lead you through the most complex operations.

One key measures all. Fast and accurately.

Tap a single key to measure horizontal and vertical angles, as well as distance, all in under 3 seconds.

Additional Features:

- Two-speed tangents on SET-2C and SET-3C
- Alpha-numeric coding for point descriptions
- XYZ stake-out from Data Memory Cards
- Horizontal index angle stored during power down
- No dip switches; all functions on keyboard

Breakthrough technology. Breakthrough price.

For the name of your nearest Lietz Authorized Distributor and more information about the affordable SET-2C, SET-3C and SET-4C Intelligent Total Stations, call us toll-free today.

We can put the future of surveying in the palm of your hand.

SOKKIA™
MEASURING SYSTEMS

2895 West Eighth Avenue
Denver, CO 80204
(303) 623-4385
(800) 729-1729

APPROVED _____ REJECTED _____ DATE _____

MEMBERSHIP APPLICATION

DATE _____

NAME _____ WY REG. NO. _____

(Please indicate preferred mailing address)

HOME ADDRESS: _____

STREET OR BOX _____

TOWN/CITY _____ STATE _____ ZIP _____

TELEPHONE: _____

BUSINESS ADDRESS: _____

STREET OR BOX _____

TOWN/CITY _____ STATE _____ ZIP _____

EMPLOYER _____

YOUR TITLE _____

States other than Wyoming in which you are registered: _____

Additional information or comments (optional): _____

CLASS OF MEMBERSHIP APPLIED FOR: (check one only and please submit dues with application, prorated for the remainder of the calendar year)

_____ MEMBER, ANNUAL DUES \$75 (Persons duly registered, PLS or PE&LS, in Wyoming.)

AFFILIATE MEMBER

_____ Associate Member, annual dues \$50. (Persons employed under the direction of a PLS and working toward PLS registration in Wyoming.)

_____ Special Member, annual dues \$50. (Not meeting above qualifications but with a particular interest in, or association with, the profession of land surveying.)

_____ Special Member, student, annual dues \$15. (Pursuing a post secondary academic course of study, and currently enrolled.)

_____ Sustaining Member, annual dues \$100. (Persons, institutions or corporations desiring to assist PLSW financially.)

I AGREE TO OBSERVE THE CONSTITUTION AND BY-LAWS OF THE PROFESSIONAL LAND SURVEYORS OF WYOMING AND THE CHAPTER TO WHICH I WILL BELONG AND TO SUPPORT SAID ORGANIZATIONS IN THEIR ENDEAVORS.

(APPLICANT'S SIGNATURE)

SPONSOR'S SIGNATURE
(For Affiliate Member applicants only.)

NOTE: All portions of the state have chapters. Chapter dues or assessments may vary in amount. Applications are considered by the Board of Directors at quarterly meetings. Send completed application to PLSW, c/o R.L. Hudson, Sec./Treas., P.O. Box 784, Thermopolis, Wyoming 82443.



SURVEY SUPPLY SERVICE COMPANY

MANUFACTURER CUSTOM
SURVEY STAKES, LATH, & BRASS CAPS
FLAGGING - PIN FLAGS - FLUORESCENT PAINT

ROBERT C. SHOOK

P.O. Box 90009
Casper, WY 82609
307-234-9856

P.O. Box 758
Newcastle, WY 82701
307-746-4113



PHOTOGRAMMETRIC
ENGINEERING

AERIAL SURVEYS INC.

GLEN R. CROSBY
Sales Manager

Certified Wyoming Land Corner Recordation Certificate

DESCRIPTION OF CORNER EVIDENCE FOUND AND/OR MONUMENT AND ACCESSORIES ESTABLISHED TO PERPETUATE THE LOCATION OF THIS CORNER:

SKETCH SHOWING RELATIVE LOCATIONS OF MONUMENT, ACCESSORIES AND REFERENCE POINTS WITH COURSE AND DISTANCE TO ADJACENT CORNER(S), IF DETERMINED IN THIS SURVEY:

The Corner Recordation Certificate displayed was presented by this Committee to the P.L.S.W. members present at the annual meeting in Sheridan on February 6, 1992. The form was approved at that meeting, as was a motion to print the proposed form in *Lines and Points* for review by members of P.L.S.W. who were unable to attend the February meeting.

A deadline of July 1, 1992 was set for receiving comments regarding the proposed Certificate. At that time this Committee will review the responses, make necessary changes/corrections, present the revised (if applicable) Certificate to the P.L.S.W. Board of Directors and finally present the Certificate, with endorsement from P.L.S.W., to the State Board of Registration.

We have received only five written comments within the past year. I have personally heard many comments critical of the size and format of the 11 inch form which is, by some users, considered the current Certificate. This Committee would feel far more secure if we could have more written comments, both critical and supportive.

Please send your comments to: J. Harvey Copeland
P.O. Box 883
Cody, WY 82414

CERTIFICATION

I, _____, certify that I, or others under my supervision, have performed the work as described above and completed this form

STATE OF WYOMING

Office of the County Clerk
County of _____

This Certified Land Corner Recordation Certificate was filed for record on the _____ day of _____, 19____, in the Book as indicated below and was noted on the Cross Index Plat.

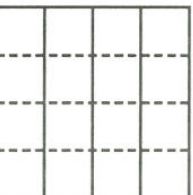
County Clerk

Company/Agency _____

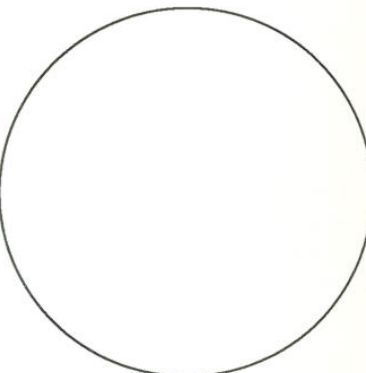
Address _____

City, State, Zip _____

Telephone _____



LOCATION DIAGRAM



SURVEYOR'S SEAL

NOTE: Official Certificate will be 8 1/2" x 14"

Corner Name _____, Section _____, T _____, R _____, P.M. INDEX REF. No. _____

Editorial Potpourri*

- **Chapter Minutes** – Send us a summary of your organizations activities by 15 JUNE 1992. Summaries need not be typed.
- **Join PLSW Now** – If you are not a member of PLSW, you will not receive *Lines and Points*. Only PLSW members, advertisers and other state newsletters will receive this newsletter. Join NOW. An application is included in this issue. If you are a member, recruit a new member. Part of PLSW membership dues makes this publication possible.
- **DUES NOTICE** – If you have not paid your dues, the Board of Directors may suspend your membership and you will no longer receive *Lines and Points*. Pay your dues now.
- **Support Your Advertisers** – The advertisers in this issue help make this publication possible. Support them.
- **Thanks Brunton Company** – The Brunton Company sold, at cost, a pair of binoculars to the Central Chapter. The chapter conducted a raffle at the convention and donated the monies to the PLSW Education fund.
- **PLSW Board Meetings** – The meetings of the PLSW Board of Directors scheduled for 1992 are as follows:

May Cheyenne
September Jackson
December Thermopolis

NEW MEMBERS OF PLSW

Harry Moore Rock Springs Member
Charles Wolz Casper Member
Charles Albrecht Evanston Member
Joel Schneider Rock Springs Associate

Welcome and congratulations to our new members.

- **FAX Receiving** – *Lines and Points* will now receive your important materials by calling (307) 235-5604.
- **Workshop Scheduled** – On May 11 & 12 the SE Chapter will host a two day Public Lands Survey System workshop presented by Cadastral Consultants, Inc. featuring Dennis Mouland. Cost is \$170. Call 1-800-666-1320 for more information.

Lines and Points is published by the Professional Land Surveyors of Wyoming. *Lines and Points* is not copyrighted and permission is hereby granted to reprint articles with appropriate credit. The Professional Land Surveyors of Wyoming assumes no responsibility for statements made or opinions expressed in this publication.

PLSW (Professional Land Surveyors of Wyoming) is a state-wide organization of Registered Land Surveyors licensed to practice in the Equality State of Wyoming. PLSW is dedicated to improving the technical, legal, and business aspects of surveying in the State of Wyoming. PLSW is affiliated with the American Congress on Surveying and Mapping and the Western Federation of Professional Land Surveyors.

Editorial Staff: John Hibsman, Steve Strang, Don Davis.

Lines and Points subscription \$50/year

Advertising Information

Camera ready advertisements with payment should be mailed to *Lines & Points*, PLSW, Box 904, Casper, WY 82602.

Advertising rates are as follows:

	Year	Issue
Full page	\$300	\$80
Half page	\$175	\$50
Quarter page	\$100	\$30
Business card	\$ 30	\$10
Classified	40¢ per word/issue	
Employment	Free	

Special Rates for PLSW Chapters

Deadline for spring issue – June 15, 1992

The Surveyor's Song

When you've fought all the way
to the end of the day
through the skeeters and willows and bogs

When you've offset your offsets
and lost all your foresights
and had your ass bitten by dogs

When the wind's blowing cold
and you're ready to fold,
conquered by old winter's curse

Take heart my good friend
this isn't the end
Everything's gonna get worse!

By William R. McJunkin, P.L.S.

Front Cover Artwork
By Ray Blaha – Casper

Bill is a Wyoming Registered Land Surveyor from Cody.

President's Message

Becky Braman

Professional Land Surveyors of Wyoming had a very productive and enjoyable annual meeting on February 6, 1992. In Sheridan, in conjunction with the Wyoming Engineering Society convention. Among the items that stand out in my memory are the pride the Board of Directors feel about the new PLSW Handbooks. True, these are in the initial stages, with only the binders, table of contents, dividers, and some of the "meat" items available. So far, the handbook includes the current guidelines as developed by WACES, the compiled Wyoming statutes from Surveyor Scherbel, a list of PLSW members and addresses, the current PLSW committees, and the PLSW by-laws. Among the projects which PLSW members need to address are the rewriting of the professional guidelines (The current plan is for each chapter to take a section and work on rewriting it . . .) the history of PLSW, a section on GPS and a section on Wyoming state plane coordinates. Many members picked up their notebooks at the state meeting or later during the WES convention. If you haven't received yours, contact your chapter director, who can pick up notebooks at the May meeting in Cheyenne. I would like to express my thanks and the thanks of all of PLSW members to all those who worked on the notebook, especially Scott Pierson, who conceived the idea of the notebook and has pushed it to fruition.

Reviewing the budget for 1992, our major emphasis will be on additions to the notebooks, scholarships, and a couple of awards for special projects. The special projects are the remonumentation of the east corner common Utah and Idaho which is supposed to lie on the western boundary of Wyoming. PLSW is donating \$500.00 to Surveyors of the 6th P.M. for this remonumentation which is being carried out with the support of the BLM. The other special project is \$500.00 for copying of documents regarding the public land surveys in Wyoming, which is in conjunction with a research project being done by Herb Stoughton. The other major emphasis of the budget is representation on national organizations, including Western Federation of Surveyors (West Fed) and National Society of Professional Surveyors (NSPS).

As governor from Wyoming, I attended the NSPS meeting during February 28-March 6 in Albuquerque. A full report of the meeting will be presented at the Board of Directors' meeting in May and published in the next "Lines and Points", but here are my initial highlights. NSPS has assumed control of its own finances and destiny, while working on an improved relationship with ACSM. NSPS is in relatively good financial shape, with money still tight, however. All the NSPS governors and directors understand that they key to financial health is increased membership, but it will take increased programs and benefits to members to increase the number of members. To help set the direction which NSPS will follow, the governors participated in an all day "think tank" session on Friday, February 28. This intense meeting helped clear the air and set some new directions for NSPS. An item discussed at the Board of Governors which is of immediate interest to PLSW members is the report of the Geodetic Mark Maintenance Committee. This committee has worked with the National Geodetic Survey to prepare a "Geodetic Mark Preservation Guidebook." The preliminary copy of this guidebook is available for review and comments. Give me a call and I'll get it copied and sent to anyone interested. Information concerning the condition of NGS stations should go to Richard

- Guaranteed Quality & Savings
- Wyoming Based Customer Service
- Outgoing Watts • Incoming Watts • Travel Cards

"Your Long Distance Alternative"

AMERICAN SHARECOM

Casper Business Center • 123 West First Street
Suite C75, Box 5 • Casper, WY 82601
307-266-3627 or 1-800-735-8302

Cohen, NGS Mark Preservation Center, NOAA-RC, 325 Broadway, Boulder, CO 80303. Phone 303-497-6530.

Well, now that I've covered the first item of the meeting, you can see that there is a lot to convey. NSPS is actively representing surveyors with Congress and agencies of the federal government, is working on a high Accuracy Reference Network to be used with GPS surveys, and is developing new articles of affiliation for the state organizations who will now be affiliated with NSPS directly. Among other items of interest are the announcement that West Fed has compiled a book of the registration requirements of all fifty states and the announcement by NSPS that if you get 3 new members to join during 1992, your membership will be free in 1993.

The next PLSW Board of Directors' meeting will be in Cheyenne on May 16, hosted by Southeast Chapter. All members are invited to attend, and PLSW will buy lunch. See your director for details.

SURV-KAP®

LANDMARK DISCOVERIES



Aluminum

- Survey Markers for Rebar,
- Concrete and Pipe,
- Monuments, Fluted Stakes,
- Delineator Posts,
- Access Covers



Brass

- Concrete Markers
- Cast Brass



Stainless Steel

- Monuments
- Stakes



Permamark®

- Plastic Markers

Carsonite®

- Boundary Stakes
- And Accessories

FREE CATALOG AND PRICE LIST

or WRITE:
SURV-KAP
P.O. BOX 27367
TUCSON, ARIZONA 85726

CALL
(602) 622-6011
1-800-445-5320
FAX (602) 792-2030

GLO Contract Surveys "Unearthed"

(First in a Series)

Herbert W. Stoughton, Ph.D.
Geodetic Engineer

Subject: GLO contract surveys in Wyoming Territory.

1. Reference: *Annual Report of the Commissioner of the General Land Office for the Year 1887* (Washington: Government Printing Office, 1887), pp.243-244.
2. The following is a verbatim transcription from the GLO Commissioner pertaining to the surveys in Wyoming Territory:

Wyoming. - No contracts for the survey of public lands in this district were awarded during the fiscal year.

On page 265 of the last annual report reference is made to the vast area of alleged surveyed lands in the Territory, and the probability is suggested that said surveys were never in fact *executed in the field*, but are represented only *on paper*, viz, "official plats and field notes."

On March 7, 1887, the surveyor general was requested to report to this office (based upon information in his possession and the general characters thereof) as to the *actual condition in the field* of the public surveys which have heretofore been executed in his district, and are now represented as "officially surveyed" by duly approved plats and field notes.

Under date of March 10, 1887, the United States surveyor general (John Charles Thompson) submitted his report to this office, and the following extracts therefrom will show that the condition of the public surveys in the Territory of Wyoming have not heretofore been misstated or misjudged:

Numerous complaints have been made to me in my private capacity and officially as surveyor general. There is every reason except a conclusive one based on actual official examination in the field, to believe that quite a large extent of territory in Wyoming should be resurveyed. Complaints made by settlers and surveyors of all political complexions are so numerous that I am constrained to believe that many of the so-called government surveys were made wholly on paper; others were not made in conformity to the "manual" and instructions in the establishment of corners of required size and with the requisite marks on same. Even where surveys have been made with some slight regard to the requirements of law and a small stone dropped (many of which stones could be and doubtless were carried in the pocket) no intelligent marks can be found to identify same.

On the other hand there are large tracts of land about which no complaints have been made so far as I know, and which are probably sufficiently well surveyed to answer the requirements of the settler, who can and generally does secure the services of a professional surveyor to "locate" his land for him by the use of his transit and chain *supplemented by the proper township plats*.

On the area of land covered by erroneous public surveys I am unable to make even an approximate estimate, but judging from the number of complaints and the widely separated localities from which they came said area must be considerable.

Only by an actual examination in the field can the extent and true character of fraudulent surveys be determined in the near

future, and the early examination of these "supposed" surveys is to my mind an apparent necessity. Of course time alone would in all probability bring them all or nearly all to light, but irreparable loss, vexatious delay, and innumerable and unavoidable errors in location will be the settler's legacy in the mean time.

If it is your determination to make an examination of all surveys reported fraudulent it would seem necessary to continue the suspension of patents for land contained in the districts *covered by the evidence of fraud* for reasons perfectly obvious.

It might seem desirable upon proper investigation of the subject to post notices in the land offices in the districts where fraud has been perpetrated to the effect that frauds in certain surveys have been discovered and that the said surveys will be examined at as early a date as possible; but that in the mean time settlers and all other filings on the land in these townships, although acting under the law, run the risk of subsequent and serious trouble in the probable event of a resurvey. This action would furnish sufficient warning to the ignorant settler.

Editor

Lines and Points

Dear Sir:

There seems to be some confusion amongst Professional Land Surveyors as to the need to acknowledge the signature of the surveyor upon plats recorded in the Offices of the County Clerks.

The applicable statute is W. S. 34-1-113 quoted herewith:

34-1-113. Acknowledgment of conveyances; generally.

Execution of deeds, mortgages or other conveyances of lands, or any interest in lands, shall be acknowledged by the party or parties executing same, before any Judge or clerk of a court of record, or before any United States magistrate appointed under and by authority of the laws of the United States, or any county clerk, Justice of the peace, district court commissioner, notary public, or other officer authorized under the laws of the state of Wyoming to take such acknowledgments, and the officer taking such acknowledgment shall endorse thereon a certificate of the acknowledgment thereof, and the true date of making the same, under his hand and seal of office, if there be one.

As plats of surveys of land do show an "interest in lands" It would seem that there should be no question but that the signature of the surveyor should be acknowledged.

The confusion possibly arises from the fact that W. S. 33-29-110 allowed surveyors to administer oaths. However that statute was lost when the large statute revision was done in 1987.

It would seem then that the prudent Professional Land Surveyor would have his signature acknowledged before filing of a plat in the Office of the County Clerk.

Very sincerely yours,
Paul N. Scherbel, Professional Land Surveyor
Registration No. 164

Sixth P.M. . . Continued

ered the Idaho closing corner for T14N and T15N and MP 69 witness corner stone which was hanging on the North-South fence along the state line. The Wyoming closing corner for Sections 4 and 9, previously recovered was noted.

Rain during the night prevented further efforts the next day.

On 27 August the following began survey operations to reestablish the true position of the state corner:

Ross Workman and Ron Baugh of the Utah Office of BLM Dennis Bland and Jerry Messick of the Wyoming office of the BLM, and myself.

During the field time on 27-28-29 August the following was accomplished:

a. The initial point was visited and the original bottle recovered and replaced with a 3/4"x 12" steel reinforcing rod set four feet below ground and the stainless steel monument reset atop to use as a base survey point. The original bottle was removed for safe-keeping and is presently in my hands.

b. The charred remains of the post for MP 1 - Idaho Utah were recovered and a BLM pipe monument set.

c. MP 70 Wyoming-Idaho was recovered and a BLM brass marker was set in concrete.

d. As MP 69 - Wyoming-Utah was lost, MP 68 Wyoming Utah was recovered and monumented with a BLM pipe monument.

e. All of the foregoing monuments were tied by radial surveys.

f. MP 69 was reestablished at the true point and monumented with BLM pipe.

g. The Utah closing corner monument for Sections 32 and 33, T15N, R8E was recovered where it had slid down the hill and was placed under the E/W Utah-Idaho state line fence pending reestablishment.

h. Workman and Baugh on 23-24 September were in the field again and checked the previous effort plus tied in MP 2 - Utah-Idaho.

Exhibit "B" is a sketch of the monuments recovered.

3. PLANS, THOUGHTS, DREAMS.

a. Both monuments ought to be perpetuated by significant monumentation.

b. That a dedication ceremony be held at the Initial Point on Friday, 28 August 1992, the 121st anniversary of the original monument placement. The state corner monument is not as well located for a ceremony as the Initial Point.

c. If a ceremony is held an access roadway would need to be constructed as well as a parking area. The roadway would be on lands administered by the BLM and its cooperation would be imperative.

d. A decision would need to be made by the BLM to continue the initial point as a site of public interest much as the Tri-Territorial Monument.

e. It was the consensus at the August group that the state corner be remonumented with a 6 ft.x 12" triangular granite monument set three feet into the ground with a BLM brass cap affixed to the top. IDAHO, UTAH, WYOMING would be etched on the appropriate side. The area to be fenced or protected in a way to prevent stock damage.

f. No consensus was reached on the initial point monument design. One suggestion is a reconstruction of the original square

mound plus similar stones for each state as before. To replace the original post a square granite shaft with etchings similar to the original markings. Also an explanatory plaque be set nearby. All to be fenced to prevent livestock damage.

g. It was thought that maybe the Boards of County Commissioners of Bear Lake County, Idaho; Rich County, Utah; and Lincoln County, Wyoming might pay the cost of the state corner marker.

h. Talks at the dedication ceremony could well include the following:

1. A biography of Astronomer, W. A. Richards of the Wyoming line by Dennis Bland.

2. A biography of Astronomer D. J. Major by Gerald A. Willett, Jr. of University of Idaho at Moscow.

A lot of help will be needed from numerous people and your input would be greatly appreciated. Please contact me with your suggestions and offers of assistance.



SCHERBEL ON SURVEYING
A compilation of parts of the
WYOMING STATUTES
and other items of interest to
PROFESSIONAL LAND SURVEYORS
order from
SURVEYOR SCHERBEL, LTD.
Box 4296
Big Piney - Marbleton, Wyoming 83113
\$30.00 postpaid

Professional Land Surveyors of Wyoming

P.O. Box 784, Thermopolis, WY 82443

DATE: February 6, 1992
TO: PLSW Board of Directors
FROM: Stanton J. Abell, Jr., Teller Committee
SUBJECT: Election Results 1991 - Annual Meeting

I have completed the tabulation of the ballots submitted for the annual meeting election.

Of the ballots sent, 73 were returned, 55 were validated by the required signature and had paid their 1992 dues, 10 were unsigned, 1 was late and 7 were validated by signature but had not paid their 1992 dues.

The results are as follows:

OFFICERS:

President - Becky J. Braman
Vice-President - Robert L. St. Claire
Secretary/Treasure - R.L. Hudson

BY-LAWS AMENDMENT:

An affirmative vote of 52 Members (two-thirds of the 78 Members) is required for the By-Law Amendments to pass.

FOR THE AMENDMENT	36
AGAINST	19

As the amendment did not receive a two-thirds majority vote, the amendment failed to pass.

Introducing the most advanced total station feature yet: \$299/month.

Many people think Geodimeter total stations are the finest in the world. They're right.

Some also think they're expensive. They're wrong.

Now, for a limited time, you can own the new Geodimeter 400RTS - one of the finest, most advanced (yet easiest-to-use) total stations in the world - for just \$299 per month.*

And that's not all! This low price gets you a *complete system* - including our latest smart data collector, and our survey management software for your PC.

You get the fastest possible performance - both in the field and the office - in one package.

High-Performance Financing

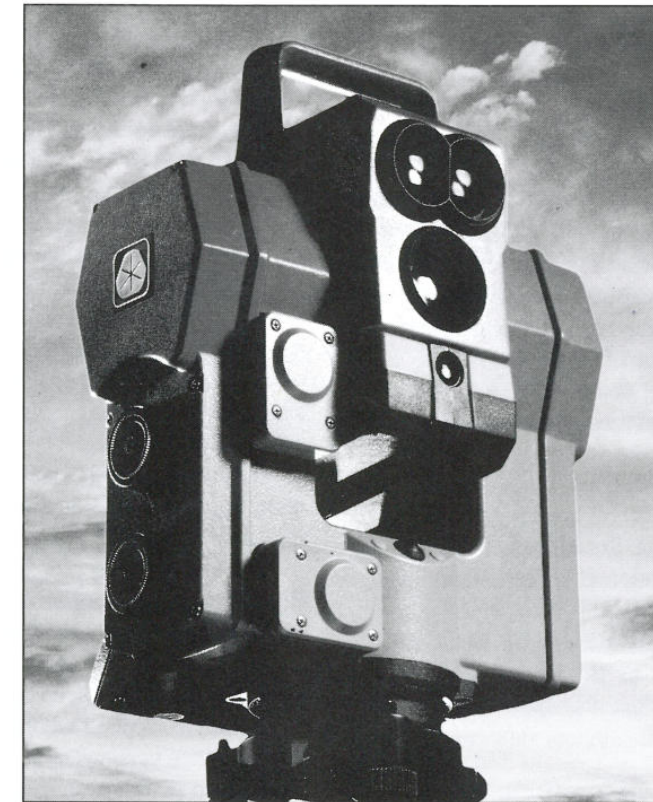
Whether you want to lease or pay cash, Geodimeter can put you in the driver's seat for a lot less than you thought.

Cash - Geodimeter sweetens the pot with a hefty rebate that cuts your outlay lower than you thought possible for Geodimeter quality and true robotic automation.

Lease - Here's where you really clean up! Sign up for our special lease program now and you'll pay only \$299 per month for the first year. And that makes the 400RTS a real money-making machine!

High-Performance Surveying

The combination of robotics and our



The new Geodimeter 400RTS system uses the power of robotics to get your jobs done faster. One call, and you can try it today!

surveyor-friendly software makes the 400RTS the ideal power tool for both roadway and construction staking projects.

Roadway Surveying

Break the surveying speed limit - legally

Full topographic surveys, cross-sections, and as-builts are dramatically faster

with on-board RoadLine software. It automatically converts between coordinates, station offset, and angle/distance data, eliminating time-consuming and error-prone manual conversions.

Construction Staking

Spend your time putting points in the ground, not dialing in angles.

On-board SetOut software makes stake-out operations much faster and easier. It automatically establishes the instrument station at a known or unknown point. It calculates and checks your stake-out data, and counts down to zero in three dimensions, providing fast cut and fill values.

Full-Auto Power with Robotic Surveying

The innovative 400RTS automatically aims itself, quickly and precisely, eliminating error-prone routine work. You'll spend far less time turning multiple sets of angles and making repeated measurements. Now that's power surveying!

Survey your way to the bank

The new Geodimeter 400RTS. Fast. Precise. Fully automatic. And now at truly unprecedented terms. But not for long. This offer ends soon.

So call your Geodimeter rep today. And get yourself details and a demo of the hottest roadway & construction package around.

Because the 400RTS system not only *saves* you money, it *makes* it for you too. Every time you use it.



Nothing else quite measures up.

Geotronics of North America
55 Leveroni Court, Novato, CA 94949
415/883-2367 Fax: 415/883-2532



We make 14 total stations, each one a complete surveying solution. There's one with just the

*Just one of a variety of lease plans available. See your Geodimeter dealer for complete details.

BOARD OF DIRECTORS' MEETING SUMMARY

The last meeting of the Board of Directors before the 1992 annual state meeting was held in Sheridan, at the Holidome, on Thursday, February 6, 1992, and was called to order at 10:07 A.M. by president Becky Braman.

All members of the board were present with the exception of the South Central director who was represented by an alternate. Additionally, various committee chairmen and PLSW members were present making a total of 23 persons in attendance.

Minutes from the September board meeting in Rock Springs and the December board meeting in Gillette, both of which had been previously distributed to board members, were approved.

The treasurer's report was presented by Rick Hudson and consisted of the latest bank statement for Hilltop National Bank as well as the 1991 itemized expenses and balance sheet handouts. The report was accepted as presented.

Introduction of Joe Popp, our latest honorary member, and Allen Mace, member-and donor, was made by president Braman.

Director Richard Kohler of the Northeast Chapter mentioned the establishment, within that chapter, of a scholarship to be awarded each semester in the surveying technology program at Northern Wyoming Community College of Sheridan.

Much of the balance of the meeting concerned the 1992 budget. Each director reported on the activities and concerns of his individual chapter. More than one director mentioned that members questioned the amount of annual dues and what they receive in return for those dues.

Herb Stoughton, chairman of the Standards, Ethics and Professional Practice Committee, mentioned several items from that committee.

The budget was discussed, item by item, with input from committee chairmen and members of the board. The final amounts were agreed upon and the budget was approved for submission to the general membership at the annual state meeting to be held later in the day.

The board voted to make copies of the PLSW Handbook available, at no charge, to all members and affiliates upon request.

All members present at the meeting were invited to remain for the luncheon buffet and the continuation of the meeting.

Other items which were acted upon by the board included approval of three new members and one new affiliate, and the designation of "Lines and Points" the PLSW newsletter as a committee rather than the sole responsibility of the South Central Chapter.

The next board meeting, which is required under the By-Laws, will be held immediately after the annual state meeting.

The meeting was adjourned at 12:57 P.M. with all members proceeding to the annual state meeting.

Dated this 22nd day of February, 1992.

1992 ANNUAL STATE MEETING SUMMARY

The 1992 annual state meeting of the Professional Land Surveyors of Wyoming was held in conjunction with the 72nd annual Wyoming Engineering Society convention in Sheridan.

The meeting was held in the Solitude Room of the Holidome and took place on Thursday, February 6th, 1992.

President Becky J. Braman called the meeting to order at 1:27 P.M., asked for agenda revisions, and introduced the officers. This was followed by a last call for ballots by Stan Abeil of the Teller's Committee.

The signed attendance list indicates 48 persons were present; including two honorary members, Joe Popp and Paul N. Scherbel, 38 members, six affiliates and two guests, including former charter member Paul Reid from California.

Copies of approved minutes and committee reports were available at the front table and a copy of this summary will be sent to all attendees.

The minutes of the 1991 annual state meeting, held in Cody, were approved by voice vote, a formal action required by the By-Laws of PLSW.

The treasurer's report was presented by Secretary/Treasurer Rick Hudson and consisted of the current bank statement updated to February 4th, 1991 itemized expenses and balance sheet. Copies were passed out to all attending members. The report was accepted, again by voice vote.

Committee reports were presented orally and kept intentionally short. Written versions were available as previously stated. Reports were given as follows: Audit-Finance, written; Membership, oral and written; Standards, Ethics and Professional Practice, oral and written; Education, oral; Legislative, oral and written; By-Laws, oral; Professional Awards, oral; Scholarship, oral; History, oral; Certified Land Corner Recordation, oral and written; GPS "Supernet", oral and written; our Newsletter "Lines & Points", oral; Handbook, oral; and Manual of Practice, oral and written.

Scott Pierson, of the Handbook Committee, presented a copy of the PLSW Handbook and stated that copies will be available for distribution beginning tomorrow. It was announced that all members of PLSW who are current with dues payment, including honorary members, members and affiliates, will receive a copy free of charge and upon request.

Herb Stoughton, of the Manual of Practice Revision Committee, introduced a motion, which was carried by vote, that the following documents be adopted on an interim basis as guidelines for professional practice (of Land Surveying in Wyoming): "Guidelines For Professional Practice of Land Surveying", WACES, 1982; "Madson, On Wyoming Real Property Law", 1984; and "Scherbel on Land Surveying". An additional motion, by others, was carried which included the 1988 ALTA/ASCM title survey requirements. A vote, at the 1993 annual state meeting, will be taken regarding adoption of the PLSW Handbook as a manual of practice.

Continued on page 7

1992 CORPORATE OFFICERS

PRESIDENT

Becky J. Braman, PLS
1816 Central Avenue
Cheyenne, Wyoming 82001
(307) 864-3138 (W)
Robert L. St. Claire
P.O. Box 2366
Gillette, Wyoming 82717
(307) 682-5000 (W)

VICE-PRESIDENT

SECRETARY/ TREASURER

R.L. "Rick" Hudson
P.O. Box 784
Thermopolis, Wyoming 82443
(307) 864-9389 (W)
Bryce E. Rumph
209 Stocktrail
Gillette, Wyoming 82716
(307) 682-2976 (W)

PAST PRESIDENT

DIRECTORS

NW CHAPTER

J. Harvey Copeland
P.O. Box 883
Cody Wyoming 82414
(307) 587-5403 (W)

NE CHAPTER

Richard A. Kohler
2911 Harder Avenue
Gillette, Wyoming 82716
(307) 686-9168 (H)

CENTRAL CHAPTER

Chris D. Hamilton
P.O. Box 309
Hudson, Wyoming 82515
(307) 332-5280 (W)

SW CHAPTER

Craig A. "Andy" Shauers
816 Young Avenue
Rock Springs, Wyoming 82901
(307) 362-7519 (W)

SC CHAPTER

James F. Jones
3048 Herrington Street
Casper, Wyoming 82604
(307) 266-4346 (W)

SE CHAPTER

Peter J. Hutchison
209 Lakeshore Drive
Cheyenne, Wyoming 82009
(307) 632-3138 (W)

OFFICIAL PUBLICATION

LINES & POINTS
PLSW, South Central Chapter
P.O. Box 904
Casper, Wyoming 82602

Sixth P.M. News

FROM: Paul N. Scherbel, Chairman pro-tem
Corner Common to Idaho, Utah, and Wyoming
Initial Point of Survey of ID 42° parallel forming
boundary of Idaho, Utah, Nevada, Oregon, and
California Committee

TO: All interested
SUBJECT: Progress Report No. 1

1. OVERVIEW

On 5 October 1985 a visit was made to the state corner monument and an unset red sandstone as called for in the 1915 field notes was found, evidently replacing a wooden post set in 1880 by Woods.

After reading a copy of the field note record of 1874 and a later visit produced no extant accessories, it was concluded that the corner was "lost" and it ought to be reestablished. It is unclear whether the 1915 monument is the first monumentation of the State corner.

However, involvement with the reestablishment of the initial point of the 6th principal meridian precluded pursuing the reestablishment at that time.

Further delving into the field note records, it was found that the Initial Point was established in 1871 about three-quarters of a mile easterly in Wyoming. This made the project more enticing as there are two monuments worthy of attention. These notes are transcribed as Exhibit "A".

At meetings of the Interagency Cadastral Coordinating Council, the reestablishment was discussed and at the 1991 Bureau of Land Management Cadastral Survey Branch Chiefs, meeting at Park City, John P. Lee of Wyoming, Don Buhler of Utah, and Duane Olson of Idaho agreed to support the project.

The Committee as presently constituted consists of the following:

Chairman pro-tem
Dennis Bland of Wyoming BLM Office
Ross Workman, PLS of Utah BLM Office
Gary Oviatt of Idaho BLM Office
Donald M. Schramm, PLS of Rock Spring, WY BLM Office

2. STATUS

On 6 June 1991 Gordon M. "Mike" Dress of the Idaho Office of the BLM in Boise, John A. Teichert, Superintendent of Water Division No. 4 of the Office of Wyoming state Engineer and myself, began investigative field work.

The site of the initial point was first visited and the surface remains of the monument were quickly found. In a scattered mound of stone was found the original reference stones though each of the three stones were broken and weathered but with the marks readily identified after assembling the pieces.

Digging in the area produced charred remains of the original post. Following the post down, the original glazed, earthenware pint bottle marking the true initial point was recovered unbroken.

This was replaced in its original position and a temporary 2" stainless pipe with brass cap (BLM) monument was set atop for ease in future recovery.

Later that day the state corner was visited. The Mile Post No. 1 for Utah-Idaho was next searched for without success. Finally Dress walked the Wyoming-Utah line south and recovered.

Continued on page 12



Gard Talbot
Home 234-0632

Drafting and Engineering Supplies
Complete Reproduction Service

145 North Durbin
Casper, Wyoming 82602

P.O. Box 1276
Phone 265-2990

In State Wats 1-800-231-9743



4708 SOUTH COLLEGE AVE.
FORT COLLINS, COLORADO • 80525

Aero-metric
ENGINEERING, INC.
PHOTOGRAMMETRIC ENGINEERS

Aerial Photography • GPS Surveys
Precision Digital Mapping

TEL. 303-226-2883
FAX 303-226-2965

State Board of Registration for Professional Engineers and Professional Land Surveyors Tid Bits

By Christine Turk

The Board was engaged in a panel discussion with the constituency of the Wyoming Engineering Society (WES), at the society meeting held in Sheridan the first week of February, 1992. The main topic of discussion was continuing professional competency.

Dr. John W. Steadman gave a presentation on the proposed guidelines for professional development being considered by the National Council of Examiners for Engineering and Surveying (NCEES). If adopted, the guidelines will provide uniformity with other states and perhaps simplify comity registration with those states requiring professional development hours.

The proposed guidelines seemed to be better accepted by those in attendance at the WES Convention as opposed to the original proposal published by the Board. Additional information concerning this issue will be mailed to all registrants when it becomes available to the Board.

The NCEES recently carried out a task analysis for professional land surveying. This task analysis involved a mail survey of over 2500 registered professional land surveyors to determine what knowledge, skills and abilities were deemed necessary for the competent practice of land surveying. The steering committee was chaired by Peter Jorgensen, PE/LS of Wyoming. The task analysis has resulted in new exam specifications for the national portion of the PLS examination. There will now be a single six-hour national exam beginning with the test administration in October of 1992. The remaining two hours of the eight-hour examination period is to be used for the state-specific portion of the examination.

NCEES provided state-by-state results from the task analysis. This assures a better basis for the state-specific portion of the examination. Pete Jorgensen generously agreed to lead a one day workshop in which Wyoming surveyors used the task analysis to define the questions to be included in the Wyoming portion of the exam beginning in October 1992. The Board asked selected registrants from across the state to meet for one day in Sheridan just before the beginning of the Wyoming Engineering Society annual meeting. That group of your fellow professionals gave a day of their time to assist Pete and the Board so we will have a new two hour state-specific exam ready next fall. We want to express our sincere thanks to all the volunteers and particularly to Pete for many hours of effort in shaping the new exam.

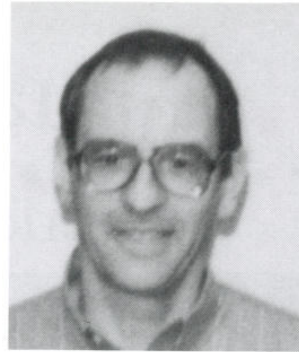
GPS WORTHINGTON,
LENHART,
and CARPENTER, INC.

**GLOBAL POSITIONING
SURVEYING**

- CONTROL SURVEYS
- EQUIPMENT RENTALS

632 South David St.
(307) 266-2524
Casper, WY 82601

CONSULTANTS:
ENGINEERING, LAND SURVEYING AND LAND PLANNING



New Board Member

The newest member of the
State Registration Board is
Duane R. Weber
Patterson Weber &
Associates
437 South Spruce
Casper, WY 82601
(307) 266-5033

Duane was graduated from the University of Wyoming in 1960 and 1965 with B.S. degrees in Electrical and Mechanical Engineering, respectively. He is a Registered Professional Engineer in Wyoming, Utah and Montana. He is a member of the American Society of Heating, Refrigeration and Air Conditioning Engineers and the American Society of Plumbing Engineers. His work experience is as follows:

May, 1978 to present: Mr. Weber, along with Harry O. Patterson, formed the partnership of Patterson, Weber & Associates. The partnership provides mechanical and electrical consulting services for the design of buildings and facilities. His project responsibilities have included the Cody Firearms Museum, the Nicolaysen Art Museum, the Gillette Aquatics Center, the Centennial Junior High School, Caballo Rojo Coal Mine and others.

February, 1977: Mr. Weber joined Rice, Marek, Holtz & Patterson, Inc., Consulting Engineers, Casper, WY as a senior mechanical engineer. His duties included project leadership, personnel supervision, design, field inspections, system test/troubleshoot/analysis and client contact.

Before working for Rice, Marek, Holtz & Patterson, Inc. Mr. Weber was an engineer for Howard, Needles, Tammsen and Bergendoff in Casper, WY.

From 1967 to 1973 Mr. Weber was manager of Manufacturing Engineering for Data/University Computing Company, Riverton, WY. He was the company's initial manufacturing engineer and was responsible for setting up the company's production lines and facilities. This included coordination of plant design and construction, production tool designing, purchase and specification of production equipment and techniques. Besides production responsibility, Mr. Weber developed the company's workmanship standards, machine shop standards, parts numbering system, assembly format and department procedures manual.

From 1965 to 1967 Mr. Weber was a senior manufacturing engineer for Ampex Corporation in Colorado Springs, CO. Ampex produced professional video tape equipment and Mr. Weber's duties involved production engineering, system trouble shooting, and tool design.

After receiving his degree in electrical engineering in 1960 from the University of Wyoming, Mr. Weber was a design engineer for Allis-Chalmers in Milwaukee, Wisconsin, attached to the research division. His work involved the design and construction of energy research. In 1964, Mr. Weber returned to the University of Wyoming to work on a degree in mechanical engineering.

Congratulations Duane!

Annual Meeting . . . Continued

President Braman presented the proposed 1992 Budget which had been prepared by the Board of Directors earlier in the day. Specific items that were mentioned included \$500 for documents regarding the public land surveys in Wyoming, \$1,250 for scholarships, \$500 for outside secretarial services, as well as \$350 for the purchase of PLSW flags and \$500 to Professional Surveyors of the 6th P.M. for a corner remonumentation project in the southwest portion of the state.

It was stated that the budget reflects a planned deficit caused by the publication of our PLSW Handbook.

The budget was approved by unanimous voice vote.

A break was taken at 3:27 P.M. wherein the members socialized, the meeting being reconvened at 3:51 P.M.

The Western Federation of Professional Surveyors "West Fed" delegate report was presented by John Steil. He stated that the 1993 conference will be held at South Lake Tahoe, conferences being held only in alternate years. He also stated that Hawaii is now a member of WFPS and that the application of Texas is currently pending. A written report was delivered to the secretary treasurer as was a check in the amount of \$169.67, the check representing the attendance of six persons from Wyoming at the 1991 conference in April at Las Vegas.

The National Society of Professional Surveyors (NSPS) report was presented by governor Becky Braman who attended the Board of Governors' meeting in Atlanta last October. The report, in written form, had been previously delivered to our board of directors and is available to the general membership.

A motion that would have required membership in a national society by all members of a state organization was defeated.

Stan Abell presented the Teller's Committee report by announcing that the proposed by-laws amendment was defeated and that the 1992 officers are as follows: Becky J. Braman, president; Robert L. St. Claire, vice president and R.L. Hudson, secretary/treasurer. A motion was carried for acceptance of the report and for publication of the report in the next edition of *Lines & Points*.

Items of new business included a presentation by Paul Scherbel, representing the Professional Surveyors of the 6th P.M., regarding the remonumentation of the corner common to Idaho, Utah and Wyoming, and the initial point of the 42nd parallel survey and a letter from member Kevin Jones regarding the use of the PLSW logo.

A nomination, from the floor, for honorary membership of an individual led to a discussion wherein it was decided; by vote, that a compilation of PLSW policies will be prepared. In this particular case our by-laws state that honorary membership is a matter to be decided by the Board of Directors of PLSW. The original motion was amended to refer the nomination to the board with a favorable recommendation and subject to the nominee meeting the minimum age requirement of 50 years old.

Additional new business concerned the possibility of elimination of the "take-home" portion of the state-specific portion of the Professional Land Surveyor test. Becky informed those present of the background behind this matter and that it had been mentioned in a workshop held yesterday in which several members of PLSW had participated. Following a discussion involving many of those present, a vote was carried wherein PLSW endorses the continuation of the "take-home" test and that our endorsement will be forwarded to the state board of registration. Announcements included the following items:

- 1) A workshop, sponsored by the Southeast Chapter, presented by Dennis Mouland on retracement surveys, in Cheyenne, on May 11th and 12th, 1992;
- 2) A seminar by an attorney and land surveyor, again in Cheyenne, on February 26th, 1992;
- 3) National Engineers and Surveyors Week, February 16th through the 22nd, 1992;
- 4) The PLSW raffle at the exhibitor's beer break, tomorrow, at which a pair of Brunton binoculars will be given away. This results from the financial gift by member Allen Mace and the proceeds will go toward our scholarships;
- 5) The raffle of the "Elk" cover art by the Lines & Points committee, also tomorrow;
- 6) The addition of several items, donated by the Wyoming Game and Fish Department, to be included in the PLSW raffle, tomorrow;
- 7) Greetings from charter member and past president of PLSW Paul Reid, now residing in Sacramento, California;
- 8) Mention of the latest edition of the ACSM journal which deals with cadastral surveying by the Bureau of Land Management, and;
- 9) Mention of the upcoming ACSM convention, later this month, in Albuquerque.

Acting upon a motion by John Steil, the meeting was adjourned at 4:51 P.M., by unanimous voice vote.

Dated this 22nd day of February, 1992.

**ATLAS
REPRODUCTION**
AUTHORIZED AGENT FOR

XEROX

**USWEST
CELLULAR**

**Free Pick-Up & Delivery
Complete Reproduction Services**

800 East "A" Street Casper, WY

237-9523 or 1-800-372-3837 In State

**PLSW Key Rings are for sale. Send \$5 to:
P.O. Box 904 • Casper, WY 82602**

LAND SURVEY EQUIPMENT RENTAL



Larry Erdman
280 Indian Paintbrush
Casper, Wyoming 82604
(307) 266-4506

E.D.M. - Transits - Levels
Misc. Survey Equipment

POST CONVENTION BOARD OF DIRECTORS' MEETING SUMMARY

The first meeting of the Board of Directors after the 1992 annual state meeting was held, again in Sheridan at the Holidome, immediately after said meeting on Thursday, February 6, 1992.

This meeting is required by the By-Laws and was called to order at 5:09 P.M. by president Becky Braman.

All members of the board were present or represented, as were four other members of PLSW.

Three items were discussed and approved. The first dealt with the honorary membership matter that was brought up at the annual meeting. Approval was given subject to the nominee meeting the age requirement-, that being 50 years old at the time of nomination.

The next item was to assign dates to the upcoming board meetings. The following list represents the remaining 1992 board meeting dates and places:

- 1) Saturday, May 16th, in Cheyenne, at noon, to be hosted by the Southeast Chapter;
- 2) Saturday, September 12th, in Jackson, to be hosted by the Central Chapter;
- 3) Sometime in December, in Thermopolis, to be hosted by the Northwest Chapter.

The final item was in regard to the proposed By-Laws amendment regarding expanded membership. The Nominations and Election Committee will draft the ballot and it will be sent out to the membership by the secretary treasurer. A deadline of April 15th was agreed upon by the board.

There being no further business at this time, the meeting was adjourned at 5:23 P.M.

Dated this 22nd day of February, 1992.

R.L. Hudson, Secretary/Treasurer

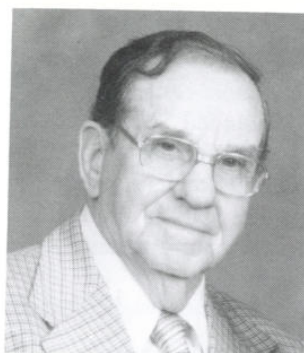
HORIZONS, INC.

Aerial Mapping Professionals

- Digital Topographic Mapping
- Aerial Photography
- Orthophotos • GIS
- Custom Color Printing
- AUTOCAD™
- INTERGRAPH™
- ARC/INFO™

605-343-0280

P.O. Box 3134
Rapid City, SD 57709-3134



Elmer N. Johnston

Funeral services for Elmer N. Johnston 84, were held Wednesday, February 19, 1992, at the First Christian Church in Casper.

Mr. Johnston died at the Wyoming Medical Center February 14, 1991, following a

brief illness.

He was born January 19, 1908, in Gregory, MO, to Newton P. and Matilda Josephine (Baker) Johnston. In 1910, the family moved west and homesteaded near Manderson, Wyoming. He attended the University of Wyoming and worked as a professional engineering land surveyor for more than 40 years.

On October 11, 1941 he married Christine N. Nesbitt in Mitchell, Nebraska. The couple moved to Casper in 1949 where Mr. Johnston established Johnston Inc. Engineering Surveys.

Mr. Johnston was an honorary member of the Wyoming Engineering Society and of Professional Land Surveyors of Wyoming. In addition, he was a member of the Wyoming Wool Growers Association, the Odd Fellows of Worland, the Casper Chamber of Commerce, and the Governor's Water Development Commission (1975-1981).

Interment was at the Mountain View Cemetery in Basin.

Happy Trails.

1992 CHAPTER OFFICERS

NORTHWEST CHAPTER

Director	J. Harvey Copeland	Cody
President	Alan B. Cormier	Worland
Vice President	Stanton J. Abell, Jr.	Worland
Secretary/Treasurer	Paul R. Campbell	Cody

NORTHEAST CHAPTER

Director	Richard A. Kohler	Gillette
President	Richard A. Kohler	Gillette
Vice President	Jeffery C. Lewis	Gillette
Secretary/Treasurer	Joel T. Ebner	Gillette

CENTRAL CHAPTER

Director	Chris D. Hamilton	Hudson
President	Richard W. Greenwood	Wilson
Vice President	Brad N. Shaw	Riverton
Secretary/Treasurer	Bruce L. Hughes	Riverton

SOUTHWEST CHAPTER

Director	Craig A. Shauers	Rock Springs
President	Donald W. Schramm	Rock Springs
Vice President	Joseph W. Manatos	Rock Springs
Secretary/Treasurer	Randy J. Rowley	Rock Springs

SOUTH CENTRAL CHAPTER

Director	James F. Jones	Casper
President	William R. Fehringer	Casper
Vice President	Joseph W. Popp	Glenrock
Secretary/Treasurer	Don A. Davis	Casper

SOUTHEAST CHAPTER

Director	Peter J. Hutchison	Cheyenne
President	Jeffery B. Jones	Cheyenne
Vice President	James E. Greer	Wheatland
Secretary/Treasurer	John P. Lee	Cheyenne

1992 Annual Convention Sheridan, WY

