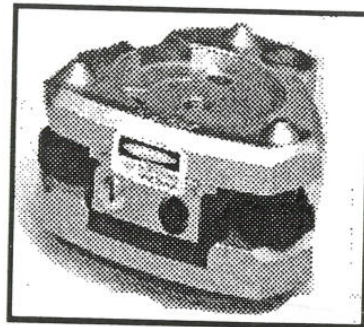


Buy the Best -From the Best



Gold Talon Tribrach

**Laser Beam Plummet
Durable All Machined Aluminum
Lifetime Warranty
Built and Warranted Locally
Last Tribrach You'll Need to Buy**

**SPECIAL
\$445.00****

Try the Best for Less

****\$595.00 - DEDUCT \$150.00 with trade in on any tribrach**

SPECIALS

-> 25' Fiberglass Level Rod	\$	149.95
-> 14' Fiberglass Level Rod	\$	79.95
-> Pumpkin Flagging Box/12	\$	6.00
-> Pumpkin Flagging Case/144	\$	62.00
-> PENTAX 22X Level Pkg.	\$	550.00
-> SCHONSTEDT GA-52CX Locator	\$	675.00
-> SCHONSTEDT MAC 51B Locator	\$	1,550.00
-> Safety Cones Heavy Duty 28"	\$	9.40
-> Safety Cones Heavy Duty 18"	\$	5.40



1001 Smithfield Drive
Ft. Collins, CO 80524
(970) 482-0111 Fax (970) 482-0428
(800) 762-5252

Also In Stock

*METRIC Level Rods-METRIC Pocket Tapes-
METRIC Cloth & Nylon Steel Tapes-
METRIC Measuring Wheels-METRIC Scales*

Full Line Geodimeter Dealer—Call for Information

"Owned & Operated By A Surveyor"

Lines & Points
P.O. Box 904
Casper, WY 82602

JOEL T EBNER
3224 WATSABAUGH DRIVE
GILLETTE WY 82716

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



THE EQUALITY STATE SURVEYOR

LINES & POINTS



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

D. R. GRIFFIN, VICE-PRESIDENT
VOLUME 8, NO. 3

PETER HUTCHISON, PRESIDENT

RICK HUDSON, SEC.-TREAS.
OCTOBER 1996

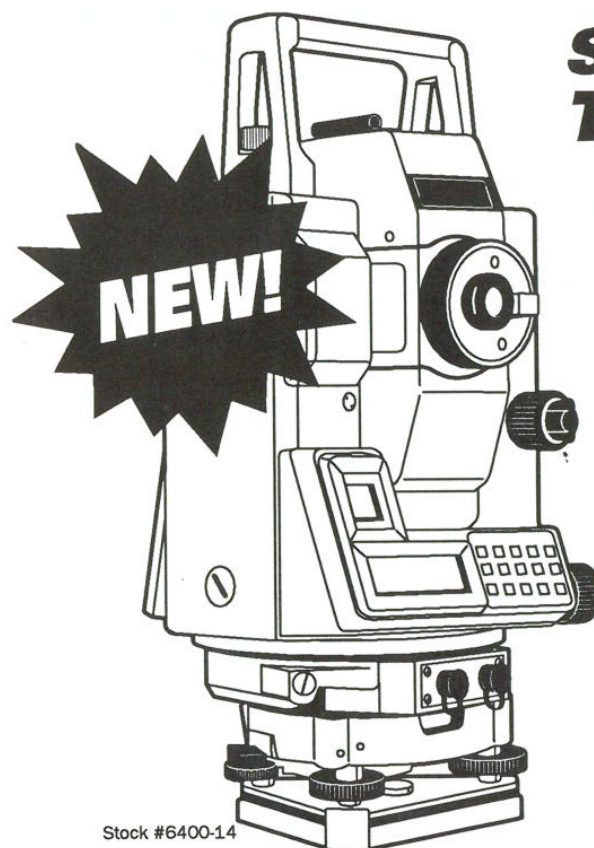


• 1996 Annual Meeting Minutes (Draft)



SOKKIA

SPECIALS



Stock #6400-14

SET4BII Electronic Total Station

- 5-second display
- fast, accurate distance measurement
- increased productivity
- advanced on-board software
- dual-axis compensator



Suggested List \$10,995

**LEASE IT FOR JUST
\$236³⁹/MO***

Low, low lease rates on other SETs.

Item	Stock#	Rate/mo
SET2BII	6400-12	\$322.39*
SET3BII	6400-13	\$279.39*

NEW 5.0 SOFTWARE SPECIALS



Sokkia Software 5.0 MAP Kit

Includes the three most popular modules - MAP, CALC & CONTOUR.

Only \$2,995

Regularly \$3,585

Stock #5187-00

Sokkia Software 5.0 ROADING Kit

Includes MAP, CALC CONTOUR and ROADING.

Only \$4,995

Regularly \$6,075

Stock #5188-00



2895 W. 8th Ave. • Denver, CO 80204

SOKKIA™

NSPS NOTICE OF AWARDS

The National Society of Professional Surveyors
Sponsors four 1997 awards for excellence in the
surveying profession.

SURVEYING EXCELLENCE AWARD

Staff Liaison: Pat Canfield ■ ACSM/NSPS, 5410 Grosvenor Lane, Bethesda, MD 20814-2122

Presented to a person who performed outstanding service to the surveying profession, this award includes an engraved plaque and a \$500 honorarium contributed by POB Publishing Co., Canton, Michigan.

The person does not have to be a surveyor or a member of NSPS or ACSM, but candidates must be nominated for the award by an ACSM affiliate section or two NSPS members at large. If nominated by an ACSM section or affiliate, the nomination must be signed by two officers of the organization. If nominated by two NSPS members at large, the nomination must be signed by the sponsors and accompanied by four letters of recommendation.

Each nomination must include a narrative stating the reasons why the sponsors feel the nominee is deserving of this honor, specific accomplishments the nominee has made toward the profession and biographical data that can be used in the award presentation.

The staff liaison must be notified of any nomination by December 31, 1996.

MOST INTERESTING SURVEYING PROJECT OF THE YEAR AWARD

Staff Liaison: Pat Canfield ■ ACSM/NSPS, 5410 Grosvenor Lane, Bethesda, MD 20814-2122

This award consisting of a Pentax IQZoom 105 Super 35mm camera with case, a plaque, and 1000 reprints of the resulting published article contributed by Pentax Corporation, Englewood, Colorado, is presented to individuals, companies, governmental units, or state associations having knowledge of interesting projects and the ability to provide documentation of the project—technical information, releases, photographs, and a record of the personnel and equipment involved. The project need not have occurred in the last year.

Interested candidates should submit a project by December 31, 1996 to P.O.B., Attn: Most Interesting Surveying Project, P.O. Box 2600, Troy, MI 48007-2600.

STUDENT PROJECT OF THE YEAR AWARD

Staff Liaison: Pat Canfield ■ ACSM/NSPS, 5410 Grosvenor Lane, Bethesda, MD 20814-2122

This award consists of a plaque and a \$500 honorarium, contributed by C&G Software Systems, Inc., Atlanta, Georgia, as well as paid travel and lodging expenses to the ACSM-ASPRS Spring Convention.

A submitted paper should describe a project in which the applicant was a participant and may involve a group of students and/or non-students. The paper must be written by one person only. Advice and constructive criticism from the applicants' instructor or supervisor is permissible and encouraged. The project need not have occurred within the preceding 12 months. All papers submitted will be considered for presentation and publication by ACSM specifications for the format of the manuscript can be acquired from the staff liaison.

Completed papers should be submitted to the staff liaison by December 31, 1996.

EXCELLENCE IN PROFESSIONAL JOURNALISM

Chairperson: Kenneth S. Curtis ■ 2204 Happy Hollow Road, West Lafayette, IN 47906

An engraved plaque is presented annually to the ACSM affiliate society whose newsletter was judged to have the highest quality during the previous year. In the past, judging was made by the editors or publications chairmen of the newsletters participating in the contest. Any editor wishing to participate should contact the chairman for information.

For complete details: Contact Pat Canfield at ACSM/NSPS 5410 Grosvenor Lane, Bethesda, MD 20814-2122 Or Call (301) 493-0200

BLM NEWS

This letter is to inform you of official cadastral surveys in Wyoming that have been accepted from January 3, 1995 through June 6, 1996, and are now available in the Survey Records Office, Wyoming State Office, Bureau of Land Management, P.O. Box 1848, 5353 Yellowstone Rd., Cheyenne, Wyoming 82003.

The accepted surveys are listed below by township, range, type of survey, meridian, and acceptance date.

SIXTH PRINCIPAL MERIDIAN, WYOMING

Township and Range	Type of Survey	Meridian	Accepted
T. 17 N., R. 84 W.	Dep. Res.	6 P.M.	01/03/1995
T. 50 N., R. 72 W.	Dep. Res.	6 P.M.	01/03/1995
T. 58 N., R. 60 W.	Remonumentation	6 P.M.	02/06/1995
T. 50 N., R. 73 W.	Dep. Res.	6 P.M.	02/15/1995
T. 51 N., R. 73 W.	Dep. Res.	6 P.M.	02/15/1995
T. 43 N., R. 68 W.	Dep. Res. & Sec. Sub.	6 P.M.	04/21/1995
T. 50 N., R. 72 W.	Dep. Res.	6 P.M.	01/03/1995
T. 20 N., R. 108 W.	Dep. Res.	6 P.M.	04/21/1995
T. 42 N., R. 71 W.	Corr. Res.	6 P.M.	04/21/1995
T. 50 N., R. 72 W.	Dep. Res.	6 P.M.	01/03/1995
T. 50 N., R. 68 W.	Dep. Res.	6 P.M.	08/17/1995
T. 50 N., R. 69 W.	Dep. Res.	6 P.M.	08/17/1995
T. 45 N., R. 77 W.	Dep. Res.	6 P.M.	08/17/1995
T. 46 N., R. 77 W.	Dep. Res.	6 P.M.	08/17/1995
T. 16 N., R. 84 W.	Dep. Res. & Sub.	6 P.M.	08/17/1995
T. 46 N., R. 76 W.	Dep. Res.	6 P.M.	08/17/1995
T. 47 N., R. 76 W.	Dep. Res.	6 P.M.	08/17/1995
T. 48 N., R. 69 W.	Dep. Res.	6 P.M.	08/17/1995
T. 25 N., R. 74 W.	Sec. Subit.	6 P.M.	08/17/1995
T. 18 N., R. 78 W.	Dep. Res.	6 P.M.	08/17/1995
T. 49 N., R. 71 W.	Corr. Res.	6 P.M.	08/17/1995
T. 42 N., R. 72 W.	Dep. Res.	6 P.M.	08/17/1995
T. 49 N., R. 63 W.	Dep. Res.	6 P.M.	08/17/1995
T. 12 N., R. 78 W.	Metes & Bounds	6 P.M.	08/17/1995
T. 14 N., R. 78 W.	Sub. & Metes & Bounds	6 P.M.	10/18/1995
T. 13 N., R. 108 W.	Metes & Bounds.	6 P.M.	11/30/1995
T. 14 N., R. 108 W.	Metes & Bounds.	6 P.M.	11/30/1995
T. 25 N., R. 109 W.	Dep. Res.	6 P.M.	11/30/1995
T. 51 N., R. 68 W.	Corr. Dep. Res.	6 P.M.	11/30/1995
T. 19 N., R. 105 W.	Dep. Res. & Subit.	6 P.M.	12/12/1995
T. 14 N., R. 78 W.	Sub. & Metes & Bounds	6 P.M.	10/18/1995
T. 25 N., R. 102 W.	Dep. Res.	6 P.M.	01/19/1996
T. 26 N., R. 102 W.	Dep. Res.	6 P.M.	01/19/1996
T. 25 N., R. 103 W.	Dep. Res.	6 P.M.	01/19/1996
T. 18 N., R. 91 W.	Corr. Dep. Res.	6 P.M.	01/19/1996
T. 49 N., R. 69 W.	Dep. Res.	6 P.M.	03/07/1996
T. 47 N., R. 69 W.	Dep. Res.	6 P.M.	03/07/1996
T. 30 N., R. 97 W.	Dep. Res.	6 P.M.	03/15/1996
T. 31 N., R. 97 W.	Dep. Res.	6 P.M.	03/15/1996
T. 12 N., R. 114 W.	Dep. Res.	6 P.M.	04/23/1996
T. 13 N., R. 114 W.	Dep. Res.	6 P.M.	04/23/1996
T. 13 N., R. 115 W.	Dep. Res.	6 P.M.	04/23/1996
T. 52 N., R. 64 W.	Corr. Dep. Res.	6 P.M.	04/23/1996
T. 44 N., R. 118 W.	Metes & Bounds	6 P.M.	05/01/1996
T. 49 N., R. 72 W.	Dep. Res.	6 P.M.	05/20/1996
T. 53 N., R. 101 W.	Dep. Res.	6 P.M.	05/20/1996
T. 56 N., R. 103 W.	Dep. Res.	6 P.M.	05/20/1996
T. 15 N., R. 76 W.	Dep. Res.	6 P.M.	06/06/1996

This letter is to inform you of official cadastral surveys in Wyoming that have been accepted from July 15, 1996 through October 9, 1996, were officially filed and are now available in the Survey Records Office, Wyoming State Office, Bureau of Land Management, P.O. Box 1848, 5353 Yellowstone Rd., Cheyenne, Wyoming 82003.

The accepted surveys are listed below by township, range, type of survey, meridian, and acceptance date.

SIXTH PRINCIPAL MERIDIAN, WYOMING

Township and Range	Type of Survey	Meridian	Accepted
T. 22 N., R. 101 W.	Dep. Res.	6 P.M.	07/15/1996
T. 16 N., R. 83 W.	Dep. Res. & Sec. Sub.	6 P.M.	08/08/1996
T. 56 N., R. 95 W.	Dep. Res.	6 P.M.	08/08/1996
T. 49 N., R. 72 W.	Supplemental Plat	6 P.M.	08/16/1996
T. 17 N., R. 93 W.	Corr. Dep. Res.	6 P.M.	08/16/1996
T. 27 N., R. 71 W.	Dep. Res. & Sec. Sub.	6 P.M.	08/26/1996
T. 13 N., R. 86 W.	Supplemental Plat	6 P.M.	10/09/1996

As other surveys are completed, I will advise you of their acceptance. You may circulate this letter among the membership of the Professional Land Surveyors of Wyoming.

EDITORIAL POTPOURRI

O NEW PLSW MEMBERS - At the 28 SEP 96 Board of Directors meeting, the following new members were approved:

John Wesnitzer, PE & LS	West Sedona, AZ	Member
Kevin Burges	Cody, WY	Associate
Pamela Schreiner	Casper, WY	Student

CONGRATULATIONS AND WELCOME

O TRIGSTAR WINNER - Jason Facer of Afton, Wyoming is this years winner of Trigstar. He finished in 8 minutes. Congratulations Jason.

O PLSW MEMBERSHIP - JOIN PLSW TODAY!
We need your support. An application is included in this issue. If you are a member, recruit a new member.

O SUPPORT OUR ADVERTISERS - As evidenced by the exhibitors at the annual convention, our advertisers support us. We should support them.

O LOCAL PLSW NEWS - We need news of your chapter's activities. Send us a summary of your chapters activities or other related activities for publication. Summaries need not be typed. The deadline for the next issue of *Lines and Points* is presented on this page.

O PLSW BOARD MEETINGS - 1996 Board of Directors meetings are scheduled as follow:

December 7 Casper (Winter Tech Session)

O LINES AND POINTS FAX - The *Lines and Points* fax number is 307-235-5604 or 307-235-8184.

O E-MAIL LINES & POINTS - *Lines & Points* is on the WEB. Contact www.dond@trib.com.

O ACSM WEB SITE - The new ACSM Web site is open and ready. The URL is <http://www.landsurveyor.com/acsm/>.

O 77th ANNUAL CONVENTION - The annual WES convention will be held in Rock Springs from January 30, 1997 to February 1, 1997. Headquarters will be The Inn (1-800-442-9692)

O ACSM 1996 GIS/LIS ANNUAL MEETING - The annual meeting will be in Denver, Colorado November 19-21.

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 statewide 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 next issue — 15 DEC. 1996

ATLAS
REPRODUCTION
AUTHORIZED AGENT FOR

XEROX

USWEST
CELLULAR

Free Pick-Up & Delivery
Complete Reproduction Services

800 East "A" Street Casper, WY
237-9523 or 800-372-3837 In State

Front Cover Artwork
by
Larry T. Perry, P.L.S.
Cheyenne, Wyoming

SBA Presents Award

CASPER — Robert St. Claire has been selected as the 1996 Wyoming Minority Small Business Person of the Year by the U.S. Small Business Administration.

St. Claire is the owner of Eagle Surveying and Mapping in Gillette.

"Mr. St. Claire represents the entrepreneurial spirit at its best and is being recognized for his contribution to the community, the state and the nation," said Steve Despain, acting district director for the SBA.

Each year since 1983, the president designates one week for recognition and celebration of the accomplishments of minority entrepreneurs. That event, Minority Enterprise Development Week, was celebrated Sept. 22-27. The MSB Person of the Year Award is part of this annual celebration.

The award selection process includes evaluation of growth in sales, profits and employees; and overcoming adversities.



SURVEY SUPPLY SERVICE COMPANY

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

ROBERT C. SHOOK

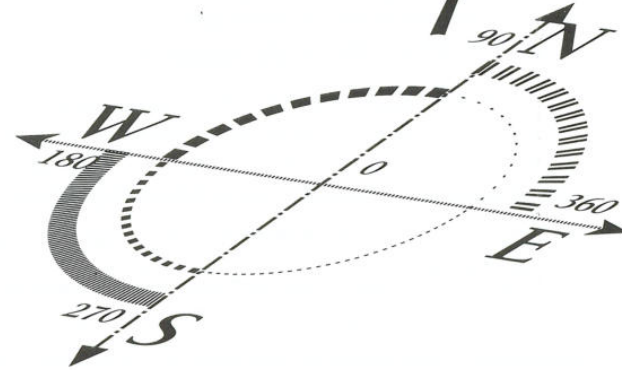
P.O. Box 90009
Casper, WY 82609
307-234-9856

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



WYOMING SW CORNER

Don't Lose Your Way



SURVEY MARKERS MONUMENTS REBAR CAPS PIPE CAPS BENCH MARKS & ACCESSORIES

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



SURVEY MARKERS & MONUMENTS

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

time line moves forward, these percentages begin to change. By the time you reach 1996, they have completely flip-flopped. You could easily spend 90 percent of your time in the records and evidence areas, while the measurements (thanks to the technology) have become very simple, fast, and routine. This is a reality all of us deal with, and the difference changes more every day. Yet we did not use the technology to "offset the time factors. We used it to accelerate our measurement capabilities, but we never took that "freed" time to increase our efforts in the legal arenas. Consider how you approach a boundary job today as compared to 25 years ago. For most of us, there has been a great shift in approach. We made great use of the technology, but we dropped the ball on the real purpose of our professional — protecting land ownership rights in their true positions.

It's Not Too Late

My friends, we can buy our souls back. And it will not cost you any money! What it will require is your honest self-assessment of how you survey, how you operate, and how you apply the technology. It will require some humility, as you discover how foolish and naive your applications of the math have been. You will discover that basic statistics do not support the vast majority of things we report on our plats. You will realize that in spite of the salesman's claims, your one-second gun does need to be turned more than once. You will learn that your favorite mentors in the profession may not have known all that they thought they did. But this is the beginning of the resoration of our professional souls. And we must do it.

Think hard about what you do and why you do it. It may surprise you how little sense it makes. Are you a professional surveyor or just a licensed measurer? Never forget the reason our profession exists — to protect the welfare of the public. Take some time to assess how your procedures and attitudes affect that task. We can turn this around! I wish you the best in your efforts. This is a great profession. Never forget why. It has nothing to do with the technology.

DENNIS J. MOULAND is a *licensed Professional Surveyor in several western states. He is currently employed by the USDA Forest Service in western Colorado. Dennis has conducted hundreds of seminars nationwide and has recently completed his newest book 'Ethics for the Professional Surveyor; A Collection of Thoughts.'*

Reprinted from *Professional Surveyor*, September, 1996.

Letter to the Editor

Pennsylvania Society of Land Surveyors

Dear Sir or Madam.

I am writing about a trend which seems to be developing in our area. That trend is for private business groups which conduct professional seminars and award a certificate at the conclusion of the seminar.

Our Society promotes, believes in and offers educational programs and seminars as do other State Societies. We are however concerned that the public may misconstrue the apparent selling of certificates.

An example of our concern is that two licensed land surveyors who have equal abilities and education might both submit a proposal for surveying services for a particular project. One of these surveyors enrolls in and completes a for profit seminar on setting property corner monuments. He receives a

certificate, for an activity he is licensed to perform and in the aforementioned proposal for surveying services he included a copy of his certificate in setting corner monuments. He is awarded the contract. The owner realized the two surveyors are equally qualified and based his selection on the basis of the certificate the one surveyor held.

In this example, the surveyor who has not attended the for profit seminar and obtained the meaningless certificate is viewed by the owner as less qualified than the other surveyor.

I realize the given example is a really simplistic silly illustration but the fact remains that the for profit seminars currently being pushed could have the effect given in the example.

We have an additional concern. We have been receiving inquiries pertaining to individuals who are not licensed surveyors or supervised by a licensed surveyor, locating and setting property corners by GPS. This is in violation of our Registration Act.

We realize we must be more attentive to this situation. We are interested in hearing if this activity has been taking place in your state, and if it has, what has your society done about it.

Our society would appreciate a response from your society as to the impact, either good or bad, of the private business seminars and the possibility that property corners may be set in violation of state law by GPS entrepreneurs.

MESSAGE:

I have passed on your letter, dated September 23rd, to the two above committees within PLSW. Either or both will most likely prepare a response to your chapter's concerns regarding misuse of seminar certificates and land surveying by non-registrant GPS entrepreneurs.

As you may be aware, beginning with renewals this December, all Professional Engineers and/or Professional Land Surveyors holding registration in Wyoming will be required to document continuing education competency. This has made, as a practical matter, attendance at seminars mandatory for all of us. The topic of "professional seminars" has been discussed at length in this state.

The matter of firms offering GPS land surveying services, without benefit of a PLS in responsible charge (read "on the payroll") surfaced several years ago and resulted, as I recall, in a formal complaint to the State Board of Registration for Professional Engineers and Professional Land Surveyors.

R. L. Hudson, PLS



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 800-231-9743

have lived up to their claims. They save us time, money and energy. They allow us to produce quantities and qualities of work unheard of 30 years ago.

I'm really glad I got to experience these changes. It has been a whirlwind of accomplishment followed by even greater improvement. Technology is an amazing part of our profession. I wouldn't want it any other way. But . . . we did not realize what it did to US.

High Price Paid by the Public

Like the baseball player in the Broadway musical "Damn Yankees," we did not count the cost of selling our souls in order to gain some other advantage. We sold our professional souls to this marvelous landslide of technology, but only now are we realizing the cost to us and our profession. More important, there has been a very high price paid by the average citizen, who relies on our licensing and regulatory processes to protect him or her from the negative effects of a profession gone mad. It is a profession that sold its soul and never counted the cost.

In our rush to utilize technology for our field and office needs, did we keep close to our hearts "why we exist as a profession?" Did we cling to our "legal roots," or did we just leave them by the roadside when we spotted a new gadget glittering in the sunlight? Did we collect all the trinkets available, only to find that they diverted us from our real purpose? Like a coyote eating poisoned bait, we swallowed without questioning, without even pausing to meditate on how these devices would divert us from the mission we set out upon.

What We Are About

How could these technological wonders do us any harm? They made things easier, faster and more accurate. How could they mislead us? The answer is simple-speed, ease, and accuracy are usually the enemies of a profession like ours. For, you see, land surveying is not about measurement. It is not about precisions, nor adjustments, nor COGO routines. Land surveying is a profession which may make use of these tools, but it is not what we are all about. We are not about shortcuts, mass-production, nor simplicity.

We are about the business of "where is it? "Where is the property corner? Does this monument represent the corner position or does it not? What is the intent of this description in this deed? What effect does this old fence have on the property lines? How does this court decision impact the boundary line of my client? All of these questions are about "where." They are not about "how precise?" They are about rights of land ownership, not about one part in a billion.

What has this soul-selling done to us as a profession? Our wholesale buy-off on the technology took us away from our purpose. We suddenly became measurement experts. We took on COGO software as if it had all the answers. We began to "set up" the gun on a hill and radially shoot in every thing, not recognizing that the device had taken us *away from the line*. The LINE: where the evidence is located. We started putting our least-experienced crew members out on the prism. The party chief, the decision-maker, was at the gun, unable to see the evidence, to recognize danger signs, to apply the iniagination often needed to do it right.

We've All Seen The Results

We live in an age where a survey has to "close" by some standard. We have access to technology that allows us to survey to amazing precisions, but we quit getting the survey done "right."

One part in a billion is meaningless if we did not start at the right place. We zap through surveys with great efficiency, but with little understanding as to the legal principles at work under our feet. We have lost the skills to interpret old plats, deed descriptions and evidence complexities. We limit our solutions to mathematical shadows of what we are supposed to be doing. We let the math make the professional decisions now. As long as it closes, as long as it looks good, as long as it is mathematically "true," the majority of our profession will call it good. But is it really?

Everyone reading this has experienced the results of the selling of our professional souls. You have seen the places where surveyors have set another monument within a tenth or two of another. You have seen locations with 5, 6, even 10 monuments in a small circle, all claiming to be the same corner point. You have stood at monuments that were set with no regard to senior rights. You've seen plats that do not tell you anything except the measurements. You have read land descriptions that contain tons of "metes," but not one "bound."

As I enter my 25th year in this profession, I look back and realize how great a percentage of the surveys I've seen, reviewed, or adjoined which were *blatantly* out of touch with the first 10 minutes of "Surveying 101." Better than half of the surveys I've looked at had major errors in procedure, evidence or interpretation. Yet they all closed! Most were great AutoCAD plats (with dynamic north arrows). They all had a seal and a signature, and usually the little trivia" that most states require. But they were worthless. They were *prima-facie evidence* that the public had not been served, that the client had been ripped-off.

I love this profession. I do not enjoy having to speak out on these issues, but my devotion and commitment to the *legal principles* behind this honorable profession require me to say it . . . we are in trouble." Our historical heritage is at stake.

How has tile technological wizardry affected you? Has the math taken over the law? Have you found yourself relying on measurements as the sole gauge of whether you would accept monuments? Has the "ease" of modern surveying camouflaged your need to take the time to get a boundary survey right? Are you too quick to rely on a mathematical solution because the legal approach simply takes too much time?

You see, the technology is wonderful of and by itself. But it has caused us to approach field work in an almost "assembly line" manner. We set up on hill, "zap" in our shots, never close our work, dump the data into a COGO routine, and start inversing and intersecting. Somehow we have raised an entire generation of employees who think *this* is surveying. But it is not. To be a good medical doctor, you must know far more than how to take a temperature and sign a prescription form. Yet for many in our profession, that is the limit of their understanding of the task at hand. I love the technology, but it was a sad day when we sold our souls to it. It controls us, it dictates our procedures to us, it has taken over my profession.

Research Versus Measurements

If you were to have retraced an 1860 GLO survey in 1862, what percentage of your efforts would have been dedicated to records search and evidence analysis vs. field measurements? Obviously it would have been 10 percent for the former, and 90 percent for the latter. But think about the effect of time. As the

(Continued on Page 17)

1996 ANNUAL STATE MEETING MINUTES (DRAFT)
FEBRUARY 1, 1996 - CASPER, WYOMING

(FOR APPROVAL AT 1997 ANNUAL MEETING)

1. Date And Location: The 1996 annual state meeting of the Professional Land Surveyors [PLSW] was held in Casper on Thursday, February 1, 1996. The meeting was in conjunction with the 76th annual Wyoming Engineering Society convention at the Park Plaza Hotel and Convention Center.

2. Call To Order: President Claflin: The meeting was called to order at 1:17 P.M. by President Jim Claflin.

a. The first item of business was the solicitation of agenda revisions and adoption of the revised agenda.

b. The signed attendance list indicates 59 members and affiliates present, as well as two guests, for a total of 61 attendees.

c. Jim asked attendees to rise for a period of remembrance for recently deceased member Allen W. Mace and former members Sylvan J. Smith and Harold E. O'Malley.

d. Introductions were made and included Honorary Members Wes Reed and Joe Popp; ACSM Board of Direction member Herb Stoughton and NSPS Area 7 Director John Steil, both also members of PLSW; Vice President Pete Hutchison and Secretary / Treasurer Rick Hudson at the front table; other board members in attendance; new members and guest Milbert Krohn of the BLM.

e. Jim announced the last call for sealed ballots and stated they were to be given to Teller Bob St. Claire as soon as possible.

3. Summary: A summary of these minutes, dated 15 March 1996, is attached and a part of these minutes. Said summary is to be printed in "Lines & Points", Volume 8, Number 2.

4. Minutes: Secretary Hudson: Rick Hudson reviewed the minutes of the 1995 annual state meeting held in Cheyenne last February. He stated the minutes, labelled "draft" had been printed in the latest issue of our publication "Lines & Points" and trusted all members had taken the opportunity to review said minutes before this meeting. Motion to approve said minutes, as published, was made by Becky Braman, seconded by Jack Studley and carried.

5. Treasurer's Report: Treasurer Hudson: Rick presented the treasurer's report which was distributed at the beginning of the meeting. The report consisted of "1996 Expenses" and "1996 Balance Sheet" (dated 17 January), and "Treasurer's Report" (dated 30 January); and is attached and a part of these minutes. He also reported the Board of Directors had authorized the purchase of a 24-month certificate of deposit, in the amount of

\$7,500 with Hilltop National Bank here in Casper, at the April meeting. Questions regarding specific items were answered. A motion to approve the report, as presented, was made by Past President Chris Hamilton, seconded by John Steil, and carried.

6. 1996 Budget: President Claflin and Treasurer Hudson: Copies of the budget had been distributed at the beginning of the meeting. Rick stated that the original budget worksheet had been approved by the Board of Directors at the December 9th meeting and amended by special vote on January 29th. Each item was reviewed to some extent. He indicated that, in past years, actual expenses have been less than anticipated by the budget and projected an ending balance of approximately \$13,000. A copy of said budget is attached and a part of these minutes. Following a general discussion; a motion to approve the budget, as presented, was made by Herb Stoughton, seconded by Jack Studley, and approved by unanimous vote.

7. Committee Reports:

a. Audit - Finance - Robert L. St. Claire, Chairman: Bob reported he had completed the audit and found the records to be in good order and represent an accurate accounting of our funds for the past year. A motion to approve Bob's audit was made by Becky Braman, seconded by John Steil and carried.

b. Membership - Stanton J. Abell, Jr. and R.L. Hudson, Co-Chairmen: Stan presented an oral version of Rick's written report, indicating a total membership of 110 members and active honorary members and 37 affiliates at the end of 1995.

c. Nominations and Elections - Becky J. Braman, Robert L. St. Claire and Chris D. Hamilton, Co-Chairmen: Becky presented an oral report relating to the choice of candidates that appear on the 1996 ballot and agreed that multiple candidates for each office would have been preferred.

d. Standards, Ethics and Professional Practice - Herbert W. Stoughton, 1995 Chairman, currently vacant: Herb distributed copies of his written report, dated 30 November, and reminded members to complete and return the 1996 Attendee Questionnaire to himself or Vice President Pete Hutchison. A copy of said report is attached hereto.

e. Education - Herbert W. Stoughton, 1995 Chairman, currently vacant: Herb continued with an oral version of his written report, also dated 30 November. A copy of said report is attached hereto. Jim Claflin also presented an oral report relating to the proposed "Winter Technical Session" tentatively planned for the first weekend in December, here in Casper.

f. Legislative - John A. Steil, Chairman: John distributed copies of his written report, specifically mentioning Senate File 0016 - Municipal Annexation. After a general discussion concerning the specifics of this proposed legislation, a motion was made by Pete Hutchison, seconded by Lloyd Baker, calling for John to testify on behalf of PLSW at the committee hearing for a requirement that annexation maps be prepared by a Professional Land Surveyor. Following a question from Kevin Jones and input from Darrel Schlup and Lloyd, the motion carried. A copy of John's report is attached to these minutes.

g. By-laws - John I. Dolinar: John indicated there was

(Continued on Page 6)



SCHERBEL ON SURVEYING
A compilation of parts of the
WYOMING STATUTES
and others items of interest to
PROFESSIONAL LAND SURVEYORS
Order from
SURVEYOR SCHERBEL, LTD.
Box 4296
Big Piney - Marbleton, Wyoming 83113
\$60.00 postpaid

nothing to report at this time.

h. Professional Awards - James D. Claflin and Peter J. Hutchison; Co-Chairmen: Jim made an oral presentation in recognition of Herb Stoughton's efforts on behalf of PLSW this past year; specifically: 1) GLO Reports, 2) History of PLSW, 3) Canon of Ethics, 4) Control Surveys for Utilities, 5) LCCC Courses; 5) State Plane Projection Tables. He concluded by stating that a formal Certificate of Appreciation will be prepared and delivered to Herb as a symbol of our appreciation.

i. Public Relations and Publicity - Craig A. "Andy" Shauers, Chairman: Andy was not in attendance and no report was submitted.

j. Scholarship - Martin A. Pedersen, Chairman: Martin was temporarily out of the meeting attending to WES business. Rick Hudson, as a committee member, stated that there had been four recipients at the state level and two in cooperation with the Northeast Chapter during 1995. [Martin's report was delivered later in the meeting; refer to Minute Item 15.d.]

k. History - William D. Braman, Chairman: Bill was not in attendance and Becky presented an oral version of his written report; stating that Herb has completed the updated "PLSW - A History" and that the work is to be printed for insertion into the "PLSW Handbook".

l. Corner Record - J. Harvey Copeland, Chairman: Harvey presented an oral report concerning the activities of the committee during the past year. He stated that the guide lines for preparation of the Corner Record forms has been printed in the current edition of "Lines & Points". Herb stated that, as an ad hoc committee whose mission appears to have been completed, the president could take action to disband same. Jim agreed with this statement and stated that the committee is dissolved; adding that future activities will be the responsibility of the Standards, Ethics and Professional Practice Committee.

m. Manual of Practice Committee - Herbert W. Stoughton, 1995 Chairman, currently vacant: Matters relating to this committee appear as New Business later in this meeting, Agenda and Minute Item 15.c).

n. PLSW Handbook - Scott Pierson, Chairman: Scott was not in attendance. Rick reminded members that responsibility

for printing and distribution of our handbook has been assumed by the Upper Platte Chapter; adding that roster, history and projection tables inserts will be printed for distribution, through the directors, by the May board meeting.

o. Election Teller - Robert L. St. Claire, Chairman: Ballots were being counted and the election results appear as Agenda Item 13 [Minute Item 12] later in this meeting.

p. "S.O.S." Corner Record / NSPS Map Competition - Peter J. Hutchison, Chairman: Pete read from his written report concerning the "Save Our Surveyors" honorarium established by Honorary Member Paul Scherbel and stated that several entries had been received; adding that voting was to take place during the convention. He continued by mentioning the ACSM/NSPS Map Competition, and the several entries submitted by PLSW members.

q. Newsletter "Lines & Points" - John H. Hibsman, Jr., Don A. Davis and Steven J. Strang, Co-Chairmen: Don stated that the committee reported a slight loss during 1995. When queried, he stated that the level of funding in the budget [\$2,440] would be adequate. As has always been the case, he stated that material for publication is always needed, whether on paper or 3½" magnetic diskette.

8. NSPS and WFPS Reports:

a. National Society of Professional Surveyors [NSPS] Becky J. Braman, Governor: Becky presented an oral version of her written report summarizing the two meetings this past year; Charlotte in February, and Nashville in November. She stated that reports of those meetings have been published in "Lines & Points". She stated the fall 1996 ACSM convention is to be held in Denver and urged members to attend. She also mentioned the Certified Technician Program, that she is on that committee, and invited members to contact her for additional information regarding the four levels of certification within the program. Copies of all three reports are attached to these minutes.

b. Western Federation of Professional Surveyors [WFPS] Paul A. Reid, Delegate: Paul presented a written and oral report summarizing activities from the various member states. He mentioned off particular interest were new legislation in Oregon concerning right of entry and statute of limitations for surveyors. He concluded his report by reminding members of the importance of keeping informed on various issues. A copy of said report accompanies these minutes.

9. Old Business: Old business consisted of two items carried over from the 1994 annual state meeting and placed on this meeting's agenda by President Claflin. Both originated within the Professional Practice Committee, chaired by Herb Stoughton:

a. Code of Ethics For Professional Land Surveyors: Jim referred to the "Draft" dated 10 January 1994, and stated the deadline for comments was to be the upcoming Board of Directors' meeting on 4 May. A general discussion followed with particular concern over any wording that might hint of "price fixing", various members pointing out what happened several years ago to the land surveyors in Arkansas. Herb pointed out the need to adopt a code before the state board of registration mandates something which might not be to our liking. Kevin Jones asked if NSPS or WFPS has an existing code of ethics and someone responded that NSPS does, WFPS does not. In response to a question concerning the purpose of the document, Herb spoke regarding the state board of registration mention of the code of

(Continued on Page 7)

of different technical courses which provides students with the broad education that's required by surveyors today. This will give them a better opportunity of quality employment when they graduate. "

Dr. Stoughton and the MSCD/PLSC Steering Committee are already actively developing strategies to continue to promote the department and increase enrollment. Some of the plans include:

- Making MSCD students who have not declared a major more aware of the department and the importance of surveying in general.

- Going off campus to teach courses at regional centers on weekends.

- Providing information to high school students who may be interested in surveying as a career. Part of this will be accomplished by supporting the ACSM Trigstar math contest, which takes place every year at high schools throughout the nation.

- Targeting the students at community colleges that are taking part in two-year programs, and want to continue their education at a four year school.

- Supporting cooperative education and make the surveying department more flexible for students who work and attend school.

- Rethinking how courses are being offered and developing innovative teaching techniques including interactive videos and providing the very latest surveying equipment and technology for use in the courses (CSEF is actively soliciting funds from foundations to provide equipment, scholarships and support to the program).

Dr. Stoughton, MSCD, and the Steering Committee all have very realistic goals for the school's surveying program. Short term plans include national accreditation for the department by ABET, and a continued increase in enrollment. Beyond that, the ambitions of all the people involved could make MSCD's surveying department the most highly respected program in the Rocky Mountain Region.

"We have a five year plan to make MSCD's surveying program the center of surveying education in the Rocky Mountain Region," commented Stoughton. "As long as we continue to receive the support of companies and individuals throughout the surveying and mapping industry, there is no reason why this cannot happen"

The Selling Of Our Professional Souls

DENNIS J. MOULAND, LS

How well I remember that year. It was the year my chosen profession began the slow but constant selling of its very soul. It was almost imperceptible, and I did not realize what had happened until many years later. In retrospect I can see clearly what took place. We were unprepared for the trade-off we unknowingly made back in the early 1970s.

It was a time of excitement. America had put a man on the moon the previous decade, and we were seeing the end of the conflict in Viet Nam. New technological wonders were appearing regularly, including the hand-held calculator. It seemed there was no end to where our technology, dreams and goodwill could take us. But it did just that . . . it took us. We sold our souls. The land surveying profession changed forever. It would never be the same.

A Large Orange Suitcase

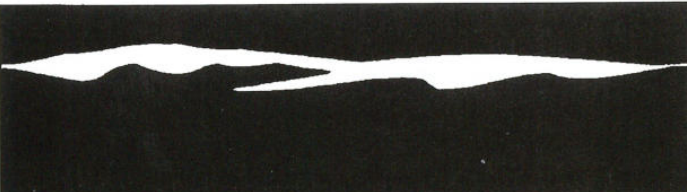
The first time I saw the "culprit," it was housed in a large orange suitcase. It came with a separate battery and a strange set of mirrors that looked as if the Martians had left them from the "War of the Worlds." It promised to speed up the survey process. It guaranteed that less brush would be cut. And I swore to uphold accuracies we had never dreamed possible. And it lived up to all these claims. It worked wonderfully. The HP 3800 was a marvelous device that took the land surveyor from brush-cutter to high-tech wizard. Soon there followed variations with new whistles and bells. Names like Tellurometer, Wild, Geodimeter and Zeiss were placed on similar devices, which kept getting smaller and smaller. Then the Japanese came with their Topcon and other versions. It was marvelous.

In an almost parallel manner, the calculators arrived. First there were trigonometric functions right in the machine. But then the programmables came along. We all jumped on the bandwagon of writing routines to make our HP or TI work those routine calculations. Then someone invented the mag-card reader, and prewritten programs of greater complexity were made available, literally at your fingertips! Who would have dreamed of the power and versatility one now finds in the "average" hand held. My HP48SX is truly wasted on my simple applications. It is so much smarter than I!

The personal computer came of age, with dizzying amounts of memory (256KB seemed phenomenal at the time), and the ability to speed through calculations on even the largest of projects was readily available. It was a good thing too, because once GPS came along, we had to have those computers to help us process that data. Soon yellow or blue boxes were popping up everywhere; set up over triangulation stations all over the world. The technological wonders of the military's satellite-based navigation system wooed us further down that road. We could directly download both terrestrial and GPS survey data into powerful COGO programs, where we could manipulate the data in endless ways. And plat drafting became a more routine effort than in the past, what with AutoCAD and such. Was there no end?

Truly the technological wonders our profession has employed

(Continued on Page 16)



WIND RIVER RENTALS
TRIMBLE GPS RECEIVERS
4000 SSI □ Dual Frequency
RTK with OTF initialization □ Static, Fast Static

Equipment Rentals
On-site Training □ Consulting
Static Data Processing

WIND RIVER RENTALS
P.O. Box 895
Dubois, Wyoming 82513
Phone: (307) 455-2796 □ Fax: (307) 455-3155



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

WINTER TECHNICAL SESSION

DECEMBER 6 & 7, 1996 • Parkway Plaza Hotel • Casper, Wyoming

GENERAL INFORMATION

REGISTRATION: Participants may register the day of the seminar. Preregistration is suggested to ensure adequate seating. FEE: \$75.00.

AGENDA:

December 6	8:00 am - 9:00 am	Registration
	9:00 am - 12:00 pm	Seminar
	12:00 pm - 1:00 pm	Luncheon
	1:00 pm - 5:00 pm	Seminar
	5:00 pm - 7:00 pm	Social Hour

December 7	8:00 am - 12:00 pm	Seminar
------------	--------------------	---------

SEMINARS

"EVALUATION OF CORNER EVIDENCE"

Instructor: Stanley French

The seminar will focus on evaluating the elements of corner evidence for their ability to serve as proof of a corner point. Selected cases and examples demonstrative of how a surveyor should weigh evidence will be discussed.

• **STANLEY G. FRENCH - Land Surveyor**
U.S. Forest Service, Mark Twain National Forest,
Rolla, Missouri

Beginning his career with the Bureau of Land Management in 1977, Stan has conducted dependent resurveys in six midwestern states, and served as Project Manager for cadastral project offices in Missouri and Arkansas. He became the Geographic Coordinate Data Base Manager at the Wyoming State Office, BLM, in 1989. In 1991, he took his current position with the U.S. Forest Service as Boundary Manager for the Mark Twain National Forest in Missouri. He has a B.S. in Forest Management, graduate credit in Advanced Surveying from the University of Arizona, and is a Missouri Licensed Land Surveyor. Stan has conducted several seminars for local Chapters, County and State Associations, ACSM and various BLM/USFS courses.

LOCATION & LODGING:

A block of rooms has been reserved at the Parkway Plaza Hotel, 123 West "E" Street, Casper, Wyoming. Rate: \$40 per night
Telephone: 1-800-270-7829

PROFESSIONAL DEVELOPMENT HOURS:

11 Professional Development Hours will be awarded for the entire seminar.

FOR MORE INFORMATION CONTACT:

Jim Claflin 686-6750
Ann Brady 682-1661

"OVERVIEW OF CONTRACT LAW"

Instructor: James P. Schermetzler

Mr. Schermetzler's topic will involve an overview of contract law as it relates to the practicing surveyor. We will discuss issues relating to contractual and tort liability of surveyors and some practical ways to minimize liability by increasing awareness of pitfalls and increasing awareness of attention to detail and client relations.

• JAMES P. SCHERMETZLER - Attorney

Jim has been an attorney since 1975. He graduated from John Marshall Law School in Chicago, Illinois with a Juris Doctorate Degree. Jim practiced in Wisconsin for seven years and has been practicing in Wyoming since 1982. Jim's practice began as a very general practice and gradually has become more narrowed to the areas of business, banking, real estate, probate, trust, collections, contract drafting, and litigation. He was in-house counsel for two banking organizations from 1986-1991. He returned to private practice in Gillette in 1991.

Jim has been teaching classes at community colleges and Regis University at the Gillette campus since 1987 in Business Law, banking related subjects, Business Ethics, and one semester of Survey Law. Jim enjoys the diversion that the classroom gives to him from day-to-day practice of law. He is a member of the Wyoming State Bar and currently holds the position of District Bar Commissioner for the Wyoming State Bar.

ethics for Professional Engineers in 1986 and read the last paragraph of the memo which accompanies the above mentioned draft. Ultimately the code of ethics would be submitted to the state board of registration for inclusion in their "Rules and Regulations". Jim stated that copies would be distributed to directors for presentation at chapter meetings prior to the May board meeting.

b. A Policy on Control Surveys for Utilities in Wyoming: Jim introduced this matter by referring to the "Draft" dated 21 January 1994. Herb presented an oral report which included background into the matter; stating that ACSM adopted a similar policy regarding route surveys years ago. The lack of a general discussion indicated that members were less concerned with this topic than the above mentioned Code of Ethics. Jim stated that copies would be distributed to directors for consideration at the May 4th board meeting.

10. Certificates of Appreciation: Past President Chris Hamilton acknowledged the efforts of the Corner Record Committee, introduced committee chairman Harvey Copeland and members in attendance, and stated that the certificates of appreciation would be sent by mail at a later date.

11. Break: Jim announced a recess, of 15 to 20 minutes, at 3:08 P.M. wherein attendees dispersed, commingled or otherwise socialized. He reconvened the meeting at 3:45 P.M.

12. Election Results: Teller Bob St. Claire began his report by stating that approximately 70% of the members had voted. He stated that the three unopposed candidates won the election: President, Peter J. Hutchison; Vice President, D.R. "Dick" Griffin; Secretary / Treasurer, R.L. "Rick" Hudson. The written version of this report accompanies these minutes.

13. Installation of 1996 PLSW Officers: John Steil, PLSW member and NSPS Area 7 Director, called all members of the board of direction to the front of the meeting and administered the oath of office to us and the affirmation to the members, as he has done in past years. Now President Pete Hutchison acknowledged the service of Jim Claflin as president during the past year and presented him with the traditional plaque in recognition of his service to PLSW.

14. Inaugural Address: Pete presented his inaugural address to the membership; stating his desire to visit each chapter during the coming year, soliciting input for committee assignments and stressing the importance of the Trig-Star program and surveying education in general. He informed the membership that only twelve new PLS registrants were confirmed by the state board of registration during 1995.

15. New Business:

a. "Mapping the Frontier" bronze raffle report: John Steil, as special committee chairman, reported on the status of the raffle and ticket sales during the past year. He stated that he had money for 220 of the 400 tickets but that four of our seven chapters had not yet reported to him. He announced the drawing will be held Saturday night at the Wyoming Engineering Society awards banquet, regardless of the number of unsold tickets.

b. Guide For Preparation of Corner Records: Former Corner Record Committee Chairman Harvey Copeland deferred to Rick Hudson who led a general discussion concerning the two-page "Guide For Preparation of State of Wyoming Corner Record" that had been mentioned during committee reports. He indicated the committee, comprised of the Northwest Chapter,

observations and opinions in drafting the guide; that it offers suggestions rather than mandates concerning the preparation of the March 1994 version forms.

c. Projection Tables For State Plane and UTM Systems: Herb Stoughton distributed copies of his written report outlining the recently completed "Projection Tables For State Plane and UTM Systems for NAD27 and NAD83". He said the work is intended as a part of our Manual of Practice and suggested it should be formally submitted to the State Board of Registration of Professional Engineers and Professional Land Surveyors. He concluded by stating that the approximately 150-page work will be published for inclusion in the "PLSW Handbook" for distribution at the May 4th PLSW board meeting in Laramie.

d. Conversion of USGS BM levelling to NAVD 1988: Martin Pedersen presented an oral report concerning a proposal to convert the existing U.S. Geological Survey levelling to NAVD 1988. The proposal is set forth in a report by Herb Stoughton titled "Wyoming: Conversion of the Third-Order Geodetic Leveling of the U.S. Geological Survey From NGVD 29 to NAVD 1988: An Assessment of the Program and the Conversion Algorithm". A copy of same accompanies these minutes. He gave members background into the need for, and requirements of, the proposed project; and asked for assistance with funding requests to large corporate firms and counties. He stated that the estimated cost of the project is approximately \$160,000.

Since he was not present earlier for his Scholarship Committee report, he added that non-traditional scholarships are available and mentioned the Laramie County Community College "Engineering Technology" program for Land Surveyors In Training. He also reported as a member of the SBRPEPLS; informing members that the new rules and regulations have been submitted to Governor Geringer, who has sixty days to take action regarding same.

e. Upper Platte Chapter project, List of deceased / retired surveyors: Martin, now as a member of the Upper Platte Chapter,

(Continued on Page 8)

P.L.S.W. REGISTRATION FORM

Name _____

Company _____

Address _____

Phone _____

Amount Enclosed _____

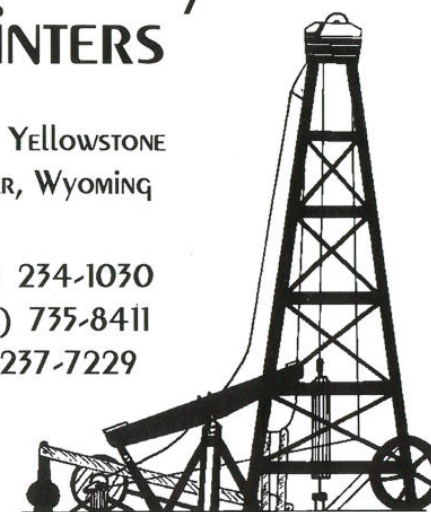
(Please return your registration by: November 26, 1996)



Oil City PRINTERS

544 E. YELLOWSTONE
CASPER, WYOMING

(307) 234-1030
(800) 735-8411
Fax: 237-7229



Serving Casper & Wyoming since 1917

discussed a proposed chapter project to compile a list of deceased or retired surveyors. He stated that a request for funding has been made to the board of directors, outlined the need for such a listing, and solicited information through a display at the WES registration desk.

f. Surveying courses at University of Wyoming: John Steil substituted for Rod Skaggs with an oral report concerning surveying courses at the University of Wyoming. He stated a total of 30 hours are presently available, including teleconferencing and video tapes. Lloyd Baker asked "how are the courses presented?". Jeff Lewis provided additional information regarding the program through Sheridan College's Gillette Campus. Herb Stoughton stated that he had met with the state board of registration in December regarding ABET procedures to meet the statutory requirements. Martin, as a state board member, stated that the "30-hours" requirement pertains to a degree in Surveying Technology and that the present UW courses will not meet that requirement. This ignited a general discussion dealing with all manner of educational availability, acceptability and accreditation. Most members agreed that it can be very difficult to obtain traditional education. John Steil added fuel with the possibility of using a portion of our scholarship fund to help pay for ABET accreditation. No formal action was taken.

g. Letter regarding NAFTA resolution: Jim Claflin mentioned a letter he had received from the California society regarding the "temporary authorization for the practice of engineering" under the NAFTA agreement. Becky Braman and Herb Stoughton offered comments with Herb stating that, based on his knowledge as a member of the ACSM board of direction, the matter pertained only to engineering and not to land surveying.

h. History of GLO Surveys: Herb Stoughton stated that handouts regarding this topic were available at the side table. He then gave members an update regarding the "History of GLO Surveys" he has compiled, stating that the series will contain eight, perhaps nine, volumes and cover the period up to 1910. He concluded by stating that copies are available, from him, for printing costs of approximately \$25 - \$35 per volume.

i. Trig-Star Program: Marshall Lindeen, state Trig-Star program coordinator, updated members on this year's competition. He stated the Southeast and Northeast Chapters each give \$50 awards; that the competition must be completed by May 29th and that one contestant from each chapter area will be eligible for the state competition. Darrel Schlup suggested that awards be given at each chapter level.

16. Announcements:

a. Board members were reminded of a board of directors' meeting to be held later during the convention, as required by the By-laws.

b. John Lee mentioned the recent publication of Al White's book on initial points.

c. Kevin Jones announced that he had discovered defective data within the CD-ROM from NGS; 200,000 meter errors in the northings for stations in the East Central and West Zones, 4902 and 4904, respectively.

17. Adjournment: The meeting was adjourned by motion of Herb Stoughton, seconded by Becky Braman, and carried by unanimous vote at 5:05 P.M.

Dated this 20th day of July, 1996.

R.L. Hudson, Secretary / Treasurer

BOARD OF DIRECTORS' MEETING SUMMARY

The summer meeting of the Board of Directors was held in the conference room of JFC Engineers, Architects, Surveyors office in Rock Springs on Saturday, September 28, 1996. The meeting was hosted by the Southwest Chapter, arrangements having been made by Director Joe Manatos.

The meeting was called to order by President Pete Hutchison at 9:54 A.M. with nine board members and three other members present and began with revisions to the agenda.

The minutes of the May 4th board meeting, held in Laramie, had been previously mailed to all board members and were presented by Secretary Rick Hudson. Following discussion, they were approved as presented.

The treasurer's report was presented, also by Rick Hudson, and consisted of tabulations of the current funds as well as expenses and balances for the first eight months of the year.

Martin Pedersen, PLSW and State Board of Registration for Professional Engineers and Professional Land Surveyors member, presented an oral report concerning several subjects. He began by soliciting input for topics to be considered for presentation at the 1997 Wyoming Engineering Society convention and mentioned the probability of a mock trial or session on legal aspects. He stated that work is continuing on the "Retired / Deceased List" and again asked for input from PLSW members. His report then shifted from PLSW matters to proposed legislative issues resulting from the latest SBRPEPLS meeting. Regarding any proposed code of ethics for land surveyors, Martin stated

(Continued on Page 9)

BUREAU OF LAND MANAGEMENT

Policy Statement for Contracting of Surveying and Mapping Sciences Activities

Subject: Contracting Policy

Background:

The Bureau of Land Management (BLM) recognizes that private contractors can provide valuable and worthwhile services. This statement is intended to document and clarify the BLM's policy with regard to contracting of surveying and mapping sciences' services.

The BLM provides a number of services associated with the establishment and maintenance of boundary lines of the Nation's public lands; spatial, land, and geo-reference data collection; and management of natural and cultural resources. The BLM activities are national in scope and are authorized and funded by Congress, whether within the BLM or other Federal agencies.

Policy:

The BLM advocates contracting to the private sector as a method to meet its surveying and mapping sciences objectives. This is accomplished by the use of qualifications based architectural and engineering (A/E) selection procedures authorized by the A/E Brooks Act (40 U.S.C. 541-544) or, when the principal purpose of the contract is for Federal Information Processing (FIP) resources, using automated data processing (ADP) competitive negotiation procedures authorized by the ADP Brooks Act (40 U.S.C. 759). Contracting can be accomplished by the private sector, for the collection, processing and displaying of spatial data, including:

Field survey measurements, plat drafting, field note preparation, Geographic Coordinate Data Base collection and processing, software development, digitizing, photo acquisition and reproduction, compilation, photo interpretation and remote sensing and related image acquisition, processing and reproduction.

This statement is intended to communicate BLM's policy as it relates to its surveying and mapping sciences programs, providing that: (1) it will not be a financial impairment to the surveying and mapping sciences programs, (2) all services are of high quality, and (3) the contracted services are delivered in a timely and cost effective manner. Further, it is also the policy to facilitate and enhance opportunities for the private sector while maintaining a technically qualified core work force necessary to (1) monitor the quality of contracted services and (2) provide basic surveying and mapping sciences needs to meet the BLM's national responsibilities. To accomplish this goal, the BLM will maintain a dialogue with appropriate representatives of organizations in the surveying and mapping profession, such as the American Congress on Surveying and Mapping (ACSM), the American Society for Photogrammetry and Remote Sensing (ASPRS), the Management Association for Private Photogrammetric Surveyors (MAPPS), and their affiliates. — Approved 1993

Herbert W. Stoughton to Lead Metro's Surveying Program

As the new lead professor, Stoughton foresees steady growth and renewed interest in one of the Rocky Mountain Region's most important surveying departments

The second year of the Partnership Agreement between the Professional Land Surveyors of Colorado (PLSC) and Metropolitan State College of Denver (MSCD) has started with great enthusiasm. The school's renewed surveying department begins the 1996/1997 with one of the surveying industry's outstanding leaders and teachers as its lead professor. On August 26, Herbert W. Stoughton — a registered professional engineer, professional land surveyor and certified photogrammetrist — assumed the role following a national search and review of applicants. His position will be an important one in the growth and continued success of the department.

Dr. Stoughton's background includes more than 35 years of experience in the surveying industry. His accomplishments are well known, including positions with the Defense Mapping Agency at the United States Department of Defense and his work as a self-employed consultant. Dr. Stoughton has provided surveying, engineering, and geodetic engineering support to a variety of individuals, companies and government entities. His work and insights have also been published in a number of professional, trade, and educational publications.

Dr. Stoughton's credentials did not go unnoticed by the PLSC, or Tom Cave, PLS, president of Accurate Consultants, Inc., president of the PLSC's Colorado Surveying Education Foundation (CSEF), and co-chair of the MSCD/PLSC Steering Committee. With an increase in enrollment of more than 230 percent during the previous school year, the MSCD/PLSC Steering Committee began to actively recruit candidates for the position of lead professor last spring. It was imperative that they hire someone who was not only a good instructor, but someone who could help the department continue to grow. - 1 -

"Dr. Stoughton was the strongest candidate for this position and will provide surveying students with an abundance of experience and knowledge," said Cave. "There is not a stronger surveying department in the state of Colorado today, and perhaps anywhere in the Rocky Mountain Region. A lot has been accomplished during the first year of this unique agreement, and with the addition of Dr. Stoughton much more will be done."

Stoughton admits to having other options available to him, but decided that his role at MSCD could be a very positive one. In his opinion, the surveying department is on the right track, and there are a number of very positive things to expand on.

"There's a great deal in our favor that will make MSCD's surveying department very strong," said Stoughton. "First of all, the school is very supportive of the program, which will make a big difference as we move forward. The surveying department here is also more diversified than at most schools, where specialization has become the norm. We offer a number

(Continued on Page 15)

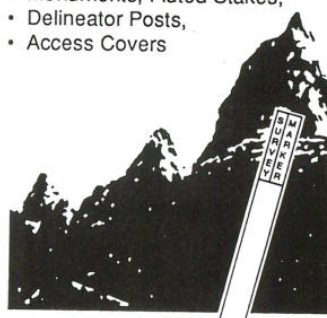
SURV-KAP®

LANDMARK DISCOVERIES



Aluminum

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



Carsonite®

- Boundary Stakes
- And Accessories



Brass

- Concrete Markers
- Cast Brass



Stainless Steel

- Monuments
- Stakes



Permark®

- Plastic Markers

FREE CATALOG AND PRICE LIST

CALL

(520) 622-6011
1-800-445-5320
FAX (520) 792-2030

or WRITE:

SURV-KAP

P.O. BOX 27367
TUCSON, ARIZONA 85726

be required to have a minimum of ten (10) CPC hours [units] in each profession, with a combined total of thirty (30). A maximum of fifteen (15) CPC units may be carried forward into the subsequent renewal period.

CPC units may be earned as follows:

- (a) Successful completion of college courses.
- (b) Successful completion of continuing education courses.
- (c) Successful completion of correspondence, televised, videotaped, audiotaped, and other short courses/tutorials.
- (d) Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions or conferences.
- (e) Teaching or instructing in (a) through (d) above.
- (f) Authoring published papers, articles, monographs, or books.
- (g) Active participation in professional or technical societies.
- (h) Patents.
- (i) Self directed study/research

Section 6. Units.

The conversion of other units of credit to CPC units is as follows:

- (a) I college or unit semester hour 45 CPC
- (b) I college or unit quarter hour 30 CPC
- (c) I continuing education unit. 10 CPC
- (d) I contact hour or professional development in course work, seminars, or professional or technical presentations made at meetings, conventions, or conferences 1 CPC
- (e) For teaching apply multiple of 2 (teaching credit is valid for teaching a course or seminar for the first time only. *Teaching credit does not apply to full-time faculty.*)
- (f) Each published paper, article, monograph, or book 10 CPC
- (g) Active participation in professional and technical society. (each organization) 2 CPC
- (h) Each patent 10 CPC
- (i) Self directed study/research 5 contact hrs/yr

Section 7. Determination of Credit. The Board has final authority with respect to approval of courses, credit, CPC value (unit) for courses, and other methods of earning credit.

(a) Credit for college or community college approved courses will be based upon course credit established by the college.

(b) Credit for qualifying seminars and workshops, will be based on one CPC unit for each hour of attendance. Attendance at qualifying programs presented at professional and/or technical society meetings will earn CPC units for the actual time of each program.

(c) Credit determination for activities Section 6 (f) and Section 6 (h) is the responsibility of the registrant, subject to review as required by the Board.

(d) Credit for Section 6 (g), active participation in professional and technical societies (limited to 2 CPC [units] per organization), requires that a registrant serve as an officer and/or actively participate in a committee of the organization. CPC credits [units] are not earned until the end of each year of service.

Section 8. Record keeping. The responsibility of maintaining

of the registrant. Records required include, but are not limited to: 1) A log/diary showing the type of activity claimed, sponsoring organization, location, duration, instructor's or speaker's name, and CPC credit [unit] earned; 2) Attendance verification records in the form of completion certificates, receipts, or other documents supporting evidence of attendance; or 3) Records as maintained by the National Professional Development Registry of Engineers (NPDRE), or other similar depositories. These records must be maintained for a period of three years and copies may be requested by the Board for audit verification purposes.

Section 9. Exemptions. A registrant may be exempt from the continuing professional competency Education Requirements for one of the following reasons:

- (a) New registrants by way of examination or comity shall be exempt for their first renewal period.
- (b) A registrant serving on temporary active duty in the armed forces of the United States for a period of time exceeding one hundred twenty (120) consecutive days in a year shall be exempt from obtaining the continuing professional competency required during that year.

(c) Registrants experiencing physical disability, illness, or other extenuating circumstances as reviewed and approved by the Board may be exempt. Registrants who believe that they are eligible should contact the Board Office for requisite documentation required to substantiate the claim.

(d) Registrants who list their occupation as "retired" on the Board approved renewal form and who further certify that they are no longer receiving any remuneration from providing professional engineering or professional land surveying services shall be exempt from the continuing professional competency required. In the event such a person elects to return to active practice of professional engineering or professional land surveying, continuing professional competency must be earned before returning to active practice for each year exempted, not to exceed the annual requirement for two years.

Section 10. Reinstatement. A registrant may bring an inactive registration to active status by earning all delinquent CPC units. However, if the total number required to become current exceeds thirty (30), then thirty (30) shall be the maximum number required.

Section 11. Comity/Out-of-Jurisdiction Resident. Registrants who are registrants of jurisdictions other than Wyoming must satisfy the CPC requirements of their resident jurisdictions. If registrants reside in a jurisdiction that has no CPC requirement, the registrant must satisfy the requirements of Wyoming.

Section 12. Dual Registrants. The number of CPC units required shall be a minimum of ten (10) CPC hours [units] in each discipline, with a combined total of thirty (30) required. Holders of a second registration are free to utilize CPC units approved for either field at their sole discretion.

Section 13. Forms. All renewal applications will require the completion of a continuing education form specified by the Board outlining CPC credit [units] claimed. The registrant must supply sufficient detail on the form to permit audit verification, must certify and sign the continuing education form, and submit with the renewal application and fee.

Note: "[unit]" has been inserted, to clarify and delete any

that the board can accept only a nationally recognized code at the present time. He mentioned the need for proposed civil penalties and changing "registrant" to "licensee". Changes regarding corporations and limited liability companies have also been discussed. He concluded by stating that the State Engineer is seeking SBRPEPLS authority, through rules and regulations rather than statute, to set forth map sizes.

National Society of Professional Surveyors Governor Becky Braman distributed copies of various handouts from NSPS and ACSM and presented an oral report on several topics of national interest. She reminded members of the fall convention coming up in November at Denver and the Spring 1997 convention planned for Seattle. Becky also mentioned the Certified Surveying Technician program, of which she is a committee member, and the meeting in North Carolina next week.

Rick Hudson stated that Paul Reid, our delegate to Western Federation of Professional Surveyors, had sent a letter stating his report of the June 1st meeting appeared in the last issue of "Lines & Points" and that the next "WestFed" meeting will be on November 8th.

Reports were presented by Education/Convention, Newsletter and Trig-Star Committees.

Jim Claflin presented an oral report of his Education/Convention Committee's progress on the "Winter Technical Session". He stated that Stan French will present a seminar on corner evidence and analysis and Jim Schermatzler's presentation will concern contract law. The session will be held at the Parkway Plaza in Casper on December 6th and 7th. He stated that the Parkway Plaza has offered a \$40 room rate for attendees. The registration fee is to be \$75 for members. A general discussion followed wherein the registration fee and continuing education requirements were mentioned.

Don Davis, of our newsletter "Lines & Points", announced the e-mail address is "dond@trib.com". He stated that material

for publication in the next issue should be submitted shortly and that any media is usable; including e-mail, paper or magnetic diskette.

Marshall Lindeen, state coordinator for the NSPS "Trig-Star" Program, updated board members on this year's competition. He stated that four chapters had participated, involving 18 high schools around the state. The state winner is Jason Facer, of Afton, who received a plaque and an honorarium of \$300. Congratulations!

Old business followed with Pete Hutchison presenting an oral report updating members on the gift to Laramie County Community College Foundation of \$6,000 for purchase of six "total stations" from Geotronics for the Engineering Technology program. He stated the money was delivered to Oliver Sundby and that the instruments should be delivered next week. Both PLSW and LCCC will be publicizing the event through various media outlets. PLSW member Dr. Herbert Stoughton, formerly with the LCCC program, is now a professor at Metro State in Denver. Our best regards on your new endeavor Herb!

Wrapping up old business was an oral report by Honorary Member Paul Scherbel on yesterday's commemoration ceremony for the southwest corner of Wyoming by the Professional Surveyors of the Sixth Principal Meridian. The board took action to authorize payment of approximately one-fourth of the expenses, not to exceed \$250.

The first item of new business was the presentation of applications for new membership by Rick. One new member, John B. Wesnitzer, of Arizona, was confirmed as were two affiliates: Pamela R. Schreiner, a graduate student at Purdue University, and Kevin Burges, of Cody. Welcome to PLSW!

Several announcements were made. Pete read from an article, clipped from the Wyoming Tribune-Eagle by Herb, recognizing former PLSW President Bob St. Claire as "Wyoming

(Continued on Page 10)



SOUTHWEST CORNER WYOMING, 1996

Minority Small Business Person of the Year" by the U.S. Small Business Administration. The article states "Mr. St. Claire represents the entrepreneurial spirit at its best and is being recognized for his contribution to the community, the state and the nation,". PLSW adds "to his profession" - Congratulations, Bob!

Pete mentioned correspondence from NCEES, requesting funding for a correspondence course regarding ethics. Paul Scherbel, a former member of the SBRPEPLS, stated the course is used in conjunction with disciplinary action resulting from formal complaints against registrants. Following a general discussion, the matter was tabled until the December board meeting and discussion of the 1997 budget.

Copies of "Criteria For Surveying Education" were distributed; Pete mentioned the section dealing with the "Industrial Advisory Committee" and the need for PLSW member input on same.

Rick mentioned a memo and report, titled "Continuing Education For Registration Renewal", that had been received from Herb, and will be distributed to board members.

Following a general discussion on various topics the meeting was adjourned at 11:30 A.M.; soon to be reconvened for further discussion of the southwest corner ceremonies.

Jim Claflin and Paul Scherbel reported that KSL-TV, from Salt Lake City, had a crew on site and aired a segment on last night's news. They estimated an attendance of approximately 100 individuals and dignitaries, and credited favorable weather for same. Well done, Paul!

Pete called for re-adjournment, and gavelled the meeting "done" at 11:41 A.M.

Dated this 12th day of October, 1996.

R.L. Hudson, Secretary / Treasurer

**PLSW Key Rings
are for sale.**

**Send \$5 to:
P.O. Box 904 Casper, WY 82602**



HORIZONS, INC.®

Aerial Mapping Professionals

GIS, Topographic & Volumetric Mapping
Aerial Photography • Digital Orthophotos
Airborne GPS • Photo Lab Services • Custom Color

Send for
FREE
VIDEO!

605 343-0280

P.O. Box 3134

Rapid City, SD 57709-3134

Regional Offices in Minnesota & Arizona

Board of Registration Continuing Education Rules And Regulations

(Revised 11 March 1996)

Chapter IX

General Provisions

Continuing Professional Competency

Section 1. **Authority.** The Board is authorized by W.S. 33-29-119 to adopt such rules and regulations not inconsistent with the laws of the state of Wyoming as may be deemed necessary in the performance of its duties.

Section 2. **Statement of Purpose.** The continuing professional competency guidelines are set forth below for the purpose of providing consistency in those jurisdictions that adopt mandatory requirements of for those jurisdictions that wish to encourage voluntary usage. The purpose of the continuing professional competency requirement is to demonstrate a continuing level of competency of professional engineers and/or professional land surveyors.

Section 3. **Introduction.** Every registrant shall meet the continuing professional competency requirements of these regulations for professional development as a condition for registration renewal.

Section 4. **Definitions.** Terms used in this section are defined as follows:

(a) Continuing Professional Competency (CPC) Unit - A contact hour (nominal) of instruction or presentation. The common denominator for other units of credit.

(b) Continuing Education Unit (CEU) - Unit of credit customarily used for continuing education courses. One continuing education unit equals ten (10) contact hours of class in continuing education course.

(c) College/Unit Semester/Quarter Hour - Credit for ABET approved course or other related college course approved in accordance with article (d) of this section.

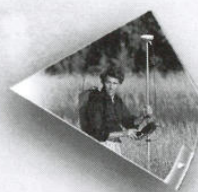
(d) Course/Activity - Any qualifying course or activity with a clear purpose and objective which will maintain, improve, or expand skills and knowledge relevant to the registrant's field of practice.

(e) Dual Registrant - A person who is registered as a professional engineer and a professional land surveyor.

Section 5. **Requirements.** All individuals whose current registration period ends in December 1996, will be required as a condition of renewing said registration to have completed a total of twenty (20) CPC hours [units]. All individuals whose registration period ends in December 1996, may begin calculating their CPC credits [units] on January 1, 1995. All individuals whose current registration period ends in December 1997, will be required as a condition of renewing said registration to have completed a total of twenty (20) CPC hours [units]. All individuals whose registration period ends in December 1997, may begin calculating their CPC credits [units] on January 1, 1996. Beginning in December 1998, all registrants renewing their registration will be required as a condition of renewal, to have completed a total of thirty (30) CPC hours [units] in each renewal period. For each renewal period, dual registrants will

(Continued on Page 12)

The best of both worlds!



Geotracer® System 2000 RTK is a complete GPS surveying system for all types of applications.

Developed for surveyors by surveyors it's a system you can count on. Rugged and ergonomic, with a user interface and method of working designed to make you feel at home.

Initial results are presented within 3 seconds with updates 4 times a second. That means you can use Geotracer System 2000 for both setting out and collecting detail. Since it's based on a modular upgrade concept, you decide when to move up and how far. Best of all, it speaks the same language as Geodimeter total stations. The best of both worlds at your finger tips.

No total station beats a Geotracer® System 2000 GPS when it comes to traversing or surveying base lines. Not even when it comes to setting out and collecting detail.

No GPS system beats Geodimeter® System 600 when it comes to setting out and collecting detail, where highest accuracy is required, or in areas near buildings and trees, in tunnels and under bridges.



Imagine both systems working together, each doing what they do best. It's easy since they speak the same language. All you have to do is move data from one system to the other using a PCMCIA memory card. It's all part of Integrated Surveying... maximum productivity in every situation.



Geotronics

Geotronics of North America Inc.
911 W. Hawthorn Drive, Itasca, IL 60143
Telephone 630-285 1400 ext. 228
Telefax 630-285 1410
e-mail: geoinfo@geotronics.com
Internet: http://www.geotronics.se



For more information
please contact Scott Carter
at 801-451-9688

