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# HOOSIER SURVEYOR

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QUARTERLY PUBLICATION OF THE  
INDIANA SOCIETY OF  
PROFESSIONAL LAND SURVEYORS, INC.

VOLUME 19  
NUMBER 3  
WINTER 1993



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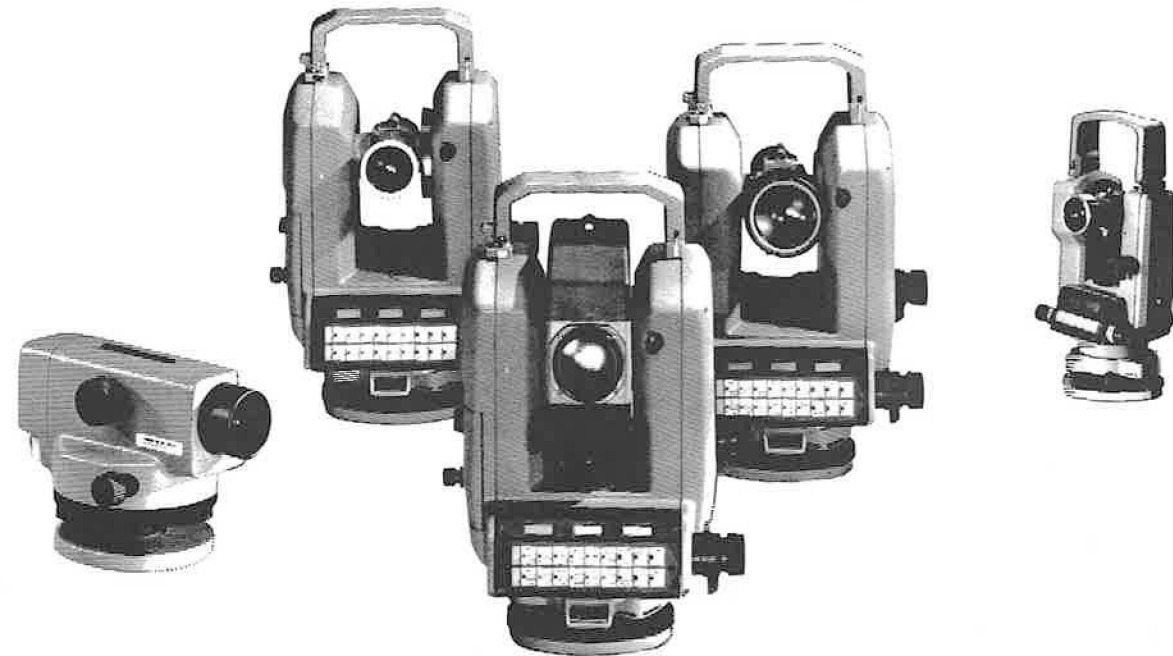


## LAND SURVEYING AND THE CONNER PRAIRIE MUSEUM



Brad Rayl, PLS, Anderson, giving Conner Prairie interpreters a "hands-on" opportunity to "give line". Five ISPLS and Surveyors Historical Society members, provide program for the living history museum. (See article inside.)

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Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to its members, the general public and for the betterment of the surveying profession. No responsibility is assumed for errors, misquotes or deletions as to its contents.

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# HOOSIER SURVEYOR

VOLUME 19 NUMBER 3 WINTER 1993

## CONTENTS

Masthead .....	1
President's Thoughts .....	2
BOD Minutes, Ethics Forum .....	3
The Ethics of Moonlighting .....	4
Conflict of Interest-Are you Guilty .....	5
Chapter News .....	6
QBS Recap .....	7
1993 Joint Convention .....	8-9
Metrics in Construction .....	10-11
Vincennes University .....	14-15
"Long Knife Award" .....	16
Meet Nelson Prall .....	17
Surveyors Historical Society .....	18-19
NSPS Governor .....	21
Completed Careers .....	22
Sustaining Members .....	23
Calendar .....	24

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## PRESIDENT'S THOUGHTS

by Douglas Herendeen, New Palestine, IN

Dear Fellow Surveyor:

It is that time of year again when administrations of all types are progressing toward the changing of the guard. For I.S.P.L.S. I consider it an honor to represent the Society as its President for the year 1993. I have been a Board Member since 1988 and a number of changes have occurred during this time.

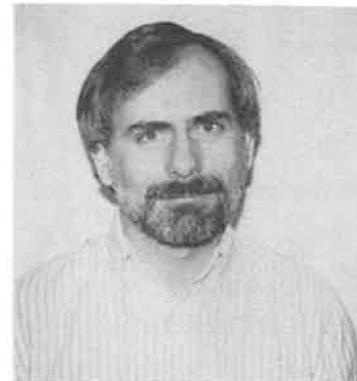
Relocating from East 38th Street to Monument Circle or as some members called it the Country Club with high rent. Well the rent is very close to what we were paying, we have carpeting on the floors and neighbors. In the old place the carpet was gone, we were the only occupants on our floor, and we had to carry a panic beeper just in case someone hassled you going to your car. With the exception of Board Meetings, members rarely visited the office. Moving to the Circle more members are visiting as they conduct business in the Indianapolis Downtown area and can arrange a visit into their schedule. Another reason for moving downtown was to create the opportunity for members to visit the office and Dianne.

Rule 13/12 has been passed/revised and more surveyors are beginning to adapt to these new regulations, however, as you will see at the convention in March, there are quite a few surveyors who are not adhering to these Rules. With a mock hearing you will see how the complaint process works for the Land Surveyor's Registration Board and the procedures used by the Attorney Generals Office to deal with these people.

The issue of Continuing Education is on the minds of our members. Should we or shouldn't we proceed with Continuing Education. I would like to use the issue of computers to illustrate the need for Continuing Education. Five years ago computers were typically 8086/8088 with 640MG Ram; two 5.25" floppy drives; 30MG hard drive with a mono colored monitor. Today's computer is a 80486-66mhz; 8MG Ram; 5.25" and 3.5" floppy drives; CD Rom; tape backup; modem/fax; 210MG Hard Drive (if not connected to a network) with a colored monitor.

In looking at where this technology has progressed in just five years we need to be constantly educated in order to communicate properly.

In closing, I feel excited about the upcoming year. As you can see from my comments from above we have quite a few programs in progress and I look forward to seeing and hearing from as many of you as possible. A friend of mine and fellow surveyor once said that the strength of an organization lies with its volunteers and the more time a volunteer has the stronger the organization becomes. Please participate, I.S.P.L.S. is your society and we cannot accomplish your goals without you.



## YOU ARE A KEY PERSON

Xvxn though my typxwritxr is an old modxl, it works wxll xxxcpt for onx of thx kxys. I'vx wishxd many timxs that it workxd prfxctly. Trux, thxrx arx 42 kxys that function, but onx kxy not working makxs thx diffxrxncx.

Somxtimxs, it sxxms to mx that our organization is somxwhat likx my typxwritxr - not all thx pxoplx arx working propxrlly. You might say, "Wxll, I'm only onx pxrson. It w makx much diffxrxncx."

But you sxx, an organization, to bx xffixxnt, nxxds thx actvx participation of xvxy pxrson. Thx nxxt timx you think your xfforts arxn't nxxdxd, rxmxxbxx my typxwritxr, and say to yoursxlx, "I am a kxy pxrson and thxy nxxd mx vxry much."

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## NEW REGISTERED LAND SURVEYORS IN INDIANA

The Indiana State Board of Registration for Land Surveyors held the certificate presentation for Professional Land Surveyors on Friday, November 20, 1992. The ceremonies were held at the Government Center South Auditorium, Indianapolis. The following land surveyors were awarded with certificates:

Gary Ahlberg	Wheaton, IL	80920006
Tom Fidler	Longview, TX	80920003
Bryan Foust	Lafayette, IN	80920001
David Gaston	Clayton, IN	80920002
James Hankins	Rockford, IL	80920213
Stuart Hein	Evansville, IN	80920007
Rodney Neese	Plainfield, IN	80920005
Jerry Newburn	Greenwood, IN	80920004

## BOARD OF DIRECTORS MEETINGS

Summary by Dianne Bennett

The Board of Directors of the Indiana Society of Professional Land Surveyors held meetings on November 21, 1992 and January 9, 1993. Among items addressed were the following:

### November 21st:

E.R. Gray reported on the ACSM/GIS/LIS Fall Convention held in San Jose, California on November 6-12, 1992.

The topic of ISPLS by-laws state that the current Board of Directors and officers shall remain in office until the annual convention. The 1993 convention will not be held until March. A motion was made and passed to place an amendment to the laws on the ballot for the upcoming election for directors. Amendment: In years when the annual convention is not held in the month of January, the newly elected board of directors and its' officers shall take office on the first official meeting in January.

Doug Herendeen reported on the 1993 convention and David Blankenbaker reported on the 1994 convention to be held jointly with Kentucky.

Chris Marbach reported that the ethics committee has approved the Canons of Ethics as approved by ACSM. The ethic committee also approved the use of PLS as the acronym for all use on stationary, etc., also in accordance with ACSM and NSPS. A motion was made and passed to adopt the PLS on a state level and also for ISPLS to adopt the Canons of Ethics as approved by ACSM.

An application from Wayne Stewart for an Associate membership was approved.

After much discussion a motion was made and passed to fund the QBS program in the amount of \$500.

Art Haase presented Vincennes University's view on the proposed changes to the registration act, particularly the requirements of a B.S.L.S. He suggested that our act be modeled after Michigan's. They require a B.S. degree and a minimum number of hours in Surveying, Mathematics and Sciences. A motion was made and passed to contact the registration board to discuss the possibility of changing the requirements for registration in the proposed registration act from B.S.L.S. to BS and minimum college credit hours in Surveying, Mathematics and Sciences. Wes Day presented the latest proposed revisions to the registration act.

### January 9, 1993 (Minutes not approved at this time.)

The Winter workshop to date has received 53 reservations. The Spring workshop is tentatively scheduled for April 30th.

Doug Herendeen reported on QBS, stating that the Architects' association will no longer fund QBS. There was discussion as to funding the coalition.

The Government Affairs Committee reported on the Registration Act. In the upcoming legislation, the Registration Act will be sponsored in the House by Reps. Klinker and Keeler, and in the Senate by Sen. Wheeler.

There was also discussion on the concerns expressed to ISPLS Art Haase. It was reported that the consensus of the Registration Board is that they will not oppose an interpretation that would

...continued page 5

## ETHICS FORUM

### DISCOUNT COUPON OFFERED WITH CHRISTMAS CARD

#### FACTS:

Registered Land Surveyor A, owner of a Land Surveying firm, enclosed a special savings coupon in a Season's Greeting card that was sent to customers. The card stated "As a small token of our appreciation, we offer you the special savings coupon below." The coupon stated "This coupon entitles you to a special savings from prices offered to the general public" and then identified a savings of \$15 with an expiration date of December the following year.

#### QUESTION:

Was it a violation of the rules of the Board of Registration for Professional Land Surveyors for Surveyor A to offer a discount coupon with a Season's Greeting card?

#### REFERENCE:

##### Rule 11, Section 19

The engineer or land surveyor shall not offer to pay, either directly or indirectly, any commission, political contribution, gift or other consideration in order to secure work, exclusive of securing a salaried position through employment agencies.

#### DISCUSSION:

A strict interpretation of this rule would imply that the discount coupons are a rule violation. However, the rule clearly is intended to pertain to gifts in the nature of bribes or illegal kickbacks. In actuality, there is little difference between a coupon as a "gift", and giving out company hats, entertaining clients at lunch, or entertaining them on the golf course. Any of these items could conceivably fall under a strict interpretation of Section 19. Additionally, a surveyor as a businessman is free to alter his rate schedule as he chooses, including changes based on different clientele, or for example, to choose to pay the recording fee himself.

#### CONCLUSION:

While the discount coupons may be viewed by some as unprofessional, I do not consider them to be violations of Rule 11 worthy of sanctions.

#### ISPLS ETHICS COMMITTEE

Opinion: Chris Marbach  
Concurring: John Schneider  
Ross Holloway  
Absent: Danny Leek

**Note:** The opinion is based on information submitted to the committee and is subject to change based on additional pertinent facts becoming known. Additionally, the committee opinion is advisory and unofficial only and should not be construed in any way to reflect the views or opinions of any or all members of the Indiana State Board of Registration for Professional Land Surveyors.

ISPLS members if you have an ethics issue you would like addressed by the Ethic Committee in the Hoosier Surveyor, please send your inquiry to ISPLS c/o Ethics Committee, 55 Monument Circle, Suite 1222, Indianapolis, IN 46204.

# THE ETHICS OF MOONLIGHTING

by Al Matherly, Chairman of NSPS Ethics Committee & NSPS Governor of Kentucky

Very little has been said about the practice of moonlighting in the past few years. I wonder whether professional surveyors are tired of being unable to do anything about the practice, or have simply decided to ignore the issue. Moonlighting, however, remains a problem for surveying professionals, boards of registration, and the public. Many moonlighters fail to see the harm they cause in the pursuit of extra pocket money.

It is especially frustrating when local, state, and federal agencies condone moonlighting. Don't these agencies realize that moonlighters spend considerable office time conducting research, settling appointments, and performing other tasks required to complete outside surveying jobs? Often moonlighters do not have adequate equipment for a project and must rent or borrow their employers' equipment. Moonlighters must then complete outside projects on the weekend, or by taking vacation or sick leave.

What harm is caused by moonlighting? Certainly it harms the effectiveness of the moonlighter in performing his or her work. Lack of research time, proper equipment, and experience also are detrimental to the project's outcome. And clients, while possibly saving a few dollars, do not always get the quality product they should expect. I say "should expect" because regardless of circumstances, the registered professional is obligated by state and local laws to perform at a certain minimum standard.

Another problem typical of moonlighting is that clients are forced to deal with the professional in the evening and on weekends. If a crisis arises, clients are often unable to reach the moonlighter for an answer. It is reasonable to expect clients to put their projects on hold until the moonlighter is available?

Employers are harmed to varying degrees. Time is taken away from assigned projects to copy plans and specifications and make phone calls. In addition, ill health from late hours, stress, or accidents incurred while performing outside work add up to hours lost by the employer. And moonlighters, who provide the same services as their employers, thus become competitors. Because moonlighters have little or no overhead and use their employers' supplies and time, they can charge fees lower than the industry norm.

The profession is surely hurt by this practice. While it is unfair to say that employers cannot compete with moonlighters, it is fair to say that the fair market value of the product is undermined by such practices. The individual who is renting or borrowing equipment and produces the final product on his or her kitchen table is not rendering a service to the public. He or she is only interested in the extra money, not in furthering the profession. To best serve the public, the profession, and themselves, surveyors should use off hours to gain additional training and teach the para-professional and the public the importance of surveying to the community.

We cannot condone moonlighting because it harms the integrity of the profession. We continue to exist as a profession because we demonstrate to our state legislators the importance of the product we provide to the public. Moonlighting undermines the credibility of surveying which may be perceived as a technical trade that can be

performed by technicians, draftspersons, and engineers.

Moonlighting has been condoned for decades by some state employers. State surveying societies must bring this practice to the attention of legislators, state boards of registration, state attorney generals, and others charged with protecting the public interest.

Is it ethical for professional surveyors to moonlight? In some cases, the moonlighter is stealing time, office supplies, and work from the very people who pay his or her regular salary and benefits. This individual can help by realizing the consequences of his or her actions. Most companies have a written policy on the practice. It is a rare individual who does not think, consciously or unconsciously, that the practice is wrong.

Most of us at one time or another have moonlighted. Unfortunately, it is not until later in life that one sees the harm done by the practice. Moonlighting undermines the quality and image of the surveying profession, perpetuates the myth that surveying is merely a technical trade rather than a profession, and gives the public false expectations of the costs and effort involved in pursuing a quality product.

Those of us who have condoned moonlighting among employees should reevaluate the situation. We must not only look at possible lost revenue, but also at the harm done to the public, the individual, and the profession as a whole.

...reprinted from ACSM Bulletin, October

## NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS a member organization of the American Congress on Surveying and Mapping \* \* \* TRIG-STAR \* \* \*

A local sponsor is needed for each high school. Only one TRIG-STAR will be allowed per school per year. The local sponsor must be an NSPS Member and an Affiliate Member, and must make application to NSPS on forms provided by NSPS. A sponsorship fee of \$25 must be included with each application. A contest packet containing contest instructions, a test packet, an award plaque, and sample news releases will be forwarded by NSPS to the local sponsor. The local sponsor will be responsible for making all the local arrangements.

### Application for a TRIG-STAR Sponsorship

Please send me a TRIG-STAR packet for the high school listed below for which I have enclosed the \$25 sponsorship fee. Make check payable to: NSPS-TRIG-STAR. (Only one TRIG-STAR/school/year is allowed)

Name of High School \_\_\_\_\_  
Address \_\_\_\_\_  
Name of Local Sponsor \_\_\_\_\_  
Street or Box No. \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_

Send to: TRIG-STAR, 5410 Grosvenor Lane, Bethesda, Maryland 20814-2122.  
Phone: 301/493-200.

# CONFLICT OF INTEREST - ARE YOU GUILTY?

by James W. Frazell, Indianapolis, Indiana

The following executive summary was submitted to the Indiana State Board of Registration for Professional Engineers.

## Executive Summary

Engineers as a rule are not adequately prepared by training or experience to work with complete knowledge within the multifaceted arena of local government and the legal system. Issues that seem extraneous may later become paramount to the actual engineering problem.

While all professional disciplines operate in systems that do not always require absolute answers, the engineer's world in particular is limited to only slight variations between black and white solutions for a given problem. Because of this professional "tunnel vision" approach to our work, we are susceptible to becoming entangled in intricate legal affairs often encountered when dealing within the framework of government. We unwittingly create difficulties for ourselves; we do indeed miss the proverbial forest for the trees. To complicate this matter further, pertinent legal issues are interwoven among the statutes, making a superficial legal review ineffective for our requirements.

Although the cliché "ignorance of the law is no excuse" may seem to apply, the facts are that obscure legal statutes with new specific definitions allow for broad interpretation of various situations, thus making the engineer vulnerable to scrutiny. The engineer often is not aware of the potential scope of a law; and it is as practitioners that we encounter the pitfalls of working in the public sector without regard to how we and our work may be affected by interpretation of these laws. If we are indeed ignorant, it is of the potential legal tangles facing practicing engineers as we operate within the public domain.

Engineers cannot afford to be ignorant of the legal issues potentially facing practicing engineers as they relate to public projects. Occasionally an engineer will inadvertently fall victim to some legal statute which, while obscure, is still binding.

The issues raised by an existing statute are complex. Once a state general assembly defines a word or phrase for purposes of law, the courts are bound by that definition. Various interpretations, common usage, or other connotations of wording used in a statute cannot be used as a defense in a prosecution under that statute. Quite simply, one can legally be considered a public servant and be oblivious to the label. A "public servant" label could be applied to a professor in a state-sponsored university or a teacher in a public school.

There are numerous statutes and codes which can potentially govern the practicing engineer. While all may not have been specifically created to control the efforts of a professional, any can be interpreted to include the engineer within its scope. Laws and definitions are sufficiently vague to help prevent a dishonest person from succeeding. However, a system with vague definitions can become a pitfall for those of us who are not public people but who operate within the public framework.

Once a potential conflict of interest is identified by the practitioner, the next step is for the practitioner to file a disclosure statement.

It is difficult at best to make laws which would be more specific to avoid trapping an innocent party. It is also possible for any legal system to be manipulated by those most familiar with it. There are numerous occasions where the issue of conflict of interest can be raised and pursued if someone has the desire to do so. This situation may also exist with other professionals involved in local politics. One underlying theme throughout all statutes is the requirement of disclosure. The Indiana State Board of Accounts has created a form which fulfills the requirements of disclosure and should be filed whenever there is any question as to the established "Public Servant" statutes.

## BOD Minutes

...continued from page 3

admit to the examination a candidate with a 4-year degree (other than land surveying degree) plus certain specific education credits (i.e. surveying) as required by the Registration Board. The Registration Act might be changed to reflect that interpretation if deemed necessary. This is similar to the requirement in the Michigan's statute.

New members presented and approved were: Mark-It (Sustaining), Stuart May (associate), Charles Doriot (member), Ronald Wharry (reinstate member), William Pinnell, Joseph Schara, Duane Mast, John Applegate, Dave Haase, Anthony Julian, David Thomas, James Myers, Mike Sheppard, Kevin Hennessy, Timothy Cadle, Brian Turner, David Heller, Brent Johnson, Andrew Birkle, (Students).

Results of the recent election for Board of Directors was announced. Elected were: E.R. Gray, Ross Holloway, and Bob Bigelow. Results of the referendum also on the ballot as to the changing of directors and officers at the first official meeting in January passed 137 to 5. A motion was made and passed to have a re-vote on the referendum at the next general membership meeting.

It was brought to the boards attention that there was proposed legislation concerning County Surveyors (unregistered vs registered) compensation. A motion was made and passed to oppose and stand against that proposed legislation.

Comments and thoughts that have been expressed to some of the board of directors from ISPLS members regarding the process for complaints against surveyors and about the manner in which survey reports and plats are recorded were discussed.

The Historical Society has asked if anyone has something interesting for the convention booth to contact Roger Woodfill.

President Sexton thanked the board for its cooperation during his presidential year.



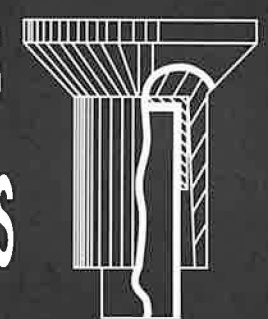
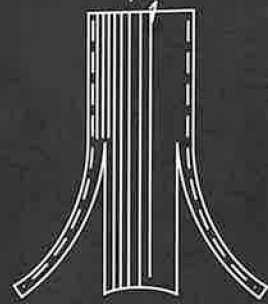
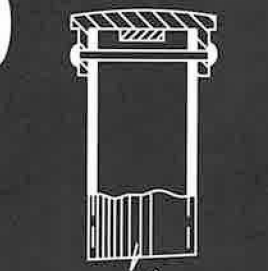
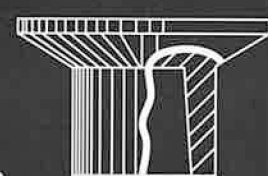
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Don Bengel, Director

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Ken Anderson, President  
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Perry Cloyd, Director

Initial Point Chapter officers for 1993:

David Blankenbeker, President  
Paul Moffett, Vice/President-Elect  
Frank Ballintyn, Secretary-Treasurer

Central Indiana Chapter officers for 1993:

Mike DeBoy, President  
Ron Nolan, Vice-President  
Greg Garrison, Secretary  
Terry Miller, Treasurer  
Rick Miller, Director  
Doug Herendeen, Director

Southwest Chapter officers for 1992:  
(1993 officers not elected)

Matt Wannemuehler, President  
Alvin Paul, Vice President  
Edward Boyd, Secretary-Treasurer  
Gordon Curtis, Director  
Don Biggs, Director

## QBS INDIANA COALITION

A RECAP OF 1992'S ACTIVITY OF QUALIFICATIONS-BASED SELECTION

### PROMOTIONAL ACTIVITIES:

Since the QBS facilitator only makes client presentations at their request, a great deal of time and effort has been spent on developing relationships with trade associations and governmental agencies who work with these clients. Following is a summarization of these contacts.

### TRADE ASSOCIATIONS/GOVERNMENTAL

Indiana Association of Cities and Towns - Have become a very strong and active advocate for QBS. This support includes articles in their newsletters, facilitator participation in several monthly meetings of the Mayor's and Town Official's Roundtables around Indiana. The facilitator attended a meeting of IACT's board of directors and was a program presenter at their annual convention in Fort Wayne.

Association of Indiana Counties - QBS article in the AIC newsletter along with a booth at their annual meeting trade show.

Indiana Association of County Commissioners - A QBS presentation was included in the program at their annual meeting in December.

HERPICC - A very effective article in the "Pothole Gazette" resulted in several client contacts and QBS will be taking part in the "Road School" next March. Dr. Scholer very supportive of QBS.

Indiana Highway Supervisor's Association - QBS facilitator attended their annual conference held in Seymour.

Mailings - QBS promotional letters and brochures have been sent to the mayors, county commissioners, town managers, county and city engineers, and county and road supervisors. A second mailing to these groups is planned for 1993.

### TRADE ASSOCIATIONS/SCHOOLS

**NOTE:** Because of the size of the undertaking, promoting QBS with school officials was delayed and began last September.

Indiana Public School Superintendent's Association - This is our best school association contact. QBS article was featured in the October newsletter and more cooperation is expected.

Indiana School Board Association - QBS had a booth in the "Association Isle" at their annual meeting.

Indiana School Business Officials Association - QBS booth in their annual convention trade show in Evansville.

Mailings - QBS materials have been sent to the school superintendents, school board presidents, and school business officials in Indiana.

Address: QBS, P.O. Box 20148, Indianapolis, IN 46220  
Phone: (317) 637-3316 Fax: (317) 637-9968

### GOVERNMENTAL AGENCIES

Indiana Department of Commerce, Community Development Division - The Consulting Engineers of Indiana, Inc. have been especially helpful in the IDOC's rather rapid acceptance of QBS as an alternative to bidding, which they had previously recommended. This has resulted in new written grantee guidelines and procedures that now include QBS.

QBS received a terrific boost this December when the facilitator participated in a grantee workshop conducted by IDOC.

Indiana Department of Transportation, Division of Local Assistance - Since there has been a recent change in the directorship, two presentations and re-establishing relationships has been required. IDOT is fully supportive of QBS and has forwarded our materials to various district offices. The facilitator is now planning to personally contact each of these district local assistance coordinators. He has already met with the key staffers of the Crawfordsville and Greenfield Districts.

Regional Planning Commissions - The facilitator has presented QBS to the directors of all of the 10 planning commissions. He is tentatively scheduled to present QBS programs to the local officials involved with three of these commissions.

### CLIENT PRESENTATIONS

To date, the facilitator has presented the QBS process to officials representing 35 cities, towns and counties and five school corporations. These include a wide range of officials and include mayors, county commissions, city and county engineers, water and sewer superintendents, highway supervisors, city planners, and school superintendents.

It is difficult to estimate accurately how many of these governmental units have or are using the QBS process or have incorporated some part of it. The facilitator is aware of ten local agencies who have adopted the QBS process and there are more. It should be acknowledged that some QBS presentations are made where the governmental body does not have a project under serious consideration at that time.

As QBS continues, and especially since its recent introduction to the school officials, both the number of client requests and usage of the QBS process should increase substantially.

### SUMMARY

In conclusion, it is important to realize the after all the promotional activities discussed previously, **nearly 20% of the client contacts have been created by the design professionals themselves.** In those cases, the QBS facilitator was contacted by a governmental official because a design professional representative had suggested/recommended QBS to the official. More work needs to be done by the sponsoring associations to alert their members to the important part they can personally play in promoting QBS.

# JOINT SOCIETY CONVENTION

March 17-19, 1993

## "TURNING IDEAS INTO REALITY"

For the first time in Indiana history five societies combine their annual conventions. The *American Society of Civil Engineers, Indiana Chapter (ASCE)*; *Consulting Engineers of Indiana (CEI)*; *Indiana Society of Professional Engineers (ISPE)*; *Indiana Society of Professional Land Surveyors (ISPLS)*; and the *Institute of Electrical and Electronic Engineers (IEEE)* have joined efforts to sponsor a statewide meeting. Each organization has worked both individually and cooperatively to put together a program guaranteed to hold your attention. Friday includes a students program to explore technical and non-technical aspects that affect their careers. Another first is the Trade Show sponsored by all five societies. A wide variety of vendors and suppliers will be attracted to a convention of this size and thus this is an excellent opportunity to see the latest in technology.

Following is a brief outline of the tentative program. (See separate mailing for details)

### WEDNESDAY, MARCH 17, 1993

1:00 - 5:00 P.M. - Board of Directors Meetings  
5:00 - 6:00 P.M. - Convention Registration

### THURSDAY A.M.

7:00 - 9:30 A.M. - Legislative Experience IX Breakfast  
9:00 - 10:30 A.M. - Convention Registration  
9:30 A.M. Exhibit Hall Grand Opening

### Thursday's Sessions

How Legislature Works  
Cash Management for Small & Medium Business  
Family Asset Planning  
Airport Expansion Infrastructure: Communication & Power,  
Indiana Bell SONET Fiber Ring  
Indiana State Board of Registration for Land Surveyors -  
General Meeting  
Computer Information Management  
Risk Allocation  
Rewards of Rewarding

### THURSDAY P.M.

Business Valuation & Transfer  
Stress Management  
Power Quality Problems & Solutions  
Simulated Settlement Conference & Prosecution of Land  
Surveyor  
Geographic Information Systems  
Seminar: Do Right

### THURSDAY NIGHT BANQUET

Keynote Speaker: Tom Sneva

### Friday's Sessions

### FRIDAY A.M.

Order of the Engineer Ceremony  
Airport: Conception to Completion  
ACSM - National Survey Technician Certification Program

Student Professional Awareness Conference  
United Airline Maintenance Operations Center II Project-  
Structural Design Aspects  
Environmental Issues for Surveying & Engineering Profession-  
als & OSHA Regulations Affecting Your Practice  
Lawful Hiring & Firing  
Global Positioning System (GPS) & the National Lightning  
Detection Network  
Why You Should Become A Registered Professional Engineer  
Corporate Disability Protection - Are There Any Holes in Your  
Safety Net?  
Renewable Resources for the 21st Century

### FRIDAY P.M.

Airport Field Trip  
Digital Ortho Photography  
Fish vs. Chemistry: What's the Best Way to Measure Water  
Quality?  
Young Engineers Roundtable  
DPW Policy on Hydrology & Hydraulic Design from the  
Department's Perspective, Consultant's Perspective & Computer  
Software Solutions  
Understanding Yourself & Others - PSI Seminar  
The EPA Did It Right - Green Lights  
Smart House  
Electric Vehicles in the 90's  
ISPLS Annual Business Meeting  
Student Chapter Meetings

### FRIDAY NIGHT BANQUET

### SPOUSE PROGRAM

Upon arrival Wednesday, registered spouses/guests are invited to get acquainted, find old friends and make new ones in the hospitality room. Thursday, plan a trip to Conner Prairie for lunch and then on to an afternoon of shopping in historical Zionsville. Friday, plan on relaxing and being entertained in the Hotel.

# 1993 JOINT SOCIETY CONVENTION

MARCH 17-19, 1993

## REGISTRATION FORM

Attendee: \_\_\_\_\_ Spouse:(If attending) \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Please check all societies you are affiliated with:

ASCE       CEI       IEEE       ISPE       ISPLS  
(Please use one form per registrant. Form may be duplicated.)

### REGISTRATION FEES

		Amount
<u>Full Registration</u>		
Member	\$150.00	\$ _____
Non-Member	\$200.00	\$ _____
Spouse	\$75.00	\$ _____
Students (Circle All Days Attending: T F )	\$25.00	\$ _____
<u>Single Day Registration (Circle Day Attending)</u>		
Member ( T F )	\$95.00	\$ _____
Non-Member ( T F )	\$115.00	\$ _____
Legislative Experience IX (See Flyer)	\$15.00	\$ _____
Order of the Engineer (See Flyer)	\$25.00	\$ _____
Late Fee After March 1st	\$10.00	\$ _____
	TOTAL:	\$ _____
I/We plan to attend	<input type="checkbox"/> Thursday Banquet	<input type="checkbox"/> Friday Banquet

### PERTINENT INFORMATION

- Hotel Reservations to be made directly with the *Adams Mark*. A reservation form is included in this packet. If making reservations by phone (317/248-2481) ask for special *Joint Society* rate of \$80.00/night.
  - Full registration includes: Handouts, breaks, two luncheons, one cocktail party, two dinners.  
Spouse registration includes: Spouse's program and meals as listed above.  
Student registration includes: Meetings, breaks and luncheons.  
Daily registration includes: Meetings, breaks and luncheons.
  - Late registrants will not be guaranteed handouts or luncheons.
- Refund Policy  
• 100% if canceled prior to March 5, 1993 • 50% if canceled after March 5, 1993 • No refunds after March 15th

5. Make checks payable to: JSGA CONVENTION

6. Return Registration form to: ISPLS, 55 Monument Circle, Suite 1222, Indianapolis, IN 46204  
Phone: 317/687-8859 (ISPLS) 317/637-3563 (CEI)

# Metrics in Construction

## METRIC MANAGEMENT AND TRAINING

How should design and construction firms, product manufacturers, code officials, and others in the construction industry prepare for metric? The American National Metric Council and the U.S. Metric Association recommend the following management and training measures, which apply to organizations large and small:

**Provide top level commitment.** Top level management must provide a firm commitment to metric. This includes: announcing a formal metric policy, forming a metric committee, and appointing a metric coordinator to chair the committee and act as the organization's metric representative.

**Set milestones.** Establish a realistic, organization-wide metrication schedule with milestones and a completion date.

**Collect information.** Begin a metric reference library. See the July-August issue of this newsletter for a list of metric construction references or refer to the more complete list in the *Metric Guide to Federal Construction*.

**Develop training objectives.** Write carefully worded, measurable training objectives with the goal of "enabling employees to perform their jobs with the same or greater degree of efficiency using metric."

**Define the learner population.** Determine who needs to know metric and to what extent they need to know it. Some employees may require an in-depth working knowledge of metrics whereas others may never need to know it at all. Most probably will need to know only a few metric units.

**Determine training needs.** There are three kinds or levels of training: metric awareness training to help all employees overcome fear and resistance to change, management training to educate the people responsible for the transition to metric, and implementation training to teach specific metric skills to specific employees.

**Train at the right time.** Training should take place just prior to when an employee will use the new knowledge on the job; earlier training is ineffective.

**Train only as needed.** Train only as necessary to meet the goal of "enabling employees to perform their jobs with the same or greater degree of efficiency using metric." Training is not a panacea, and massive training programs are wasteful. Often, training can be performed completely on-the-job.

**Train people to "think" metric.** Link metric measurements to familiar objects. Avoid converting to inch-pound units as much as possible. For linear measurements use dual unit tape measures (See "Metric References" below).

**Monitor the metrication program.** Make sure training matches the organization's metric transition schedule. If something changes, adjust either the training or the schedule.

**Don't hide costs.** There is a cost to metric conversion, both in time and money. Plan for it in advance, and monitor costs as transition takes place.

General metric publications and materials are available from the U.S. Metric Association, 10245 Andasol Avenue, Northridge,

CA 91325, phone 818-386-7443, and the American National Metric Council, 1735 North Lynn Street, Suite 950, Arlington, VA 22209-2022, phone 703-524-2007.

*Stan Jakuba, a metric management and training consultant in Hartford, Connecticut, and a member of the Construction Metrication Council, contributed to this article. He can be reached at 203-521-7924.*

## METRIC RESOURCES

**Dual unit tape measures.** The use of dual unit tape measures is considered one of the best ways to learn metric on the job because they provide a quick and easy means of "visualizing" linear dimensions in metric. Stanley Tools, Lufkin, U.S. Tape, Starrett Tools, and others make dual unit tape measures. Check larger hardware stores or call Stanley Tools at 1-800-262-2161, Lufkin at 912-362-7511, or U.S. Tape at 703-256-1500.

**Metric drawing scales.** Metric architect and engineer scales are available from graphic arts supply stores. Popular models are the Staedtler-Mars 987-18-1, Alvin 117 PM, and Charvoz 30-1261.

**Metric plumbing template.** A metric plumbing template is available from American Standard. Call Ms. Barbara Munson at 703-841-9585.

**Metric guides.** Two metric guides are available from the Publications Department, National Institute of Building Sciences (NIBS), 1201 L St., N.W., Suite 400, Washington DC 20005; phone 202-289-7800 (bulk orders are available at a discount):

*Metric Guide for Federal Construction (34 pg, \$15).* Written specifically for the construction industry and reviewed by metric experts throughout the country. Includes a background on the federal metric laws, facts on metric in construction, an introduction to metric units, a primer on metric usage for architects, engineers, and the trades, requirements for metric drawings and specifications, guidance on metric management and training, and a listing of current metric construction references.

*GSA Metric Design Guide, second draft edition (78 pg loose-leaf, \$8, \$5 if ordered with above guide).* Interim design guide developed by GSA for use by federal project managers and their A/Es. Contains practical architectural, civil, structural, mechanical, and electrical design information, a list of available "hard" metric products, sample drawings, and related reference information.

Both guides also are available in electronic form on the Construction Criteria Base (CCB), a large database of construction criteria and standards on optical disk. For more information about the CCB, call NIBS at the above number.

...taken from Volume 1, Issue 3 September-October 1992 newsletter of the Construction Metrication Council of the National Institute of Building Sciences, Washington, D.C.

## VISUALIZING METRIC

A few basic comparisons that help in visualizing metric are well worth remembering:

■ One millimeter (mm) is about 1/25 inch or slightly less than the thickness of a dime.

■ One meter (m) is the length of a yardstick plus about 3-1/3 inches.

■ One gram (g) is about the mass (weight) of a large paper clip.

■ One kilogram (kg) is about the mass (weight) of a softbound model building code book (2.2 pounds).

■ One liter (L) is about the volume of a 4 inch cube (100 mm x 100 mm x 100 mm)--a little over one quart. One liter of water has a mass of 1 kilogram.

■ One inch is just a fraction (1/64 inch) longer than 25 mm (1 inch = 25.4 mm; 25 mm = 63/64 inch).

■ Four inches are about 1/16 inch longer than 100 mm (4 inches = 101.6 mm; 100 mm = 3-15/16 inches).

■ One foot is about 3/16 inch longer than 300 mm (12 inches = 304.8 mm; 300 mm = 11-13/16 inches).

■ Four feet are about 3/4 inch longer than 1200 mm (4 feet = 1219.2 mm; 1200 mm = 3 feet, 11 1/4 inches).

■ The metric equivalent of a typical 2-foot by 4-foot ceiling grid is 600 x 1200 mm, so metric ceiling tiles and lighting fixtures are about 3/8 inch smaller in one dimension and 3/4 inch smaller in the other.

■ Similarly, the metric equivalent of a 4 by 8 sheet of plywood or drywall is 1200 x 2400 mm so metric sheets are about 1-1/2 inches shorter and 3/4 inch narrower.

■ "Rounding down" from multiples of 4 inches to multiples of 100 mm makes dimensions exactly 1.6 percent smaller and areas about 3.2 percent smaller. About 3/16 inch is lost in every linear foot.

## METRIC MODULES & GRIDS

The basic metric module is 100 mm (about 4 inches; see above). Submodules in preferred order are 50 mm (about 2 inches), 25 mm (about 1 inch), 20 mm, 10 mm, and 5mm. Multimodules in preferred order are 300 mm (about 1 foot), 600 mm (about 2 feet), 1200 mm (about 4 feet), 3000 mm (about 10 feet), and 6000 mm (about 20 feet). For buildings, the metric planning grid is usually 600 mm.

## BASIC METRIC

There are seven metric base units of measurement, six of which are used in design and construction. (The seventh, mole, is the amount of molecular substance and is used in physics.)

Quantity	Unit (Symbol)
length	meter (m)
mass	kilogram (kg)
time	second (s)
electric current	ampere (A)
temperature	kelvin (K)
luminous intensity	candela (cd)

Note that "weight" in common practice often is used to mean "mass".

Celsius temperature (<sup>o</sup>C) is more commonly used than kelvin (K), but both have the same temperature gradients. Celsius temperature is simply 273.15 degrees warmer than kelvin, which begins at absolute zero. For instance, water freezes at 273.15 K and at 0<sup>o</sup>C; it boils at 373.15 K and at 100<sup>o</sup>C. To move between Celsius and kelvin, add or subtract 273.15.

## FEDERAL METRIC PROJECTS GAIN MOMENTUM

The **General Services Administration**, which serves as the "federal landlord," now has over \$1 billion in metric projects in the planning, design, or construction stages.

The **National Institute of Standards and Technology** is planning about \$1 billion in facilities work for its campuses in Gaithersburg, Maryland and Denver, Colorado. Work is scheduled to be in metric.

Most of the **Department of Energy's** \$8.2 billion Super Collider project will be constructed in metric.

Two new **Smithsonian Institution** facilities with a total cost of over \$150 million will be built in metric.

The **Army Corps of Engineers, Air Force, Office of the Secretary of Defense, NASA,** and the **Public Health Service** are conducting over \$60 million in metric pilot projects with significantly more work in planning.

The \$400-\$500 million **Defense Medical Facilities** program for FY95 is scheduled to be in metric.

The **Department of State** continues to build in metric with current projects totaling \$275 million.



# VINCENNES UNIVERSITY

## Surveying Technology 8510

### A Two-Year Program Leading to the A.S. Degree

The surveying technologist may be employed in various capacities by consulting engineers, contractors, public utility companies, petroleum and coal industries, land surveyors, highway commissions, and various governmental agencies. With experience, appropriate continuing education and successful completion of the state exam the status of land surveyor may be achieved. The Indiana Society of Professional Land Surveyors serves as the advisory committee for this program.

FIRST YEAR		SEM I	SEM II
TCE 100	Surveying Fundamentals .....	3	
BML 101	Real Property Law .....	3	
HEW 101	English Composition I .....	3	
SES 115	Physical Geology 1 .....	3	
SEL 115	Physical Geology Laboratory 1 .....	2	
SMA 102	College Algebra .....	3	
TCE 150	Surveying Computations & Layout Techniques .....		3
TCE 155	Mapping and Drafting .....		3
TCE 160	Basic PC/CAD Systems .....		3
EPP 200	Land Transaction, Remedies and Instruments .....		3
SMA 104	Trigonometry .....		3
	Physical Education Activity .....		1
		17	16
SECOND YEAR		SEM I	SEM II
TCE 201	Boundary Surveying and Legal Aspects .....	3	
TCE 265	Control Surveying .....	3	
TCE 270	Surveying Applications Using Auto Cad and Related Software .....	4	
HSS 143	Speech .....	3	
	Social Science Elective .....	3	
	Physical Education Activity .....	1	
TCE 240	Subdivision Design and Layout .....		4
TCE 275	Applied Field Surveying .....		3
TCE 280	Survey Data Acquisition and Analysis .....		3
SPH 105	General Physics I .....		4
SPL 105	General Physics Laboratory I .....		1
	Social Science Elective .....		3
		17	18

Vincennes is still critically short of surveying equipment. If you would like to donate any old instruments or equipment please contact Art Haase at Vincennes University (812) 885-4185.

# VINCENNES UNIVERSITY SURVEYING SCHOLARSHIP

Vincennes University freshman Brian Turner (right), Farmersburg, is the recipient of a \$1,000 Peggy Archer Memorial Endowment Scholarship from the Indiana Society of Professional Land Surveyors. Congratulating Turner is Art Haase, professor and chair of the VU Surveying Technology Department. Turner returned to VU this fall and is completing his second year in the program. The Indiana Society of Professional Land Surveyors serves as the advisory committee for this program.



TO:  
Friends of the Peggy Archer Memorial Endowment Scholarship

I would like to express my gratitude to the Indiana Society of Professional Land Surveyors for selecting me as the recipient of the 1992 Peggy Archer Memorial Scholarship.

Last December I left my job and went back to school full-time to further enhance my surveying career. The financial stress that was placed on my family and I has been greatly diminished by the Peggy Archer Scholarship.

The faculty at Vincennes University and the members of the Indiana Society of Professional Land Surveyors have given me the motivation and guidance to become a qualified member of the surveying field in Indiana.

Sincerely,  
Brian H. Turner  
Vincennes University Scholarship Recipient

Vincennes University freshman Tony Julian (right), Vincennes, is the recipient of a \$1,000 Scholarship from the Friends of Surveying, Central Indiana Chapter ISPLS, and Southwest Chapter ISPLS. Congratulating Julian is Art Haase, professor and chair of the VU Surveying Technology Department. Julian returned to VU this fall and is completing his second year in the program. The Indiana Society of Professional Land Surveyors serves as the advisory committee for this program.



TO:  
Friends of Surveying Technology and the Central Indiana Chapter of ISPLS, and Southwest Chapter of ISPLS.

I would like to send my sincere thanks to the Indiana Society of Professional Land Surveyors for the contribution you have made toward my college education. It has greatly enhanced my financial stability and kept me from having to obtain another student loan.

The fact that I have received this award is a great honor to me. I sometimes feel lost about my future, but with people like you my life seems more applicable. I feel that I have chosen a profession that most suits my way of being.

The Society has given me the confidence to succeed and I am willing to put the scholarship to good use. I hope to be able to return the favor someday to another student in the same manner. Thank you all very much.

Sincerely,  
Anthony Julian  
Vincennes University Scholarship Recipient

## LONG KNIFE OF THE INITIAL POINT

The "Long Knife of the Initial Point" was conceived by David Ruckman to honor our forefathers, those surveyors who came before us, laid out and perpetuated the rectangular survey system of Indiana. The members of the Initial Point Chapter feels that the modern surveyors first duty is to retrace the footsteps of the original surveyors and the perpetuation of their corners. Those surveying in the present, after having retraced the rectangular system feel indebted to the original and later surveyors whose integrity and dedication to correct monumentation have given us a true sense of what it means to be a surveyor.

Nelson Prall was chosen as the first recipient of this award due to his 50 years of dedication and service to the surveying profession and his countless surveys whose quality is honored by this chapter. Members of the Initial Point Chapter, in the ongoing spirit of this award, will have the opportunity to research past and present surveyors and nominate those deserving as a future recipient of this honor by reciting the nominee's history, maps and records. An unanimous vote by the members, after hearing of this sketch of the nominee's gift to surveying, is required to ordain a new member of the "Long Knife of the Initial Point".

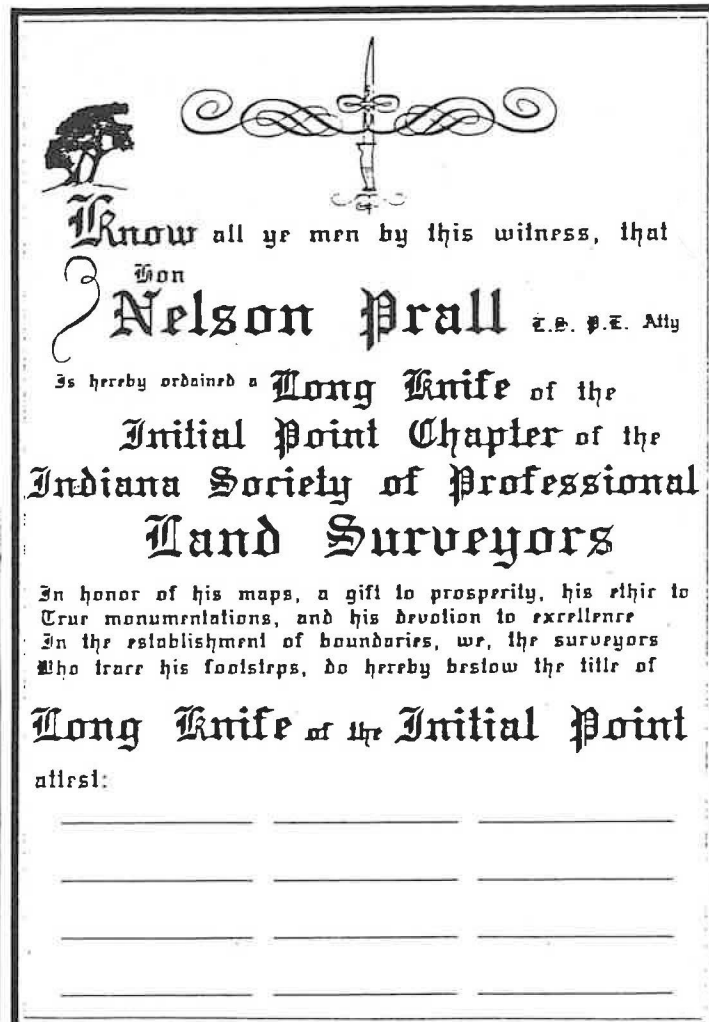
The honoree receives a framed certificate on parchment and the Chapter maintains a parchment scroll of those surveyors honored as "Long Knives of the Initial Point".



Nelson Prall (right) receiving award from Rollyn Blankenkemper.



Rollyn Blankenkemper, Nelson Prall and Tom Boofter (right), Initial Point Chapter President with award.



## MEET NELSON PRALL, BEDFORD, (PAST PRES. ISPLS - 1963)

Elsewhere in this issue is a notice that Nelson Prall has been named the recipient of a new "Long Knife" award given by the Initial Point Chapter, ISPLS. This honoree is most deserving of this award and the younger member of our Society should know of his many accomplishments. With this issue we will initiate a new feature recalling and reviewing the careers of some of our prominent Indiana land surveyors through the years.

NELSON LEROY PRALL was born on a hill in a brick house about three miles east of Henryville, Indiana, on July 9, 1906. The bricks were manufactured from clay mined on the site. He has been able to trace his family through New Jersey and Pennsylvania, to Clark County, Indiana. After obtaining a Civil Engineering degree from Evansville College, he went to work with a survey party of the Indiana State Highway Commission. In 1930 and 1931 he helped on the survey of State Road 54 from Cincinnati to Oolitic and two routes from Bedford to Brownstown for U.S. 50. While living in Bedford, he met Bertha Mahan whom he married on Feb. 4, 1933. She died in July 1984. They eventually settled at 2743 Washington Ave. in January 1945 and he still resides there. He has two sons, Eric of Hartker Heights, Texas, and Daniel of Newark, Delaware. In 1935 he went to work for the U.S. Forest Service on the establishment of the Hoosier National Forest. Prall is one of the people who traveled Orange, Perry, and Crawford county land to the soils, so the price of the land could be set.

Nelson took up the private practice of land surveying in 1950 and is still interested in it, but recently (1990) sold his practice, maps, notes, and records to Ken Anderson of Bedford. In 1958, he obtained a Bachelor of Law degree from the University of Louisville and was admitted to the Bar in 1959, although he never practiced as a lawyer because he liked surveying better. As a registered PE and LS, he often tangled with attorneys over land tracts. So he got a law degree "so I could argue with them".

During the 1960's he was the Legislative Chairman of both the Indiana Society of Professional Engineers and then the Indiana Society of Professional Land Surveyors. He was a lobbyist for them and was instrumental in getting several laws passed dealing with county surveyors, land surveyors, and engineers. He served as president of ISPLS in 1963, and has received awards for meritorious service from both societies. One of the highlights of his legislative efforts was the 1965 bill to perpetuate Indiana's section corners. He was Lawrence County Surveyor from 1961 to 1965 and from 1969 to 1973. He took a contract with the County in 1968 to prepare a plat book which was completed in 1970.

He is a rabid high school basketball fan. He has rated high school basketball games since 1950, predicting the winner and margin of victory. He is about 755 correct in picking winners but only 5% correct in picking the margin of victory. He has held a season ticket for Bedford High School games since the 1945-46 school year.

Another outstanding hobby of Nelson has been his travels. He lays claim to have been in every county in every state of the lower

48 United States (as they existed in 1942 - as some have been eliminated or added since them). He started keeping records in 1923 and at that time had only been in 13 counties in Indiana and 8 in Kentucky. He entered the last of the counties in Minnesota in 1985. He has kept a book for each state and a page in each book for each county where he enters the date, method of getting there, and places seen.

It is doubtful if anyone has ever done this and kept a record of it! Of the 3,073 counties (1942) existing in the United States, 1,284 are touched by interstate highways; 1513 more have U.S. highways through them; and 276 are not covered by major highways. His travels have also taken him to Alaska, Hawaii, and all of the Canadian provinces. Foreign travel has included China, Brazil, Mexico, Tahiti, Australia, New Zealand, and several European countries.

Thank you, Nelson, for an interesting lifetime of devotion dedicated to the profession of land surveying! Best wishes for an interesting retirement with your travel and hobbies!



Prall at his desk figuring the High School basketball ratings. 2/12/92



Nelson L. Prall, 10/11/89

# SURVEYOR'S HISTORICAL SOCIETY NEWS

by Roger Woodfill, Lawrenceburg, IN  
Chapter President S.H.S.

## Members of the Indiana Affiliate of the Surveyor's Historical Society provide program about Land Surveying to Conner Prairie Living Museum

Five members of the Indiana Affiliate of the Surveyor's Historical Society were well received by the staff of the Conner Prairie Living History Museum near Noblesville, Indiana last spring. They had been invited to provide a program about land surveying to the museum's guides (called interpreters). But let us back up a minute! Lets go back to 1836 when Andrew Jackson had just been elected President of the United States. Indiana had been a state for only twenty years, but southern Indiana had been surveyed and settled. As various Indian treaties were negotiated; surveyors were working their way north, entering the new territories and laying the land off into sections -- squares one mile by one mile each -- containing 640 acres.

At living history museums the staff members dress in period costumes, eat period food, and work at period crafts or professions while the visitors (tourists) watch and learn. The period at the Conner Prairie settlement was 1836, and we played the part of a band of surveyors who had been awarded a contract to "sectionalize" a tract just north of the Tipton River. As we passed through the Conner settlement and trading post; we were looking for "twenty gallons of whiskey plus about seven bushels of corn for the horses; four bushels of flour; a half bushel of beans, a half bushel of pease; and thirty yards of canvas for tents". We planned to hire a "pilot" (to guide the survey party to and through unknown territory, and assume the responsibility of fresh meat), a "marker" (to blaze trees and clear underbrush), and a couple of chainmen. Going wages were from eighty-five cents and a dollar per day, and we were promising to return to civilization before bad weather in the fall.

Mrs. Higbe directed us to Dr. Tousley's house for breakfast, and we learned how to eat off the back edge of a knife. It seemed like the Tousley house also served evening meals and drink. The blacksmith heated up his forge and he was admiring our chains and brass compasses. He offered to inquire about magnetized needles in Indianapolis the next time that he went after iron stock.

The interpreters and the surveyors assembled in the one-room school house about mid-morning. We explained to the townspeople our contract, and they followed us outside for a "hands on" demonstration of our compasses and chains. The weather was damp; and although the interpreters were good sports, it soon became apparent that frontier surveyors were a hardy group. (My research for the brief lecture uncovered another example of hardiness. Only the surveyor rode horseback and everyone else walked. All supplies and equipment apparently were transported by pack horse. Roadways for wagons did not come about until after the land was surveyed.)

One interpreter dressed as a merchant asked about "hiring-on", but his hands lacked calluses. I expect that he had notions of

land speculation. One lady inquired about escorting her to Ft. Wayne to meet her husband. Not being able to guarantee her safety, we claimed that we were headed much further to the west. Black powder shots from the south seemed to draw the townspeople's interest. We packed up and headed north with supplies, but still short-handed.

All of the Indiana Surveyors Historical Society members felt that the time we spent with the interpreters of the Conner Prairie Living History Settlement was very rewarding. Subsequent correspondence indicates that we have built a foundation for further programs and liaison with another devoted, interesting group. Much of the lecture about 1836 surveying was video-taped by Conner Prairie and copies were given to participating ISHS members. This report purposely intermixes verb tenses. Perhaps, that is what surveyors and instructors at lifeway exhibits have in common -- both groups live in the past, present, and future at the same time.

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# CONNER PRAIRIE LIVING HISTORY MUSEUM

Noblesville, Indiana



Woodfill's tricorn on T.F. Randolph (1829-1898) compass with twenty-four star schoolroom flag as backdrop.



Hal Ashton of Middletown and Robert Cottrell of Conner Prairie viewing an Andrew McNeely (1802-1851) vernier compass with peep sights. Photo taken in the schoolhouse.



E.R. Gray of Columbus demonstrating 1836 survey field techniques to Conner Prairie interpreters.



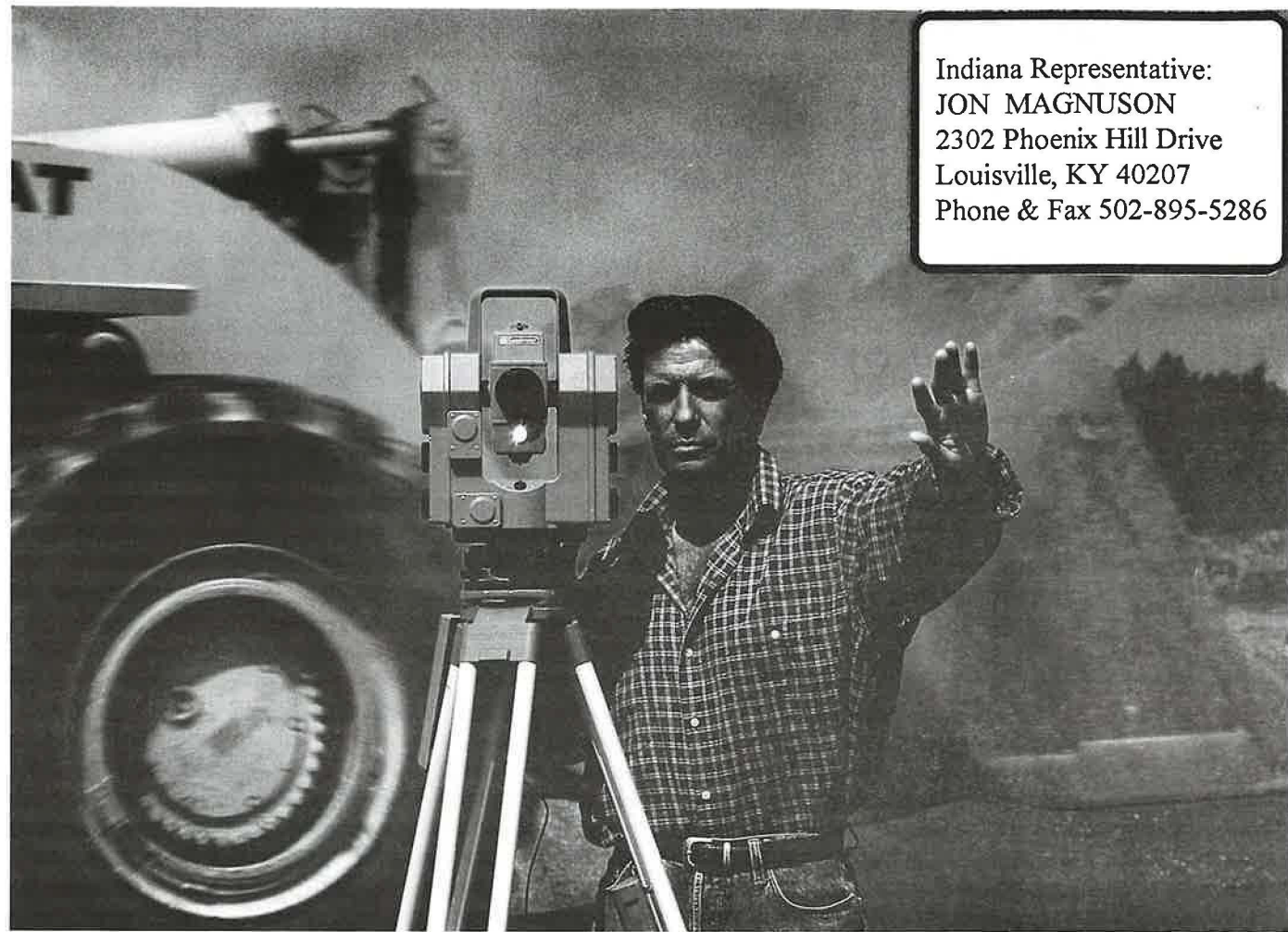
Pitser, Rayl, and Ashton back in the schoolhouse warming up.



Lowell Pitser of Bloomfield serves as "rear Chainman". The "head Chainman" seems to have the interpreters attention.



ISPLS Members who participated in demonstration of 1836 land surveying techniques and equipment at Conner Prairie Living History Museum. Back Row: Roger Woodfill Front Row: Brad Rayl, Lowell Pitser, Hal Ashton, E.R. Gray



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## NSPS GOVERNORS REPORT

E.R. GRAY, NSPS GOVERNOR

The Fall ACSM/NSPS conference was held in San Jose, California. Considered the industrial headquarters of the west coast, San Jose has more than 2,600 High Technology Companies. San Jose is among the top five entrepreneurial hot spots in the country. As of this writing San Jose has recently been experiencing some rain. The Silicon Valley has been subject to a 7 year drought.

NSPS/ACSM, and committee meetings attended by myself include:

Sunday, November 8

NSPS Board of Governors Meeting

Monday, November 9

NSPS Ethics Committee Meeting; NSPS Construction Standards Committee Meeting; County Surveyors Forum; ACSM/ALTA Committee Meeting

Tuesday, November 10

NSPS Board of Directors Meeting

Wednesday, November 11

ACSM Board of Direction Meeting

The following is a brief of some of the issues discussed and/or acted on.

Suzanne Jacques, president of the Canadian Council of Land Surveyors was introduced at the NSPS Board of Governors meeting and gave a brief report on the State of Canadian Land Surveyors.

Albert D. Frieze, Jr. reported that "the manual of Construction Layout" is final and should be available for purchase within the next few months at a cost of \$10.00 plus S.&H. through NSPS Headquarters.

A report from Connecticut that after three years of effort the Connecticut Association of Land Surveyors have accomplished the repeal of the sales tax on Land Surveying Services. Although this was certainly a great accomplishment it didn't come cheap, the Connecticut Association expenditures amounted to over \$36,000.00 in lobbying fees. A code of Surveying Practices will go in effect in Connecticut January 1, 1993.

Oregon is looking into the privatization of their State Board of Registration, Delaware has already established this, thus providing self regulation.

Over four hundred survey technician certification program booklets have been mailed out to interested parties since the spring ACSM/NSPS Conference.

ACSM B.O.D. approved a group health insurance program that should be available in the near future to surveying firms.

The concept of a fourth member organization to ACSM (GIS/LIS) was approved in concept by the ACSM B.O.D.

Illinois has established a quick response system called "I-CALL". This is much like the ISPLS "Minute Man" System. It provides for quick notification of their Association Members on issues of concern to Land Surveyors.

NSPS will be sponsoring the Map/Plat contest in the Spring of 1994.

Revised ALTA/ACSM Land Title Survey Standards have been approved by ACSM and ALTA and are headed to the printer. Copies

will be available soon through NSPS headquarters.

Romanian officials met with the NSPS Governors chairman, Curt Sumner and others this summer at ACSM headquarters to discuss dispersion of land. Discussion focused on G.P.S. and G.I.S.. N.G.S. will help in writing contracts for G.P.S. work. There are over 50,000,000 parcels of land to be surveyed. It is the Romanians intent to establish a GIS from the parcel data base.

In Arkansas five members of the Northwest Chapter of Land Surveyors have been indicted on a "conspiracy to fix prices" by the Federal Trade Commission. The five members provided a letter in support of a fellow surveyor that was being questioned for the price he had charged a client for a survey. In the letter the chapter members indicates that they charged as much if not more than the fellow Surveyors. This action is still pending in Arkansas, at substantial cost to the defendants for attorney fees. NSPS voted to allocate \$250.00 to the defendants for attorney fees. Moral to the story: Use extreme caution when discussing surveying fees with anyone, with the exception of possibly your client!

The Ethics committee is rapidly moving forward with the printing of the newly approved Creed and Canons in a frame worthy format. Additionally, the Creed and Canons will be available mounted on a walnut plaque. Both formats will be available through Pat Canfield at NSPS headquarters.

From ACSM/ASPRS Government Affairs report:

**RAILROAD ABANDONMENT** - A petition was sent to the Interstate Commerce Commission in July requesting rule making for responsible actions by railroads on preservation of surveying benchmarks, monumentation, and mapping information. A reply is anticipated in early November.

**NGS USER SERVICES** - Letters were sent and contacts were made with Congressional Appropriations Committees and NOAA officials concerning the threat to redirect resources at National Ocean Services away from products and services that benefit the surveying and mapping community and the general public. Key meetings with NOS are scheduled in November.

**FEMA'S FLOODPLAIN MAPPING** - Member concerns about accuracy and quality of FEMA Flood Insurance rate map was brought to the attention of FEMA officials and Congress. Senator Kerry (D-MA) endorsed our recommendation for his bill (S. 2907) on Flood Insurance Reform, but the bill was not enacted before adjournment. A mapping task force committee is to be created to continue to address FEMA Map concerns.

**USGS MAPPING FORUM** - A Landmark Forum was held August 5, 1992 with USGS National Mapping Division Officials, ACSM, ASPRS, and MAPPs on opportunities for private-sector involvement in Federal contracting. Government Affairs arranged the successful forum with 150 attendees. A technical session on contracting with USGS is planned for the Spring ACSM/NSPS Conference in New Orleans.

If you have questions about any of the above please feel free to contact me at 1-812-379-1525. ...continued page 22

**MICHIGAN SOCIETY OF REGISTERED LAND SURVEYORS**

Previous Surveying Legislation Enactment in Michigan:

1. A four year degree requirement for registration as Land Surveyor
2. Survey Map Recordation Act
3. Survey Corner Filing Act
4. Updated definition of the scope of practice of Surveying
5. Funded state-wide section corner remonumentation

Current Surveying Legislation Objectives:

1. Joint endeavor with the Architects and Engineers to achieve self-regulation under governmental authority.

Other Areas of Concern:

1. Wetlands designation
2. Flood Plain mapping identification
3. Monumentation of abandoned railroad right-of-way

**WESTERN FEDERATION OF PROFESSIONAL SURVEYORS**

Western Federation of Professional Surveyors, (WFPS) an association of thirteen western states, are studying the enactment of continuing education/professional development programs. Very few of the western states have enacted such programs. The WFPS Board has adopted in concept an effort to encourage limited uniformity for continuing education/professional development between the thirteen states.

"The world is moving so fast these days that the man who says it can't be done is generally interrupted by someone doing it".  
...Harry Emerson Fosdick

**COMPLETED CAREERS**

**G. WARREN MARKS, 53  
Teacher at Purdue and Penn State**

G. Warren Marks, 53, of State College, PA, died Saturday, November 28, 1992. He had been an associate professor in civil engineering at Penn State University since 1978. Before that he was an assistant professor of civil engineering at Purdue University (West Lafayette campus) from 1971 to 1978. His field was surveying and photogrammetry.

He received bachelor's and master's degrees from Cornell University in 1962 and 1966 and earned his doctorate degree in 1972 at the University of Illinois at Urbana-Champaign. Warren received many awards, including the Presidential Citation for Exceptional Service from the American Congress on Surveying and Mapping in 1985, the Outstanding Advisor Award from Penn State Engineering Society in 1985, the Surveying and Mapping Award from the American Society of Civil Engineers in 1990, and a special recognition for outstanding service from the Pennsylvania Society of Land Surveyors in 1992. He also served as technical program chairman and organizer of the annual Pennsylvania Surveyor's Conferences from 1979 to 1993.

He was born in Ithaca, NY, November 12, 1939. He married Betty Jean Corby, June 15, 1968, and she survives. Also surviving are a daughter, Anna, and a son, John, both at home, and a sister, Marilyn Spring of Valparaiso, IN.

Earlier Purdue land surveying graduates will remember him as an outstanding surveying instructor during the beginning years of the Purdue program.

**GENE NAGRON, 66  
Surveying Instrument Salesman**

Word has been received of the death of Gene Nagron, 66, of Elk Grove Village, IL on August 21, 1992 after a two year battle against cancer. Gene was a long-time employee of National Surveying Instruments in Chicago, Illinois. He spent most of his life in the Chicago area, but he had a much wider reputation through his contacts with surveyors across the country and especially the mid-west.

His knowledge of surveying equipment and techniques was largely self-taught, beginning when he accepted a position at National shortly after his discharge from the Army, where he served in Korea. He was vice-president of National at the time of his retirement, but he continued to be involved with surveying equipment companies, taking a position with Chicago Steel Tape, but was diagnosed with cancer shortly thereafter.

He was, at one time, president of American Surveying Publishing Company, the parent publisher of the Professional Surveyor where he was a tireless contributor of ideas and counsel. He is survived by his wife, Helen. Indiana surveyors will remember him as an enthusiastic and helpful exhibitor at Indiana conferences and conventions through the years!

**GEOTRONICS OF NORTH AMERICA  
APPOINTS PRESIDENT**

Geotronics of North America, manufacturer of Geodimeter surveying total stations, Dynamic Positioning products and Industrial Measurement Systems (IMS), has announced the appointment of Frank Larsson as President of the firm. In this position, Mr. Larsson will direct all marketing and sales programs for all product lines in the United States, Canada, and Mexico.

"Frank's extensive knowledge and experience in all phases of Geotronics management make him the ideal person for this position," said Rudolf Wiklund, President of Geotronics, Sweden. "His many years at Geotronics headquarters, as well as his many years in the seventies with Geodimeter in the U.S., has prepared him for the responsibilities implicit with the North American subsidiary. We are pleased he has accepted this position."

Mr. Larsson will head all marketing and sales efforts for Geodimeter, Dynamic Positioning and IMS product lines. Geodimeter products include the new "Create Your Own" 500 System series, the revolutionary robotic "One-Man" System 400 series of integrated total stations, and all related software and accessories. Dynamic Positioning products include distance meter control systems for wet processing, steel and aluminum, automatic storage and retrieval, and nuclear refueling industries. IMS products include laser-based measurement systems for refractory and ladle linings in the steel industry.

**GEOTRONICS APPOINTS TECHNICAL  
SUPPORT SPECIALIST FOR  
GEODIMETER PRODUCT LINE**

Geotronics also recently announced the appointment of Andy Donovan as Technical Support Specialist for their Geodimeter product line. In this position, Donovan will provide technical expertise and support for all Geodimeter dealers and sales representatives throughout the U.S.

Donovan brings to Geodimeter more than 15 years of survey and survey equipment experience. Prior to coming to Geodimeter, Donovan spent 6 years as Regional Manager with Nikon Instrument Division and 5 years as System Sales and Consultant for Brunson Instrument Co. Before moving into sales and service, Donovan spent 8 years in survey and construction. He was instrument Man and Party Chief and Product Manager for Wheat & Lodenburger Engineers of Lexington, Kentucky; he also has experience as Construction Superintendent for Venture Construction of Atlanta, Georgia.

"Andy's extensive background in surveying and his in-depth knowledge of survey equipment will provide excellent technical support for all our dealers and sales representatives of Geodimeter survey products," said Paul F. Hahn, Marketing Director for Geodimeter products. "In turn, our network of dealers and sales representatives will be able to provide even greater technical expertise to our expanding customer base."

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# CALENDAR

- February 15-18, 1993**  
ACSM/ASPRS Annual Convention, New Orleans, Louisiana  
Contact: ACSM 5410 Grosvenor Lane, Bethesda, MD 20814  
Phone: 301-493-0200
- February 17-19, 1993**  
Annual Conference, Michigan Society of Registered Land Surveyors, Grand Rapids, Michigan
- March 17-19, 1993**  
*Joint Society Convention (ISPLS, ISPE, ASCE, CEI, IEEE), Adams Mark Hotel, Indianapolis, Indiana*
- March 17, 1993**  
ISPLS Board of Directors Meeting, Adams Mark Hotel, Indianapolis
- April 3, 1993**  
ISPLS Board of Directors Meeting, Purdue Univ. Lafayette
- April 30, 1993**  
ISPLS Workshop, (Tentative)
- May 17-20, 1993**  
14th North American Surveying and Mapping Teachers Conference, University of Florida, Gainesville, Florida
- May 22, 1993**  
ISPLS Board of Directors Meeting, Indianapolis
- June 8-11, 1993**  
Annual Conference, Canadian Institute of Surveying and Mapping, Toronto, Canada
- July 10, 1993**  
ISPLS Board of Directors Meeting, New Albany
- July 25-29, 1993**  
Urban and Regional Information Systems Association '93 Annual Conference, Atlanta, Georgia
- September 18, 1993**  
ISPLS Board of Directors Meeting
- October 9, 1993**  
ISPLS Board of Directors Meeting
- October 29, 1993**  
GIS/LIS '93 Annual Conference and Exposition and ACSM/ASPRS Fall Convention, Minneapolis, Minnesota.
- November 13, 1993**  
ISPLS Board of Directors Meeting, Indianapolis
- January 26, 1994**  
ISPLS Board of Directors Meeting, Louisville, Kentucky
- January 26-28, 1994**  
*ISPLS & KAPS Joint Society Convention, Galt House, Louisville, Kentucky*
- April 23-28, 1994**  
ACSM/ASPRS Annual convention, Reno, Nevada

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