HOOSIER SURVEYOR



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

VOLUME 32 NUMBER 4 SPRING 2006



AFFILIATED WITH THE AMERICAN CONGRESS ON SURVEYING & MAPPING





2006 SOCIETY OFFICERS INDUCTED

Frank Ballintyn, left, Sellersburg, new incoming president of ISPLS, presents the past president's gavel and plaque to outgoing president, Ron Wharry, Frankfort, at the recent January 2006 annual ISPLS convention held at Marriott East Hotel in Indianapolis.

2006 OFFICERS & DIRECTORS

Frank Ballintyn - President 2855 Plantation Ct.

Sellersburg, IN 47170 RES: (812) 246-9881 BUS: (812) 294-4306

Ed Sweetland - President Elect 6793 W. Colonial Drive Indianapolis, IN 46140 RES: (317) 891-1137 BUS: (317) 547-5580

Jim Tibbett - Vice President R.R. 2 Box 240 Linton, IN 47441

RES: (812) 847-3254 BUS: (812) 847-1952

Todd Bauer - Secretary 3864 Ashford Blvd. New Haven, IN46774

RES: (260) 494-6673 BUS: (260) 493-0688

Dan Kovert - Treasurer 13804 Allayna Place Fishers, IN 46038

Fishers, IN 46038 RES: (317) 841-1083 BUS: (317) 202-0525

TERM EXPIRES JAN 2007 E. Donald Bengel

E. Donald Bengel 73 E. Division Road Valparaiso, IN 46383

RES: (219) 465-0988 BUS: (219) 462-0690

Rich Hudson 574 North 50 West Valparaiso, IN 46385

Valparaiso, IN 46385 RES: (219) 462-2946 BUS: (219) 462-1158

Mark Isaacs 4337 N County Rd 275 W Brownstown, IN 47220

Brownstown, IN 47220 RES: (812) 358-2702 BUS: (812) 522-3821

Ron Wharry 52 W. Clinton Street Frankfort, IN 46041

RES: (765) 654-5385 BUS: (765) 654-5910

TERM EXPIRES JAN 2008

Frank Ballintyn - President

Perry Cloyd 3906 Sycamore Drive Columbus, IN 47203

RES: (812) 526-2227 BUS: (812) 526-6209

Harold Hart 5917 Ridgefield Dr. Charlestown, IN 47111

RES: (812) 256-5777 BUS: (812) 288-6646

Steven Murray 1428 East 900 North Battle Ground, IN 46920 RES: (765) 567-4187 BUS: (765) 423-9228

TERM EXPIRES JAN 2009 Ed Sweetland - President Elect

Todd Bauer - Secretary

Dan Kovert - Treasurer

Jim Tibbett - Vice President

ADMINISTRATIVE OFFICE

Dianne S. Bennett, Executive Director 55 Monument Circle, Suite 719 Indianapolis, IN 46204 (317) 687-8859 Fax:(317)687-5053 ISPLS is a Not For Profit Corporation

COMMITTEE ASSIGNMENTS (2006)

Prof. Development Administrator: Bill Clark

EDUCATION

Brad Cramer - Chair Bryan Catlin Bill Clark Randy Compton Bruce Franke John Silnes Michael Smith

LICENSING EXAM REVIEW

Harold Hart - Chair Zach Beasley Lisa Dobrowski Bruce Franke Dirk Gowin Robert Gross Dennis Grumpp Michael Huffman Brady Kuhn Robert Tyler

SCHOLARSHIPS

Mark Isaacs - Chair Lee Bender Phillip Burress Coralina Candler Lisa Dobrowski Mark Schepers Troy Smith

TECHNICIANS

Nathan Althouse - Chair Andrew Baxter, Jr. Jason Henderson Tammy Lohr-Brown Brian Matherly

TRIG STAR

Tony Gregory - Chair Edward Clancy Bill Clark Andrew Murray Peter Wesson Ron Wharry

Government Affairs Administrator: Al Frisinger& David Smoll

BOARD OF REGISTRATION LIAISON

Perry Cloyd - Chair

COUNTYSURVEYORS Steve Murray - Chair

Zack Beasley
Jay Poe
Michael Stevenson

GOVERNOR GREAT LAKES COUNCIL

Don Bengel - Governor Tony Gregory - Alternate

GPS-GIS MONUMENTATION

Steve Murray- Chair
Tom Mahon - Co Chair
Zach Beasley
Perry Cloyd
Jamison Cullen
David Mendenhall
Paul Sanders
David Smoll
Boudewijn van Gelder
Craig Williams

LEGISLATION

Richard Miller - Chair Bruce Franke Allan Frisinger Jeffrey Knorr Brady Kuhn Brian Matherly Jay Poe Paul Sanders Mike Smith David Smoll Nathan Walker Dan Woo

STANDARDS

Norm Hiselman - Chair Brady Kuhn - Co Chair Alan Cleveland Randy Compton Brad Cramer Bruce Franke Allan Frisinger B.H.W. van Gelder Jeffrey Knarr Brian Matherly Jason Miller Rick Miller David Smoll

STATE AGENCY LIAISON

Todd Bauer

Internal Affairs Administrator: Rich Hudson

BYLAWS

Don Bengel - Chair Charles Coyle Robert Gross William Stine Tim Warner Ron Wharry

CHAPTERS

Ron Wharry - Chair Aaron Blank Randy Compton Daniel Kovert Chapter Presidents

FINANCE & PLANNING

Dan Kovert - Chair Frank Ballintyn Todd Bauer Dianne Bennett-ExDir. Doug Herendeen Ed Sweetland Jim Tibbett Ron Wharry

NOMINATIONS

Mark Gardner - Chair Doug Herendeen Rich Hudson Don West

RELIEF FUND Open

Communications Administrator: Ed Sweetland

HOOSIER SURVEYOR

Ken Curtis - Chair Andrew Baxter, Jr. Mike Davis

INTERSOCIETY RELATIONS

Phil Peden - Chair Jamison Cullen Michael Fink Donald Mosson Jay Poe

MEMBERSHIP

Mark Gardner - Chair Aaron Blank Daniel Kovert Ron Wharry

PAST PRESIDENT'S

COUNCIL
Perry Cloyd - Chair

PUBLICATIONS

Dennis Grumpp - Chair Gordon Bell Randy Compton Steven Knies Don West

PUBLICINFORMATION & MARKETING

Tony Gregory - Chair Zach Beasley Brady Kuhn Jason Miller Bill Stine Ed Sweetland Ron Wharry

WEB PAGE

Ed Sweetland - Chair Andrew Baxter David Mendenhall Phil Peden

HOOSIER SURVEYOR

VOLUME 32 NUMBER 4 SPRING 2006

CONTENTS

Masthead	
President's Thoughts	2
ISPLS Hires A Lobbyist	3
ISPLS Board Of Directors Meeting Highlights	5-6
ISPLS 2006 Committee Charges	7-13
Nails	15-17
The Perfect Husband/Meanings	17
Things	19
ISPLS 2006 Convention	20-21
Deter Thieves: Advice to Help Prevent Stolen Equipment	23
Innovations in Teaching Boundary Research/Redneck Medical Terms	25
Calendar/New Members/Sustaining Members	26
Firm Members	

EDITORS NOTE

Deadlines for copy for various planned issues of the Hoosier Surveyor are as follows: Winter - December 31; Spring - March 31; Summer - June 30; Fall - September 30.

The Hoosier Surveyor is published quarterly by the Indiana Society of Professional Land Surveyors, to inform land surveyors and related professions, government officials, educational institutions, libraries, contractors, suppliers and associated businesses and industries about land surveying affairs.

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.

Editorial Advertising Offices Ken Curtis - Editor
55 Monument Circle, Suite 719 2204 Happy Hollow Rd
Indianapolis, IN 46204 W. Lafayette, IN 47906
Phone: (317) 687-8859 Fax: (317) 687-5053 Phone: (765) 463-7452

Web Page: www.ispls.org EMail: ISPLS@aol.com E-Mail: KenSurvMap@aol.com



ISPLS BOARD OF DIRECTORS (2006)

l to r, first row:Frank Ballintyn,Sellersburg; Perry Cloyd, Columbus; Harold Hart, Charlestown; Don Bengel, Valparaiso; Richard Hudson, Valparaiso; Ron Wharry, Frankfort; Jim Tibbett, Linton; Second row, l to r: Todd Bauer, New Haven; Steve Murray, Battle Ground; Mark Isaacs, Brownstown; Ed Sweetland, Greenfield; Dan Kovert, Fishers.

PRESIDENT'S THOUGHTS

by Frank F. Ballintyn, PLS, Sellersburg, Indiana



Fellow Surveyors:

Amber R. Van Til, J.D.. Name-mean anything to you? Well we hope it does and if it doesn't we hope that it will in the future, in fact we are willing to put our money behind her. She has been approved by the BOD to be our lobbyist. We have already signed our part of the contract, we are waiting on her to

sign it. Now our Society can be pro-active instead of re-active to legislation that comes up that involves surveying in one form or another. In the past we have relied on Tom Dinwiddie Esq., Rick Miller or another surveyor searching the legislative services agency to inform us and take necessary action in favor or against a proposed bill. So far we have been able to survive with a LOT of personal work and effort by those dedicated few individuals taking the correct steps to preserve our profession, not just for ISPLS members, but all licensed surveyors practicing in our State. These few have taken time from their surveying jobs to present our side of the issues (testify) before the legislatures and have done an excellent job. The hiring of Ms. Van Til of course costs money, lobbyists are not cheap, we want a good job done and you get what you pay for. In order to afford our future costs, the biggest one being the lobbyist bill, the Finance & Planning committee came up with a proposed budget, this required a lot of work by a few individuals. This budget includes various cuts or decreases in certain line items, from previous budgets and a slight increase in our membership dues. The BOD voted to accept this new budget. The increase in our dues is \$20 a year for Prof. Mem., \$10 for Affiliate, \$10 for Associate, \$2.50 for Student, \$20 for Firm w/1 person, \$35 for Firm w/2-4 persons, \$50 for Firm w/5-9 persons and \$45 for Firm w/>10 persons. There is a very complicated lobbying tax involved that is also very expensive, if all of us claim the full amount of dues as a deduction on our taxes. The percentage that we ask all members not to deduct from their taxes is small. This is very involved and will be printed in an issue of this magazine. This lobbyist bill is a very needed item for Land Surveyors across our State, if for no other reason then to protect our profession, so we are asking all of you to support your profession by paying these higher fees. Our dues has not seen an increase in a long time. This increase is not to build a bigger coffer for our funding. ISPLS was hanging by a thread financially shortly after it was established. We almost lost our voice throughout the State. This brought up the thinking that ISPLS should have the amount of 1 years operating expenses invested, in case of emergencies. We are very close to that goal. Rick Miller came up with 12 services that Amber will perform as our lobbyist. These will appear in this or a future issue. Ed Sweetland will write an article about Ms. Van Til in this issue. Please be sure to read it.

The committee assignments, their chairman, the administrator for the 4 groupings and all their charges has been completed and will be in this issue. I will do my best to get each chairman and administrator a final copy of their charges, before this goes to print. Some committee chairman have already taken the preliminary list of charges and given the BOD not only their goals, but their completion dates. I greatly appreciate this because I have personally spent an enormous amount of time on this. I would greatly appreciate all chairman getting this done and the respective administrators following up with them and regularly reporting updates to each BOD meeting. I thank everyone who works for this society as a volunteer.

Our secretary Todd Bauer has worked very hard and very late one night in order to bring all of you the minutes of the latest BOD meeting held 4/8/05. They were due in Dianne's office by the 15, Holy Saturday. Those of you interested in following your society's news and events should be very appreciative. Thanks Todd! A request of Todd's is for the committee chairman of every committee to provide to Todd directly at work, in WORD at least 5 working days before the next BOD meeting, your report to the board. This will make Todd's secretarial work a lot quicker and easier. Thank you chairman in advance.

The Communications administrator Ed Sweetland has created a great form, listing all of his committees and their reports for the last BOD meeting. This is great. I ask all administrators to follow suit for the next and succeeding BOD meetings, please.

Vincennes students and graduates! I know there are a lot of you successful, ethical professionals out there, I've seen you. We have finally fully funded your "Peggy Archer Memorial Scholarship". Thank you to the Scholarship committee.

Some of the information you might be interested in from the committees: The Standards committee is busy working on compiling surveyors reports to post as examples on the ISPLS web page. This is to assist the BOR. The Finance and Planning committee and the Public Information and Marketing committee have addressed all of their charges already! Great!!

There has been considerable talk about a future convention being held at French Lick Springs. There - I've open Pandora's Box. I'll try to give a few brief views/comments and leave it at that. Some comments are to relocate the convention. Currently it is centrally placed. The large size required and some restrictions, forced the convention committee to keep it in INDY. The exhibitors like it, there is a large airport nearby for national speakers, there is easy access to the conventions needs. Moving the convention will be discussed in the Sept. BOD meeting, that

much has been accomplished, to get the subject on the slate. Some things to consider: size - it needs to hold our large group of attendees, speakers and dignitaries and their families, is there plenty of free parking, are the exhibitors in a good location, if we move around the State will all the attendees be equally inconvenienced (distance wise) at future conventions and finally how much are you personally willing to pay for a room? Are you willing to accept a 50% increase? We need your answers before the Sept. 23 BOD meeting. You can do this by accessing the ISPLS website and telling the BOD your professional input. We need your input for the decision. Not responding, tells us the BOD speaks for you!!! Two last items on the convention, the 2008 convention is being co-sponsored by the Wabash Valley and Initial Point Chapters at the Adams Mark in Indy by the airport. We will not scan at future conventions because it has created a large amount of extra work for our staff.

Some final comments: The Indiana/Michigan State Line committee is moving forward with the recovery and posting of our North state line and the North East corner. Norman C. Caldwell is their recording secretary. House Bill 1220 and Senate Bill 0333 were signed into law. We supported both of these. The first one establishes fees for a professional investigation fund. This will be added to the State biyearly fee we all pay, the second establishes certain continuing education requirements and requires certain licensed professionals to provide their SSN to the professional licensing agency who will release it to testing services, state boards and professional organizations. The certificate presentation ceremony is being held on May 12th. This could be the last one since the governor is contemplating eliminating it to save a few dollars. The Northwest Chapter has created a chapter scholarship - Great.

Last but definitely not least two items being discussed at the next BOD in May: the 2005 "Strategic Planning Session" held on Nov. 5th, the results will be implemented to improve our society and a deceased surveyor registry, (it entails creating a registry of where and who has the said deceased or retired surveyors records or copies thereof). Have a great day Get involved PLEASE

CHECK OUT THE ISPLS WEBSITE ISPLS.ORG

ISPLS HIRES A LOBBYIST

by Ed Sweetland, President Elect, Greenfield, IN

During our last board of directors meeting our board hired Amber R. Van Til, J. D. as a lobbyist for ISPLS. Amber will be performing the following lobbyist services for ISPLS: monitor and review legislation in the Indiana General Assembly relevant to the issues concerning the ISPLS; attend and participate in legislative committee meetings; provide notification of any and all legislative issues relevant to ISPLS in a timely and efficient manner; provide testimony when necessary; facilitate grassroots initiatives and attend coalition meetings; provide weekly reports during legislative session to the ISPLS board; provide periodic reports to ISPLS Government Affairs Committee; cultivate and maintain relationships with legislators and appropriate state officials as designated representative of ISPLS; monitor summer study committees for matters of interest to ISPLS; monitor Indiana Register for proposed and final rules of interest to ISPLS; provide timely filing of appropriate lobby registration and activity reporting; provide advice to ISPLS political contributions and provide guidance and advice on strategies and tactics related to initiating, developing, supporting or opposing Indiana legislation. Amber is currently employed by the Community Bankers Association of Indiana as the Vice President of Governmental Relations and also works as a contract lobbyist for the Indiana Mortgage Bankers Association (IMBA). During her tenure at the Community Bankers Association of Indiana, Amber has established the company's Governmental Relation's Department, increased the company's Political Action Committee (PAC) donations and has developed specific legislative strategies for each legislative session. Outside of her job she has also found time to work as an adjunct faculty at the University of Indianapolis and a fund-raiser for Sue Anne Gilroy Committee for Mayor of Indianapolis.

The board of directors believes that Amber will be a great fit to our society and through her actions, will improve our organization.

Definitions of Surveying and Associated Terms

The 2005 revised edition has been updated to incorporate over 500 new definitions and modify approximately 150 others. It contains over 100 more pages than the previous edition which was published in 1978.

Price: NSPS Member - \$22.00; Non-Member \$27.00

This book and numberous others can be ordered at ACSM.NET

or

ACSM

6 Montgomery Village Avenue, Suite 403

Gaithersburg, MD 20879



ALLEN PRECISION EQUIPMENT

1-800-241-6223

#TOPCON

Long Range & Cable-Free



- Completely cable-free
- Glonass-ready
- Dual Constellation satellite tracking

Reflectorless Range! 1200 Meter



Starting as



GPT-3000LW Series

Revolutionary 1200m reflectorless range. A new standard for EDM rangewhile delivering power for difficult shots.

TOPCON



INTEREST DETERMINED BY NUMBER OF PAYMENTS OR NO PAYMENTS

for 6 months at a low 5.9% Interest CALL FOR DETAILS!

- 1200 Meter Reflectorless range
- **Dual Laser** Optics
- Bluetooth Communications
- Precise Measurements
- Visible ILaser Pointer
- . Highly focussed Infrared Beam
- · Available in 2", 3" and 5" models

FC-2000 and **FC-100 Field Controllers**

Topcon's new field controller has all the great features as the FC-1000 but with a color screen. The FC-2000, represents the most powerful controller combinations in the industry.

- Ultra-bright, TFT sunlight-active, color touch screen display
- Removable Compact Flash Card
- · 2 comm Ports (9-pin serial, 6-pin instrument)
- · USB Port
- Removable Li-lon Batteries (off the shelf mini-cam batteries)
- Powerful 400Hz Intel Xscale processor standard





www.allenprecision.com · 1-800-241-6223

ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

January 18, 2006

The ISPLS Board of Directors held a meeting on Wednesday, January 18, 2006 at the Marriott East. President Wharry called the meeting to order at 8:15 a.m.. The minutes and treasurers reports were reviewed and approved with revisions.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Communications - Membership - The following membership applications were reviewed and approved: Professional Member - Stephen Bourquein, Thomas Harris, Alvin Paul, Jeffery Stenger; Associate - Corey Allen, Wyatt Bower, Chris Boyd, Gregory Howarth, Sean Owen, Philip Peden, Michael Plumb, John Wood; Firm - DLZ; Life - Robert Bigelow.

Hoosier Surveyor - Any articles for the winter issue need to be submitted by January 27th.

Professional Development - Education - The 2006 convention registration has 486 full time, 7 complimentary, 62 - one day, 18 spouse and 39 students signed up for a total of 612 preregistered attendees.

The adjoining state representatives are: Brad Kramer, Eaton ,Ohio (President Elect) Lee Koehler, Wheaton, Illinois (President)

EXPLORE NEW BOUNDARIES!

STRICT-TAL

Monuments, Caps and Accessories

800-445-5320 surv-kap.com

Joe Mylor, Warsaw, Kentucky (President Elect) Michael Bartolo, Lansing, Michigan (President)

The spring seminars are April 14th at Columbus, and April 28th at Anderson. Perry Cloyd will be the presenter at these two seminars.

Trig-Star - The committee is ready to get started on this years contest. The contacts are being made now. It was stated that this is the best time to get the word out to area schools.

Government Affairs - Legislation - Discussed was House Bill 1220 which adds the \$20 charge at license renewal, and Senate Bill 330 which talks about continuing education. There was lengthy discussion about having a full-time lobbyist. Steve Murray presented proposals from some different companies to give an idea of what the costs would be.

- 1). Bose Treacy Associates. LLC @ \$60,000/yr.
- 2) Amber VanTil no cost given
- 3) Hayes Murray and Caster @ \$6,000/mo.

Ron Wharry and Frank Ballintyn will put together an ad-hoc committee for dealing with legislative activities, and explore the idea of obtaining the services of a full-time lobbyist.

Board of Registration - The meeting dates are on the ISPLS website. Their next meeting is February 10th. John Stephens replaced E.R. Gray's position on the BOR. Congratulations John!

County Surveyors - Loraine Wright gave a brief report on the progress of the tie-card scanning for each county.

Internal Affairs - Nominations - The results for the 2006 board of directors were Daniel Kovert, James Tibbett and Todd Bauer.

Chapters - Initial Point Chapter will host the 2008 convention with the Wabash Valley Chapter.

The Initial Point Chapter will place a monument on the headstone of Nelson Prall in his honor.

New Business - Gary Kent, representing IUPUI, has made a request for pledges for online courses, professors, etc... no action was taken.

Also reviewed was a request for a grant to study a topic in the surveying profession. The consensus of the BOD was that there needs to be a formal request for the grant made.

John Stephens, John Updike and Tony Gregory expressed an appreciation for all the help and years spent on the BOD.

The organizational BOD meeting will follow this meeting. **February 25, 2006**

The ISPLS Board of Directors held a meeting on Saturday, February 25, 2006 at ISPLS headquarters. President Ballintyn called the meeting to order at 9:11 a.m.. The minutes and treasurers reports were reviewed and approved with revisions.

Adjustments to Agenda - Publications - Dennis Grumpp gave a report on his committee's activities. There was general discussion regarding publication for outreach to school children to develop their interest in the profession of land surveying. The committee will be soliciting input on other topics of interest by the society for future/additional publications.

Minutes

... continued from Page 5

Standards - Norm Hiselman reported on the 2005 actions focused on the Indiana Administrative Code revisions to Rule 12, and their impact on the land surveying profession. These changes have been implemented and have been reviewed as of February 10, 2006 with little objection from the society or profession.

Also discussed was the development of a publication addressing Positional Accuracies for use by the profession. The publication would establish accuracies and standards of the surveying profession through the years. The charge could be a joint effort of Standards and Publications Committees. Another possible charge for the committee was the possibility of creating a sample Land Surveyor's Report for publication on the ISPLS web page for use and reference by the profession.

Wallington Assess Management - Chris Marten & Jeff Dalden presented a general discussion of the ISPLS portfolio and to review the current direction of the portfolio and establish the direction for the future.

Legislative Update and Review - Rick Miller reported on HB 120 and SB 330. They have made it through their committees and have been approved by their respective assemblies.

Rick provided a Mission Statement and Scope of Services for the Ad-Hoc Committee regarding the retention of a lobbyist for ISPLS. A general discussion of the benefits and services that a lobbyist could provide followed. It was suggested that a lobbyist if retained should be retained by June to maximize the benefit to ISPLS, but no later than September to provide an offensive posture on behalf of the Society.

It was commented that it is in the best interest of ISPLS to retain a full time lobbyist in order to advance the objectives of ISPLS and enhance the profession.

Now that we have a Mission Statement and Scope of Services for the lobbyist, ISPLS should interview potential lobbyists to determine the cost associated with their services with the representation of ISPLS. The three perspective lobbyist firms will be contacted to establish interview dates and times with the board of directors.

The finance committee has been charged to meet and review the budget to determine mechanisms to financially support the retention of a lobbyist. They will report their findings at the April 8, 2006 BOD meeting. A draft of the budget for the coming year will be provided by the Finance committee by March 24, 2006 for consideration by the BOD.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Officers' Activity Reports - Frank Ballintyn attended the Kentucky Convention. James Tibbett attended the Ohio Convention. Ron Wharry attended the Illinois Convention and Ed Sweetland attended the Michigan Convention.

Communications - Membership - The following membership applications were reviewed and approved: Professional Member - Phillip Going; Associate - Jason Armstrong, Derrick Wallace, and Bradley Bennett; Student - Craig Lankford.

Hoosier Surveyor -The winter issue went to print Feb. 15th. Articles for the next issue are due April 15th.

Web Page - Currently we are working on changes and improvements to the web page. A comment section was discussed along with other improvements.

Public Information & Marketing - Tony Gregory is working with Purdue Calumet to establish a marketing plan and direction. Museum exhibit and telethon participation was discussed along with press releases to local newspapers regarding accomplishments. We have received the ACSM speaker's kits which will be distributed to the local chapters for use.

Past President's Council - Perry Cloyd is working on gathering information from neighboring states.

Professional Development - Education Committee - Doug Herendeen gave an update on the 2007 and 2008 state convention. A motion was made and passed to commit to the Adams Mark Hotel for the 2008 convention.

A motion was made by and passed to pursue the 2009 Convention location in French Lick, Indiana.

The upcoming seminars on Rule 12 were discussed.

Licensing Exam Review - The review will be March 11th at Fort Wayne, Indiana.

Government Affairs - Board of Registration - Perry Cloyd discussed the February 10th BOR meeting.

GPS/GIS - Steve Murray reported that the section corner tie card effort has consumed the efforts of Lorraine ad others.

County Surveyors - Steve Murray reported the annual meeting will be at the Road School at Purdue University, March 29th. The governor has given indications that the office of the County Surveyor may be phased out during future legislation actions. This is an issue that ISPLS will have to address during the next legislative session.

NSPS Governor/Great Lakes Council - Don Bengel will be attending the meeting April 21st.

Internal Affairs - Bylaws - a committee meeting is scheduled for March 17th.

Chapters - The speaker's kits have been received and will be forwarded to individual chapters. There was discussion about establishing additional chapters in the state.

Relief Fund - There was discussion as to the use and intent of the fund.

April 8, 2006

The ISPLS Board of Directors held a meeting on Saturday, April 8, 2006 at ISPLS headquarters. President Ballintyn called the meeting to order at 9:03 a.m.. The minutes and treasurers reports were reviewed and approved with revisions.

Adjustment to the Agenda: The 2005 strategic planning session and organizational goals were added to new business.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Communication - Hoosier Surveyor - Any articles for the next issue needs to be submitted by April 15th.

Intersociety Relations - A meeting is being planned at the end of April.

Membership - The following membership applications were reviewed and approved: Associate - John Kelley; Affiliate - Matthew Sutton and John Dybas.

ISPLS 2006 Committee Charges

4 Steering Committees: The administrator reports developments on assigned committees at each BOD meeting

<u>Communications</u> -Administrator: Ed Sweetland Committees: Hoosier Surveyor - Ken Curtis

Intersociety Relations - Perry Cloyd

Membership - Mark Gardner Publications - Dennis Grumpp

Public Information & Marketing - Tony Gregory

Web Page - Ed Sweetland

Past Presidents Council - Perry Cloyd

Professional Development - Administrator - Bill Clark

Committees:

Education - Brad Cramer

Licensing Exam Review - Harold Hart

Scholarships - Mark Isaacs Technicians - Nathan Althouse Trig-Star - Tony Gregory

Government Affairs - Administrator - Al Frisinger & David Smoll

Committees:

Board of Registration - Perry Cloyd County Surveyors - Steve Murray

Governor Great Lakes Council - Don Bengel GPS/GIS Monumentation - Steve Murray

Legislation - Rick Miller Standards - Norm Hiselman State Agency Liaison - Todd Bauer

Internal Affairs - Administrator - Richard Hudson

Committees:

Bylaws - Don Bengel Chapters - Ron Wharry

Finance & Planning - Dan Kovert Nominations - Mark Gardner

Relief Fund

CHARGES

Board of Registration Liaison

- 1. Attend the Board of Registration meetings and report on their activities or impending rule changes to the BOD.
- 2. Inform the ISPLS membership of actions by the Board of Registration in the Hoosier Surveyor and on the web page.

By-Laws

- 1. Re-Do Constitution, update to current standards and terms, address term limitations of officers. (Is it advisable for a 2 year term for president? Should the number of 3 year terms as a BOD officer be limited?)
- 2. Review By-Laws, provide the BOD with any recommended improvements/changes/revisions, i.e., assist the chairman of the "Past Presidents Council" with creating a Past Presidents Council.
- 3. Compile and maintain a current index or record of any Board of Directors interpretations of the By-Laws.

4. Review additional by-laws regarding student chapters involvement and/or rights of student members.

Chapters

- 1. Assist all ISPLS members to be represented by a local chapter adhering to the state chapters bylaws, by creating a chapter or moving the boundaries of existing Chapters. Have each local chapter attach a link to ISPLS's website by having them e-mail their information to ISPLS's headquarters.
- 2. Review the "Executive Summary" of the bi-annual strategic goal setting session for ISPLS and working with the Public Information and Marketing Committee, make suggestions to the BOD on how to apply the conclusions.
- 3. Solicit each chapter to pick their best representative for a "Best of Chapter" award and present it to that person at the next state convention.

County Surveyors

- 1. Coordinate with IDEM Lorraine Wright to split the Indiana area into parts and using Chapters and ISPLS members to get <u>all</u> county tie cards scanned ASAP.
- 2. Investigate to find a system so the original survey notes can be scanned and displayed on our website.
- 3. Inform the BOD of current activities and legislation regarding the County Surveyors.
- 4. Continue to promote the benefits of and encourage membership in ISPLS to all County Surveyors.
- 5. Facilitate coordination between ISPLS and the CSA to help achieve common goals, legal and otherwise, for example the charges given to the GIS-GPS committee.
- 6. Please provide the BOD with a workable timetable.

Education

- 1. Review for recommendation all ISPLS and chapter sponsored continuing education seminars and the Convention programs to the ISPLS Board of Directors.
- 2. Assist with the ISPLS sponsored continuing education seminars.
- 3. Assist any College degree programs or other ISPLS committee if requested.

Finance and Planning

- 1. Coordinate with the Executive Director regarding the operation of the office.
- 2. Prepare the 2006-2007 operating budget recommendation for the approval of the BOD, and include the budget for the full time lobbyist position.
- 3. Assist with planning and management of the 2007 convention.
- 4. Assist BOD with goal setting session every two years (next one 2007).
- 5. Submit preliminary budget and program for the 2007 conven-



Your complete source for CAD, Survey, GPS and Mapping



GeoXT

THE TOTAL GPS PLATFORM FOR ALL YOUR GIS FIELD REQUIREMENTS TRIMBLE® GEOXTTM HANDHELD, FROM THE GEOEXPLORER® SERIES, COMBINES SUBMETER GPS WITH MICROSOFT® WINDOWS MOBILETM 2003 SOFTWARE FOR POCKET PCS IN ONE RUGGED UNIT.



Trimble R8 GPS System

TRIMBLE R8 FEATURES THE NEW TRIMBLE R-TRACK TECHNOLOGY, WHICH IS CAPABLE OF TRACKING THE NEW GPS CIVILIAN SIGNAL (L2C)SCHEDULED FOR 2005.



5600 Total Stations

For specialized High-Precision applications, the 5600~IR Total Station is the Ideal Solution, Providing you with the Capability to Measure distances to an accuracy of +/-0.8mm +1~ppm.



WITH A COMPLETE SERVICE AND REPAIR CENTER WE ASSIST OUR CUSTOMERS NEEDS, REGARDLESS OF BRAND. OUR TECHNICIANS HAVE EXPERIENCE WITH ALL TYPES OF SURVEY EQUIPMENT AND CAN HAVE YOU UP AND RUNNING IN THE SHORTEST TIME POSSIBLE.



ST. LOUIS

CHICAGO

KANSAS CITY

INDIANAPOLIS

MILWAUKEE



For more information or to set up a product demo, please contact the following:

SURVEY/ GPS SALES

Steve Myer smyer@seilerinst.com Craig Williams cwilliams@seilerinst.com

GIS SALES

Craig Williams cwilliams@seilerinst.com

CONSTRUCTION SALES

Mark Gibson mgibson@seilerinst.com

TRAINING/SUPPORT

Jim Wyant jwyant@seilerinst.com

REPAIR DEPARTMENT

Richard Manthei rmanthei@seilerinst.com

Seiler Instrument 6330 E. 75th St., Ste. 114 Indianapolis, IN 45250 (317) 849-7090 / (317) 849-7297 fax

Civil & GIS Software Solutions



AUTODESK MAP
SERIES HELPS YOU
CREATE ENGINEERING
GUALITY MAPS,
MAINTAIN AND
UPDATE EXSTING
MAPS, AND
INTEGRATE DATA
FROM A WIDE
VARIETY OF SOURCES.



AUTODESK SERIES INCLUDES: LAND DESKTOP 2005, CML 3-D 2005, ARCHITECTURAL 2005 AND BUILDING SYSTEMS 2005.



Training and Support



WE OFFER COMPLETE TRAINING AND SUPPORT SERVICES ON EVERY PRODUCT THAT WE SELL. WHETHER IT IS ON THE LATEST GPS TECHNOLOGY OR A CUSTOM CAD COURSE, WE CAN HELP. CALL US TODAY TO SEE HOW WE MIGHT ASSIST YOU WITH YOUR TRAINING NEEDS.

Toll-Free

(800) 533-2280

HP Plotters

www.seilerinst.com

Charges

... continued from Page 7

- tion to the BOD by the April 8th meeting, and the final budget and program outline by the May 20th meeting.
- 6. Solicit proposals to select ISPLS Chapters, to host the 2008 convention.
- 7. Review committee budget needs and make recommendations for the 2006-2007 budget.
- 8. Gather information on locating Board of Directors meetings in the north-central and south central parts of the state (at least 1 per year) in order to have more ISPLS member participation.
- 9. Coordinate the Executive Director's job description and performance plan.

Governor of the Great Lakes Council

- 1. Represent the interests of ISPLS at the annual meeting of the NSPS Board of Governors and Great Lakes Coordinating Council.
- 2. Provide reports to the Hoosier Surveyor and ISPLS website concerning activities of the Board of Governors, Great Lakes Council, NSPS and ACSM Board.
- 3. Provide an updated report at each BOD meeting.

GPS-GIS Monumentation

- 1. Promote and assist with CORS stationing to cover all of Indiana thoroughly. Each University in Indiana should have a CORS monument first, then every State Highway district office and then each County Garage.
- 2. Assist the State Geodetic Advisor and coordinate between County Surveyors, their committees, state agencies and various associations a program for a viable recovery and perpetuation of all vertical monuments to incorporate height modernization. This needs to be made available to all surveyors.
- 3. Promote a program for all CORS stations to allow access to GPS realtime correctors via the internet:- using cellular modems.
- 4. Assist County Recorders with understanding why their GIS won't mesh with recorded surveys, and why digital submission of drawings should be allowed.
- 5. Questions that have been asked, that I would like this committee to work on with the assistance of The State Geodetic Coordinator:- what is the current status of the height modernization program in Indiana if any, and what communication with adjoining States is occurring?-is any work being done to adopt GPS & GIS standards and techniques for conducting boundary and GIS surveys? –is any work being done to adopt NMAS (National Map Accuracy Standards) for GIS and photo-control? –what is the current status of the CORS program in Indiana, and plans for densification and centralizing of this data? –what key programs or initiatives is the Geodetic advisor working on?
- 6. Provide an updated report at each BOD meeting regarding the public land corner perpetuation of the state-wide reference system and GIS ordinances that may be enacted, and the above mentioned charges.

Hoosier Surveyor

1. Develop and publish the Hoosier Surveyor quarterly, with an

- "Article submission page" requesting type of articles and writers.
- 2. Expand articles and increase the number of writers.
- 3. Explore the possibility of a monthly newsletter that can be emailed. Possibly have a link to our web-page.

Intersociety Relations

- 1. Coordinate a specific direction with a timetable and present to the BOD at the April 8th meeting.
- Research the positive aspects and present to the BOD, the idea of ISPLS becoming a member of the underground utilities to improve utility locations in field.
- 3. Establish a communication link/contact with ISPLS affiliation groups. (ie, AIA, CEI, ILTA, Realty group, etc.)
- 4. Research obtaining booth space at other society conventions to promote ISPLS.

Legislation

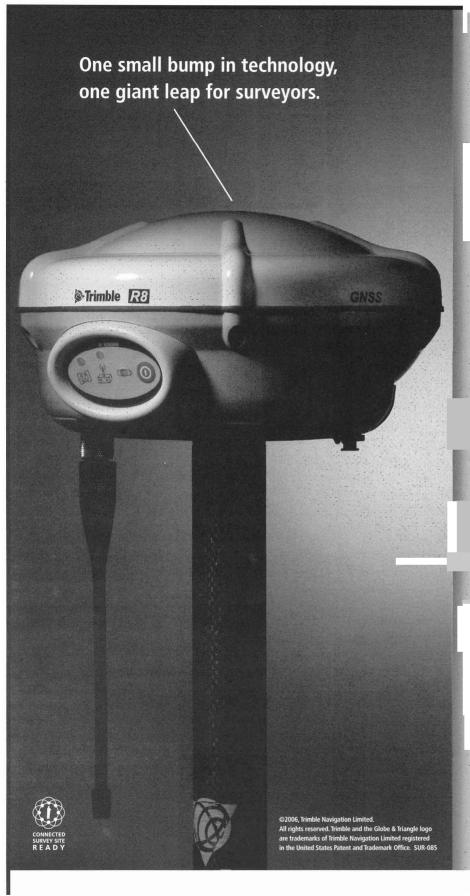
- 1. Assist with hiring an active lobbyist by June 1st, and adopt the mission and scope of services as presented to the Feb. 26, 2006 BOD meeting. Meet with the lobbyist often to fully utilize our investment and inform them of the BOD's thinking, and prevent any surprise ie. Like that Social Security Number form.
- 2. Develop and support legislative bills which: A) provide the Board of Registration with authority to act upon non-licensed people practicing land surveying in Indiana, B) require corner perpetuation to be submitted and accepted by the respective County Surveyor's office, C) assist Surveyors with trespass rights, D) create same requirements for recording surveys in any county, E) reduce the Surveyors liability, (statute of limitations for a number of years), F) require all county surveyors to be licensed in Indiana.
- 3. Develop joint legislation with the County Surveyor's Association annually and support legislation pertaining to the County Surveyors.
- 4. Inform the BOD at each meeting, of legislative issues that may be heard with regards to the practice of land surveying.
- 5. Attend any legislative meetings and give testimony directed by the BOD to support or oppose bills with regards to practicing land surveying in Indiana.
- 6. Develop a list of one ISPLS representative in each chapter to coordinate legislative action and keep ISPLS members informed.

Licensing Exam Review

- 1. Conduct the SIT and LS review course annually (minimum).
- 2. Assist applicants with review study resources.
- 3. Provide assistance to the BOR with sample questions for the State Land Surveyors Test.
- 4. Coordinate a trip for the committee chairmen to go to the NCEES National meeting.

Membership

- 1. Review all membership applications for required items, and present to the BOD for final approval.
- 2. Promote sales of ISPLS logo items, caps, jackets, sportswear, etc.



Trimble® R8 GNSS System

Upgraded. Advanced. Perfected.
And still able to fit under that shiny white dome. Designed to maximize flexibility and minimize initialization time, the Trimble R8 GNSS System keeps you on top of signal innovations for improved accuracy and field productivity. Combining a tested and proven system design with advanced receiver technology, the Trimble R8 GNSS is a major step forward for the survey industry. In other words, the best just got better.

GNSS Support

Trimble R-Track technology lets you utilize both the modernized GPS L2L and L5 signals and GLONASS L1/L2 signals. More satellite tracking means increased productivity now and into the future.

Proven System Design

It's from Trimble, so you'll always have proven technology. lightweight, flexible communications and rugged construction. As a base or a rover, it offers simple, cable-free operation.

Get Connected

Create a complete Trimble 1.S. Rover solution by adding a prism to your rover pole. And, like every Trimble product, the R8 GNSS System fits seamlessly into the Trimble Connected Survey Site.

To discover how far we've come, and how far you can go, visit www.trimble.com/gnss



FOR MORE INFORMATION CALL YOUR TRIMBLE DEALER

Seiler Instruments Indianapolis, IN 317-849-7090

Charges

...continued from Page 9

- 3. Develop an incentive program for sponsoring new members.
- 4. Make recommendations to the Board of Directors for particular membership achievements and awards and in their presentation at the convention, i.e. "Best of Chapter" award, a Chapter committee charge.
- Keep committee small, with all meetings over the phone or by e-mail.
- 6. Call businesses to advertise Business Cards in roster or on web page and advise Executive Director.
- 7. Call all new licensees to congratulate them, and delinquent members to renew their membership.
- 8. Call all of our members and ask "What can ISPLS do for you?", and present a compilation to the BOD.
- 9. Contact all Chapter Presidents to solicit, a representative for the BOD slot.

Nominations

- 1. Develop and submit a slate of six candidates for Board of Director positions and two for president-elect at a minimum, from across the state to the BOD for approval.
- 2. Collect ballots, determine the new representatives, certify the results, submit them to the BOD and notify all the candidates, asking those who didn't win to retry.
- 3. Submit a notification for nominations to the Hoosier Surveyor committee to be included in their next printings.

Past President's Council

- 1. With the assistance of the "Bylaws" committee, create a Past Presidents Council, fashioned after the Ohio example.
- 2. Assist the BOR with mentoring, ethical standards and policing of members.

Publications

- 1. Reproduction and update of Manual No. 2, <u>Indiana Coordinate Systems</u> and Manual No. 3, <u>Law and Surveying</u>, with a supplement after the legislative sessions. Ask Purdue to assist in keeping all publications updated with supplements. Possibly post on "Access Indiana".
- 2. Create a paper on accuracy of positions and closure ratios and significant figures, based on a prior 1950's handout.
- Create a new publication, by grouping the handout materials of similar current ISPLS seminars.
- 4. Create a list of rare survey books to sell to members or supply to our library. The speakers at the Initial Point Seminar had a few books, for example.
- 5. Update any of the public relations brochures on surveying for public distribution.
- 6. Create a comic book style pamphlet to start grade school kids on surveying, fashioned after other States books.
- 7. Assist the "Public Information and Marketing" committee with career material for handouts at schools
- 8. Establish and publicize library hours and checkout procedures with regards to surveying publications and historic instruments, from our library.

Public Information and Marketing

- 1. Develop a presentation for secondary schools, civic groups, other professional groups to publicize and promote what our Society is doing, in an entertaining way. Notify school guidance counselors of our profession. Offer an award to the ISPLS member with the most counselor contacts.
- 2. Research any job fairs and school career days for ISPLS members to attend. Develop a list of surveyors willing to make presentations at the various career days for each chapter. Work with the "Publication" committee to make various types of career materials available for these events.
- 3. Review and continue to update the marketing plan of ISPLS and present this to the BOD.
- 4. Finalize and set up any opportunities with legislative leaders and reporting media to display land surveying.

Relief Fund

1. This committee was created by the BOD at the end of 2006 to deal with natural emergency situations.

Scholarship

- 1. Conduct student interviews at ISPLS headquarters and make recommendation to Vincennes University for awarding of the Peggy Archer Scholarship and to Purdue University for awarding of the John G. McEntyre Scholarship.
- 2. Call all of the scholarship winners throughout the State to get them involved with ISPLS, become members.
- 3. Assist all State chapters with their scholarship recommendations if requested.
- 4. Provide the Hoosier Surveyor committee with appropriate media and articles on the recognition of scholarship recipients.

Standards

- 1. Monitor any proposed revisions to Title 865 by the Board of Registration and report any findings to the BOD in a timely manner if it pertains to any legislation.
- 2. Coordinate and make recommendations to the Board of Registration, through the Board of Directors of ISPLS, regarding revisions to the Land Surveyors Registration Act, Rules 10, 12, 13, and 14, as necessary.

Trig - Star

- 1. Assist every Chapter with having their members sponsor a Trig Star exam in a school in their respective areas.
- 2. Provide specific guidelines for ISPLS local Chapter proctors.
- 3. Determine the state winner and forward the winner's name to the National association.
- 4. Awards financial prizes for the successful winner and teacher and forward public relations articles to the appropriate media and the Hoosier Surveyor.



Positioning Solutions Co. | Productivity Tools for Survey and Construction Professionals 7528 Pendleton Pike, Indianapolis, IN 46226

Phone: 888-313-6111 | Fax: 317-542-7784 | www.1psc.com

Charges

...continued from Page 11

State Agency Liaison

1. This committee was created to have a communication line between ISPLS and the various State Agencies that we deal with. (INDOT, DNR, etc.)

Technicians

- 1. Develop joint seminars for technicians and professionals.
- 2. Recognize firms with Certified Surveyor Technician staff in the Hoosier Surveyor with an article on them.
- 3. Recognize the success of the Certified Surveyor Technician program at the annual convention with presentation of their certificates.
- 4. Develop a list of registered proctors for each ISPLS chapter when exams are given in their area.
- 5. Recommend a separate fee schedule for technicians to attend convention and workshops.

Web Page

- Investigate and respond by helping with any needed improvements to our web site.
- 2. Evaluate the inclusion of paid advertisements to our web site by associates with like interest and solicit them.
- 3. Create a place for suggestions from the members on the web page.

Minutes

...continued from Page 6

The 2006 roster is now at the printer.

Publications - The committee has met and continues to work on the goals set out at the February BOD meeting.

Public Information & Marketing - The committee met on March 27th at ISPLS headquarters. The committee established some specific goals for the year. These goals include some joint work with other committees. The committee will meet on Friday, May 19th at headquarters.

Web Page - The following has added the following to the web page: interactive calendar, chapter calendars, BOD calendar, BOR calendar, chapter announcements, chapter officer contact information and updated the home page.

Professional Development - Education - Doug Herendeen provided an update on the following convention items.

2007 Convention Scanning - Due to difficulties experienced at the 2006 state convention and the redundancy of effort required by ISPLS staff, electronic scanning will be discontinued at future seminars and conventions. Seminar and convention participants will be monitored via former method of signing in and signing out of the seminars.

2008 Convention Co-Sponsor - Initial Point Chapter and Wabash Valley Chapter have made a request to co-sponsor the 2008 convention. A motion was made and passed for Initial Point and Wabash Valley to be the 2008 co-sponsor.

2009 Convention - Information on the French Lick Springs 2009 convention site was distributed to the BOD for review. It was discussed that the general membership should be polled to determine the expense that they are willing to bear to attend the State Convention at French Lick, Indiana. The 2009 Convention location will be reviewed again at the September BOD meeting.

Upcoming Seminars - One day seminars are April 14th and April 28th on Rule 12 by Perry Cloyd.

Licensing Exam Review - A review session was held March 11th at Indiana University Purdue University - Fort Wayne, Indiana with six individuals in attendance. Thanks goes to the Northeast Chapter for providing lunch for those attendees.

Scholarship - Information was presented to the BOD on the status of the scholarships of ISPLS.

A motion was made and passed to amend the 2006-2007 budget to reduce the lobbyist expense to \$33,000 and allocate the remaining \$7,000 funds to the Vincennes Peggy Archer Memorial Scholarship so that the scholarship would be self funding.

The scholarship committee met and interviewed six candidates for the Peggy Archer Memorial Scholarship. The committee recommended John O. Stephens of Vincennes University for the scholarship. A motion was made and passed to award the scholarship to John O. Stephens.

Trig-Star - There has been a good response from around the state regarding the interest and participation in the Trig-Star program.

Government Affairs - Board of Registration - The April BOR meeting was canceled due to the Good Friday Holiday. The next scheduled meeting will be in early May.

NSPS Governor/Great Lakes Council - The next scheduled meeting is April 22nd, 2006.

Legislation - On April 4, 2006, potential lobbyists were interviewed by the representatives of ISPLS. Rick Miller presented that Amber VanTil was believed to be the best fit for ISPLS and is the recommended lobbyist by the committee.

A motion was made and passed that we retain Amber VanTil as a lobbyist for ISPLS beginning in June 1, 2006 for a thirteen month contract.

Standards - The committee plans to meet Saturday, April 15th at the office of Benchmark Land Services, Indianapolis.

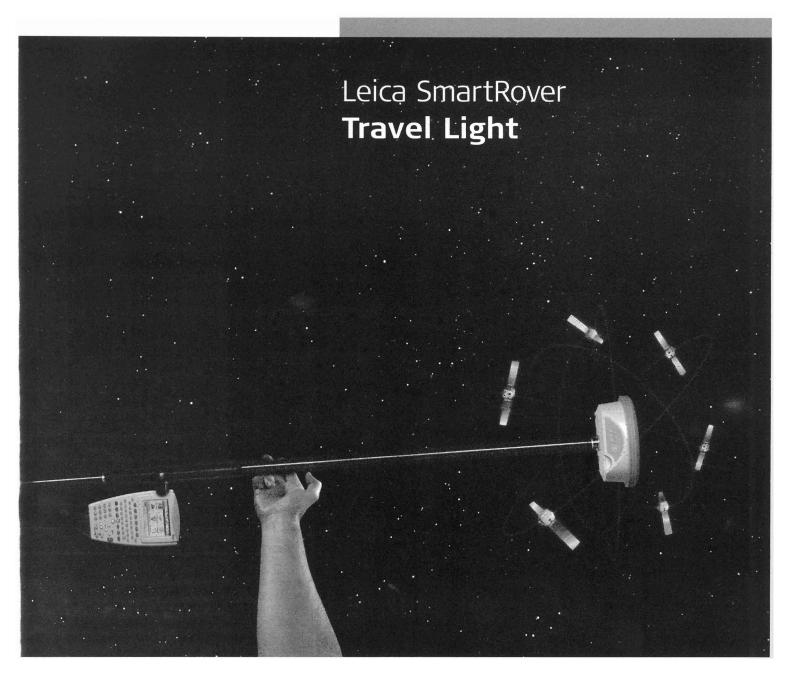
The committee is compiling surveyor's reports to evaluate and submit as references for the ISPLS web page. The committee is also considering a check list of required items for compliance with Rule 12.

It was suggested that the Standards committee stay abreast of potential legislative changes before the BOR. ISPLS should have representation at the BOR meeting during the final ruling process to provide the input and comments of ISPLS.

Internal Affairs - ByLaws - Committee will be meeting in the near future.

Chapters - Dianne has requested that the chapters forward their meeting minutes and meeting dates to headquarters for inclusion on the ISPLS website.

Finance & Planning - The committee met March 17th to review the 2006/2007 budget. The focus was to provide funds to facilitate the retention of a lobbyist. As a portion of the review, the

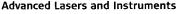


Introducing the Leica SmartRover: The world's lightest cable-free RTK GPS System.

Now the world's best-performing GPS system is also the world's lightest. Less weight reduces operator fatigue — and boosts productivity. Best of all, we've dropped weight without reducing performance. You still get the powerful SmartTrack measurement engine that out-performs every GPS system on the market. Count on heavyweight performance from this amazingly lightweight system. Only from Leica Geosystems.

Leica SmartRover

- SmartTrack and SmartCheck for best GPS results
- All-on-the-pole convenience
- WinCE and Bluetooth/MIL spec ruggedness
- Fully compatible with Leica TPS1200 and SmartStation
- To schedule a demo, contact your local Leica Geosystems dealer or call 1-800-367-9453.



Indianapolis, IN • 800-622-4905 Evansville, IN • 812-867-1286 Fort Wayne, IN • 260-483-2173 Louisville, IN • 812-282-1800



Nails

A Surveyor's Explanation of Same By John R. Gargis, PSM

While working on an update revision to my data collection processing program, I created a new example data collection control file which had in it the word NAIL – just plain old NAIL. Later, thinking about this word got me wondering about the different kinds of nails surveyors find. How was I going to distinguish between all the various nails and the ONE I found or set? I went to the various hardware stores and libraries in my area just to look at and study the various nails. This is what I found.

Nails are the simplest and maybe the oldest type of fastener for wood. They owe their holding power to their ability to displace wood fibers, to spread them out, when driven into the wood. The displaced fibers press back against the roughness of the surface of the nail and help hold it and the attached items together. Nails have more holding power when driven into the edges or faces of the wood than when driven into the ends of the wood. To a point, the larger and rougher the surface of the nail, the better it holds. Surveyors aren't really looking for holding power however. They are simply looking for something that will hold a disk or washer onto the asphalt or similar surface.

The types of nails are summarized as follows:

- A. Common nails (uncoated):
- B. Barbed box nails (smaller shank than a common nail);
- C. Common spikes (bigger than a common nail) and
- D. Hardened steel nails (cut nails & Parker-Kolan fasteners).

The common nails, which we are discussing, are distinguished by the following characteristics:

- 1. Nail head (type and size);
- 2. Shank (width and length);
- 3. Nail point (type and size);
- 4. Material (type) and
- 5. Surface condition

Common nails represent the basic structural design nail and the one that surveyors typically use. They have a "bright" surface condition, not coated or polished, but a natural bare metal finish that is easy to rust. The diameter of common wire

Figure 1. Parts of a Nail

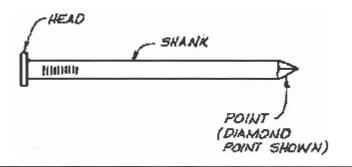
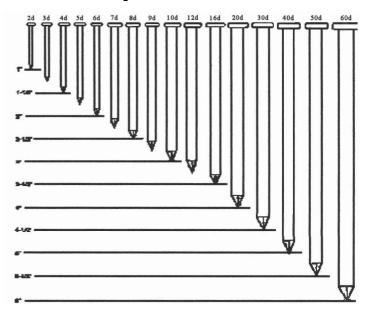


Figure 2. Nail Head Types



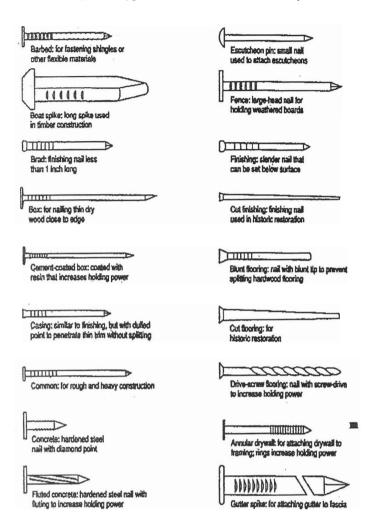
Figure 3. Common Nail Sizes



nails is larger than the diameter of other nails, but not as large as spikes. They allow structural loads that are correspondingly different. Because of their larger diameter, common nails have less tendency to bend when driven manually (hammered). Common nails that are used in the joining of wood (and other things) are the same nails that surveyors typically find and set in the field. We shall skip the exotic nails and the like (boat spikes, casing nails, cement coated nails, cut nails, dry-wall nails, finishing nails, galvanized (zinc-coated) nails, Parker - Kolan fasteners, roofing nails, etc.) and focus on bright common nails – see Figure 4).

Nails are sized in the United States by inches and something called a "pennyweight" which referred to the weight of the number of nails of a particular size you could buy for so much money. This antiquated system originated in England (1350 AD) where the abbreviation for the word pennyweight is the lower case letter d. The term pennyweight actually is a term to count money like a dime or quarter. For so much money you could buy a specific number of nails of a certain size. Thus, only so many of a certain size (say 1-1/2") nails could be purchased for the old English term 4d and only so many less

Figure 4. Types of nails in common use today



nails (say 2-0" because they are of a larger weight) could be purchased for 6d. While antiquated, the term "penny" (an abbreviation of the term "pennyweight") is still in use today, but not as much as when I first started surveying (1962).

Now nails are purchased based on their length in inches (my, but we have moved forward) but the term "penny" is still used (oops, fell back). The expression a "twenty-penny" nail is written as a 20d nail.

Nails smaller than 2d are designated in fractions of an inch. The lengths of nails that are larger than 60d, called spikes (actually spikes are 4-1/2" and up), are designated in inches and are outside the discussion of this paper. The term "penny" stops at lengths equal to six inches. Why? I have no idea except that perhaps the size of the wood they were hammering into wasn't any larger than what a 60d nail could handle. I mean the biggest things they were hammering on back then were wooden boats.

Penny Size	Length	Shaft Diameter	Head Diameter
2d	1"	0.072"	0.172"
4d	1-1/2"	0.095"	0.250"
6d	2"	0.113"	0.266"
8d	2-1/2"	0.131"	0.281"
10d	3"	0.148"	0.313"
12d	3-1/4"	0.148"	0.313"
16d	3-1/2"	0.162"	0.344"
20d	4"	0.192"	0.406"
30d	4-1/2"	0.207"	0.438"
40d	5"	0.225"	0.469"
50d	5-1/2"	0.244"	0.500"
60d	6"	0.262"	0.531"

Notice from Table A that the penny (pennyweight) is counted by 2's in the smaller sizes of nails (less than 20d-some are missing) and 10's in the larger sizes, normally 20d and up. I did not find sizes like 11 penny or 17 penny in the hardware stores. They were shown in some of the tables (see references), but did not exist in the hardware stores. Nail lengths are counted from the outside tip of the cut spike at the end of the nail, upward to the underside of the nail head and, remember, the penny size is taken from the length of the nail, not its shaft or head diameter.

When speaking of the size of a nail hammered into asphalt, you would say "Found 60d nail." However, a 20d nail would look almost like a 60d nail hammered flush into the asphalt pavement. All you see is the head of the nail, not the length of its shaft. Look at Table A. The nail head size of a 20d nail is 0.406" and a 60d nail head is 0.531", a difference of only 0.125". One eighth of an inch (1/8")! It would be hard to see the difference in size of a nail hammered into asphalt pavement with a disk under the head. In order to determine the penny of a nail hammered into asphalt, you have to dig it out of the asphalt and measure the length as described, but don't call it a penny size unless it is smaller than six inches.

So if a Party Chief gives you some notes about the fact that he found a 100d nail...sorry, but there is no such thing. Nails in a penny size stop at 60d. A 12-inch spike has a head diameter of 3/4", so it may be a 12" spike but no nail. Therefore, you don't know what it is. If you really need to know, it has to be dug up!

The author, John R. Gargis, PSM, practiced land surveying for almost 40 years in Port Charlotte and Brevard County until he retired. Now happily living in Titusville, Florida, he writes articles for various publications on varying subjects. For more details on the subject of the article, please write to Florida Surveying and Mapping Society or email director@fsms.org.

Nails

... continued from Page 16

References:

Nails – Definitions and Sizes, A Handbook for Nail Users by E. George Stern, Research Professor, Wood Research & Wood Construction Laboratory, Virginia Polytechnic Institute, Research Division, September, 1967;

Design of Wood Structures, by Donald E. Breyer, Professor of Civil Engineering and Engineering Technology, California State Polytechnic University:

Hardwood Floors, 2nd Edition, by Dan Ramsey, TAB Books, Blue Ridge Summit, PA;

Visual Handbook of Building and Remodeling, Professional Edition, by Charlie Wing, Rodale Press, Inc., Emmaus, PA; Wood Frame House Construction, A Do-It-Yourself Guide, edited by Gerald E. Sherwood, PE and Robert C. Stroh, PHD, Sterling Publishing Co., Inc., New York, NY;

How to Plan, Contract and Build Your Own Home, Third Addition, by Richard M. Scutella and Dave Heberle, McGraw-Hill;

The Wood Working Handbook, by Tom Begnal, Betterway Books, Cincinnati, OH;

Handbook of Practical Woodworking Techniques, by Robert Lento, Sterling Publishing Co., Inc., New York, NY; Woodworking Simplified, Foolproof Carpentry Projects for Beginners, by Dave & Jeanie Stiles, Chapters Publishing Ltd., Shelburne, VT;

Basic Carpentry, ISBN: 0376090510, Oxmoor House, Birmingham, AL and

The Complete Guide to Home Carpentry, Carpentry Skills & Projects for Homeowners, Creative Publishing International, Minnetonka, MI (Black & Decker).

Minutes

...continued from Page 13

proposed membership dues have been increased to help offset a portion of the lobbyist costs. A brief review of the dues and membership categories followed, with a general acceptance of the proposed fee structure.

Several of the line items annual expenses were either reduced or eliminated in an effort to facilitate the retention of a lobbyist. It was the consensus that the society will greatly benefit from the retention of a lobbyist and that the suggested budget revisions were necessary and appropriate.

A motion was made and passed to accept the tentative budget. New Business - Action steps are required by the BOD to implement the 2005 Strategic Planning initiatives. Therefore, at the next BOD meeting an hour and one half will be allocated to address the Stategic Planning elements.

The next BOD meeting will be May 20, 2006 at 9:00 a.m. at ISPLS headquarters.

It would be greatly appreciated if the committee chairmen would forward updates of their committee activities to the BOD and secretary in electronic format for inclusion in the ISPLS BOD meeting minutes one week prior to the next scheduled BOD meeting.

The Perfect Husband

Several men are in the changing room of a golf club. A mobile phone on a bench rings and a man engages the hands free speaker function and began to talk. Everyone else in the room stops to listen.

Man: Hello

Woman: Darling, it's me. Are you at the club?

Man: Yes

Woman: I am at the shopping center and found this beautiful leather coat. It's only \$1,000. Is it Ok if I buy it?

Man: Sure go ahead, if you like it that much.

Woman: I also stopped by the Mercedes dealership and saw the

new 2005 models. I saw one I really liked.

Man: How much? Woman: \$70,000

Man: OK but for that price I want it with all the options.

Woman: Great! Oh, and one more thing. The house I wanted last year is back on the market. They're asking \$950,000.

Man: Well, then go ahead and give them an offer of \$900,000. They will probably take it. If not, we can go the extra 50 thousand. It really is a pretty good price.

Woman: OK. I'll see you later! I love you so much!

Man: Bye! I love you too.

The man hangs up. The other men in the changing room are staring at him in astonishment mouths agape.

He smiles and asks, "Does anyone know who this phone belongs to?"

Meanings

Adult: A person who has stopped growing at both ends and is now growing in the middle.

Beauty Parlor: A place where women curl up and dye.

Cannibal: Someone who is fed up with people.

Chickens: The only animals you eat before they are born and after they are dead.

Committee: A body that keeps minutes and wastes hours.

Dust: Mud with the juice squeezed out.

Egotist: Someone who is usually me-deep in conversation.

Handkerchief: Cold storage.

Inflation: Cutting money in half without damaging the paper.

Mosquito: An insect that makes you like flies better.

Raisin: A grape with sunburn.

Secret: Something you tell to one person at a time.

Skeleton: A bunch of bones with the person scraped off.

Toothache: The pain that drives you to extraction.

Tomorrow: One of the greatest labor saving devices of today.

Yawn: An honest opinion openly expressed.

Wrinkles: Something other people have. You have character

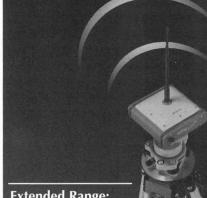
lines.



Starting at \$27,400 with payments as low as \$557 a month with Zero Down.
Also available on a Hayes 'Worry Free' Lease.

The Unlimited is Upgradeable to:

- GLONASS
- Cell Modem
- Network RTK
- Static
- OPUS
- G3 Technology



Extended Range: 2.5 miles!

It's Time.

It's time to invest in Topcon GPS from Hayes.

It's time to get the right system at the right price. With training and technical support, Hayes will help you make more time.



"ALL THINGS SURVEYING."

1-800-251-1280 HAYESINSTRUMENT.COM

Things

In the 1400's a law was set forth that a man was not allowed to beat his wife with a stick thicker than his thumb. Hence we have "the rule of thumb".

Many years ago in Scotland, a new game was invented. It was ruled "Gentleman Only...Ladies forbidden"....and thus the word GOLF entered into the English language.

The first couple to be shown in bed together on prime time TV was Fred and Wilma Flintstone.

Every day more money is printed for Monopoly than the US Treasury.

Men can read smaller print than women can, women can hear better.

Coca-Cola was originally green.

It is impossible to lick your elbow.

The State with the highest percentage of people who walk to work: Alaska.

The percentage of Africa that is wilderness: 28 % (now get this...)

The percentage of North America that is wilderness: 38%

The cost of raising a medium size dog to the age of eleven: \$6,400.

The average number of people airborne over the US any given hour: 61.000

Intelligent people have more zinc and copper in their hair.

The first novel ever written on a typewriter: Tom Sawyer.

The San Francisco Cable cars are the only mobile National Monuments.

Each king in a deck of playing cards represents a great king from history:

Spades - King David

Hearts - Charlemagne

Clubs - Alexander, the Great

Diamonds - Julius Caesar

 $111,111,111 \times 111,111,111 = 12,345,678,987,654,321$

If a statue in the park of a person on a horse has both front legs in the air, the person died in battle. If the horse has one front leg in the air the person died as a result of wounds received in battle. If the horse has all four legs on the ground, the person died of natural causes. Only two people signed the Declaration of Independence on July 4th, John Hancock and Charles Thomson. Most of the rest signed on August 2, but the last signature wasn't added until 5 years later.

O. Half of all Americans live within 50 miles of what?

A. Their birthplace.

Q. Most boat owners name their boats. What is the most popular boat name requested?

A. Obsession.

Q. If you were to spell out numbers, how far would you have to go until you would find the letter "A"?

A. One thousand.

Q. What do bulletproof vests, fire escapes, windshield wipers and laser printers all have in common?

A. All invented by women.

Q. What is the only food that doesn't spoil?

A. Honey.

Q. Which day are there more collect calls than any other day of the year?

A. Father's Day

In Shakespeare's time, mattresses were secured on bed frames by ropes. When you pulled on the ropes the mattress tightened, make the bed firmer to sleep on. Hence the phrase..."goodnight, sleep tight."

It was the accepted practice in Babylon 4,000 years ago that for a month after the wedding, the bride's father would supply his son-in-law with all the mead he could drink. Mead is a honey beer and because their calendar was lunar based, this period was called the honey month...which we know today as the honeymoon.

In English pubs, ale is ordered by pints and quarts. So in old England, when customers got unruly, the bartender would yell at them "Mind your pints and quarts, and settle down." It's where we get the phrase "mind your P's and Q's."

Many years ago in England, pub frequenters had a whistle baked into the rim, or handle of their ceramic cups. When they needed a refill, they used the whistle to get some service. "Wet your whistle" is the phrase inspired by this practice.

And Finally....

At least 75% of people who read this will try to lick their elbow.

ISPLS 54th - Annual Convention Highlights

Marriott East Indianapolis, Indianapolis (January 18-20, 2006)



Ed Sweetland, Greenfield, receives ISPLS Polaris Award from outgoing president Ron Wharry, Frankfort.



Orwic and Betty Johnson, Columbus, dress for the occasion.

Hosted by Northeast Chapter (based at Fort Wayne) Attendance: full time - 512 one day - 70 student - 39 spouses - 19



New 2006 ISPLS Board of Directors.



Representing ACSM was Executive Director Curt Sumner, Washington D.C.



Walt Robillard jokes with Roger Woodfill and Kelly Miller

THANKS TO OUR 2006 EXHIBITORS

Accu-Air Surveys, Seymour, IN Advanced Laser and Instruments, Indianapolis, IN Aerocon Photogrammetric Services, Inc., Avon, IN Agency Associates, Inc., Zionsville. IN Astro Wood Stake, Inc., Zeeland, MI Carlson Software, Maysville, KY Continental Sales, Fort Wayne, IN Eastern Engineering Supply, Inc., Fishers, IN Ellerbusch Instrument Co., Cincinnati, OH IDNR Division of Water Indiana, Indianapolis, IN Indiana Geographic Information Council, Inc., Indianapolis, IN Indiana Surveyor's Historical Society, Lawrenceburg, IN Marbaugh Reprographics Supply Co. Inc., Indianapolis, IN Municipal Marking Distributors, Inc., Gilberts, IL Museum of Surveying, Lansing, MI Pinnacle Mapping Technologies, Inc., Indianapolis, IN Positioning Solutions Company, Indianapolis, IN Priority Engineering, Indianapolis, IN Rinker Materials-Storm Ceptor, Greenfield, IN Seco Manufacturing Co., Inc., Redding, CA Seiler Instrument, Indianapolis, IN Sterling Systems-Indiana, LLC, Indianapolis, IN



"Insurance Cost Savings" Speaker: Michel Haffey



"Public Land Surveys" & "Mentoring and Training" Speaker: Dennis Mouland



"Value of Your Practice" Speaker: David Wahby



"Easements, Right of Way & Encumbrances" Speaker: Walt Robillard



"Surveyor's Report" Speaker: Randy Miller



"Rule 10-Ethics" Speaker: Ross Holloway



"Discrepancies in the Official Record" Speaker: Ron Scherler



"Traffic Safety and More" Speaker: Ron Koons



"Surveyor's Role in Flood Plain Management" Speaker: Rodney Rekenberger



"Indiana Map" Speaker: Jill Saligoe Simmel



"Theory of Location & Surveyor Reports" Speaker: Tony Gregory



"Cleanwater BMP" Speaker: Siavash Beik



"Section Corner Perpetuation in Indiana" Speakers: Curt Candler, Cindy Candler, & Gary Kent



Incoming ISPLS president, Frank Ballintyn, Sellersburg



"Accuracy in Motion" Speakers: Craig Williams & Bruce Strack



(L) Purdue University students in attendance



(R) Vincennes University students in attendance











Technology for the World you Build.

Autodesk Authorized Training Center

Award Winning Technical Support and Services

Autodesk Software Solutions

IT Services

High Definition Laser Scanning

From primary needs assessment to project completion -

we can help you build your world.

Sterling Systems - Indinapolis, IN - 866-742-8900 www.sterling-systems.com









Deter Thieves: Advice to Help Prevent Stolen Equipment

Earl Soeder of GPServ, Inc. and Ralph Lengemann of Lengemann of Florida submitted these suggestions regarding the stolen equipment situations that have happened recently:

- 1. Have your crews be aware of their surroundings. In some cases crews were followed by thieves until they got their chance to take items. If they notice the same vehicle at different job sites beware. In one case in Miami, a white truck came to a job site. Two individuals got out dressed in tan pants and white shirts looking like utility workers. When the instrument person was only 20 feet from the gun, one person started their truck while the other grabbed the instrument, threw it in their truck and sped off dragging recon behind.
- 2. Park trucks in a fenced and locked parking area, garage or in low crime areas, and have employees drive trucks home. Remove equipment at night from trucks.
- 3. Label all instruments and cases with marker: name of business and an after hours phone number, preferably the party chief's cell phone. The world is full of honest people who may find it and call you. Labels can be ripped off and engraving is good, but it can be changed and will affect the value of your equipment if you want to trade it in. Place your ID between the tribrach and instrument. A thief will not know to look there.

If an instrument is stolen and police stop a vehicle that has six instruments in the back, they do not have probable cause to search. However, if they pull a vehicle over that has six instruments in the back from six different companies they know have probable cause to search and can call to verify if it is stolen or not. Unfortunately this will probably happen after hours. Also if a pawn shop has your stolen instrument, I believe by Florida Law you have to buy it back from the pawn shop at the price they paid for it; however, if your name is on the case and an attempt was not made to verify if it was stolen or not, I believe you do not have to pay.

- 4. In the glove box of each vehicle, where the registration and insurance papers are, should be a list of each instrument the vehicle carries. The list should have manufacturer name, model and serial numbers. This will help the police as well as your own office personnel in the event of a theft. Have pictures of all your equipment easily available.
- 5. Whenever the crew stops for non-work related matters, one person should always stay with the truck. If possible, park vehicle by the equipment. If the entire crew leaves, place non-used instruments in cab behind seats out of sight. In July a survey crew was at a job site, in the contractor's trailer getting plans, when someone stole their robot. The thief leaned over the radios and did not take them rendering the robot useless. The thieves only know to take the gun cases not the accessories.

- 6. If you have an extended cab, crew cab or camper top, go to Home Depot or Lowe's and buy tint for the windows. Tint helps reduce the visbility of the content. They will still break in, but why make it easy? Plus, they do not have much time. Also, install a double locking system for truck toppers.
- 7. Install electric locks on your trucks so all doors can be locked easily and all the time.
- 8. Buy a back pack for your instrument. I used these up north where you had to walk with your instrument a lot. They are priced at about \$500, but it is still cheaper than a \$10,000 instrument. I believe the thieves do not know what they are stealing they only look for gun cases. The back packs come in different colors and sit the instrument upright nicely behind a seat
- 9. If the crew is in the field and are using a collector, have them always keep the collector. Even if they just walk a few feet away, disconnect and take it. It is bad enough to have your equipment stolen but to lose data is worse, especially if you cannot resurvey it.
- 10. Make survey crews understand not to fight back-this is why we pay insurance. With the human resource problem we already have in this profession we cannot afford to lose people.
- 11. Make sure your insurance covers rental and leased equipment.
- 12. You can buy instruments that have removable face plates which can fit in a shirt pocket. This will render the instrument useless and we would match serial numbers if anyone would try to replace it. Yes, they will discard the instrument but at least you know they could not sell it or use it.
- 13. Push eBay and others for a requirement that all equipment serial numbers be displayed with the picture of the item. A large part of the equipment on the web has been damaged or it of questionable origin.
- 14. All equipment comes with a case; no case is a guarantee it is stolen. Ask the legislature to require that pawn shops purchase equipment with cases. We get calls all the time for cases from people who are not in the industry.

Reprinted from The Florida Surveyor, August/September 2005, as seen in The Mississippi Surveyor, Fall 2005

Remember, equipment can be replaced, a life can't.

Are you paying too much for your health insurance?

See how a Health Savings Account (HSA) can work for *you*!

With an HSA, you can pay lower premiums annually than with a low deductible health plan. You are eligible to make tax-deductible contributions into your HSA. Over time, the money in your account grows tax deferred as interest accumulates. Withdrawals used to pay for qualified medical expenses are tax-free.

Reduce your premium cost.

Save on taxes.

Use tax free dollars to purchase qualified healthcare expenses.

Give employees/insureds an incentive to control healthcare costs.

Money left in your HSA rolls forward year after year for future use.

Look at the Tax Advantages

- Deposits to the HSA account are 100% tax deductible.
- Interest that accrues on the money in the account is *tax deferred*.
- Withdrawals from the account that are used to pay for qualified healthcare expesses are *tax free*.

*Agency Associates, Inc. can help you as an individual or a group through our endorsed HSA plans. We've been helping businesses save money with High Deductible Health Plans since the late 80's.

Give us a call at

877-647-2242 317-471-4229

or email agorton@agencyassoc.com



Innovations in Teaching Boundary Research

by Knud E. Hermansen & Carlton Brown, University of Maine

Boundary law is a foundation course for a surveying program. As part of a boundary law course, the procedure for researching public records is taught. Traditionally, this has involved teaching the procedure using notes and pictures in the classroom. Students practice the procedure taught in the classroom by traveling to a town office and county registry of deeds.

Recent trends have municipalities and registries making all or part of their records accessible using the web. Web access has provided new opportunities for bringing relevant property records into the classroom. Now it is possible to show students real-time tax assessor maps, tax information, and registry information within the classroom at the same time the research procedure is being explained.

Using an LCD projector and computer, the instructor can begin with the name and property address of a landowner to represent a fictitious client. All the landowners in the municipality are available to the students. Students can see how the landowner's deed book, page number, and tax parcel number are found using on-line tax records. Next the tax assessor's maps (or GIS database) can be displayed and the landowner's parcel located. Adjoining tax parcel numbers are identified from the map. Finally, the tax parcel numbers can be used to get the names, addresses, deed books, and page numbers pertinent to the adjoining properties.

With a couple of key strokes, the registry of deeds can be revealed on the web. Grantor/grantee indices can be accessed using all or part of the current or former landowners' name. Deeds can be viewed on-line by employing either the book and page, document number, or landowner's name.

The ease and availability of public records on-line provide new opportunities to bring realistic examples into the classroom and help students understand the procedures for record research.

For those readers interested in viewing examples of online information, examine one of the following:

Knue E. Hermansen is a Professor in Surveying Engineering Technology. He is a professional land surveyor, professional engineer, and attorney at law. Carlton Brown is an Assistant Professor in Surveying Engineering Technology. He is a professional land surveyor and professional engineer.

Redneck Medical Terms

Artery.....The study of paintings.

Benign......What you can be after you be eight.

Bacteria.....Back door to cafeteria.

Barium......What doctors do when patients die.

Cesarean Section.....A neighborhood in Rome.

Catscan.....Searching for Kitty.

Cauterize......Made eye contact with her.

Colic......A sheep dog.

Coma......A punctuation mark.

D&C......Where Washington is.

Dilate.....To live long.

Enema.....Not a friend.

Fester.....Quicker than someone else.

Fibula......A small lie

Genital.....Non-Jewish person.

Hangnail......What you hang your coat on.

Impotent......Distinguished, well known.

Labor pin......Getting hurt at work.

Medical Staff......A Doctor's cane

Morbid......A higher offer than I bid.

Nitrates......Cheaper than day rates.

Node.....I knew it.

Outpatient......A person who has fainted.

Pap Smear.....A fatherhood test.

Pelvis.....Second cousin to Elvis.

Post Operative......A letter carrier

Recovery Room......Place to do upholstery.

Rectum......Pretty near killed him.

Secretion......Hiding something.

Seizure.....Roman emperor.

Tablet..... A small table.

Terminal Illness......Getting sick at the airport.

Tumor......More than one.

Urine.....Opposite of you're out.

Varicose.....Near by.

Staff Infection......What the staff get?

coTax Information	Assessor Maps	Registry Information	Town	County, NH
http://www.ci.durham.nh.us/ DEPARTMENTS/assessing _office/assessing.html	http://www.ci.durham.nh.us/	http://www.nhdeeds.com/ sttd/web/start.htm	Durham	Strafford, NH
http://data.visionappraisal.com/SacoME/	http://www.sacomaine.org/ departments/assessor/ graphic_menu_main.shtml	http:// www.york.me.us.landata. com/	Saco	York, ME
http://data.visionappraisal.com/barharborme/	http://www.ci.bar-harbor.me. us/assessment/	http://24.198.44.126:1234/ ROD_2003/tab_pages/ tabframes.html	Bar Harbor	Hancock, ME

CALENDAR

SUSTAINING MEMBERS

May 20, 2006

ISPLS Board of Directors meeting, headquarters, Indianapolis 9:00 a.m.

August 7-11, 2006

26th ESRI User Conference and 4th Survey and GIS Summit, San Diego, CA www.esri.com

September 14-17, 2006

Surveyors Historical Society 2006 Rendezvous, Surveying the Wachovia Tract & Old Salem, Winston-Salem, North Carolina Contact: Roger Woodfill (812) 537-2000

September 26-29, 2006

URISA (Urban and Regional Information Systems Association) Annual Conference and Exposition. Vancouver, Canada. www.urisa.org

September 29, 2006

ISPLS Seminar, Clifty Falls Inn, Clifty Falls State Park, Madison, Indiana, Topic TBA

October 6, 2006

ISPLS Seminar, ALTA/ACSM Land Title Surveys, Speaker: Gary Kent, PLS, Essenhaus Inn & Conference Center, Middlebury, Indiana, 6 CEH Elective

October 27, 2006

ISPLS Seminar, ALTA/ACSM Land Title Surveys, Speaker: Gary Kent, PLS, Holiday Inn Airport, Indianapoolis, IN 6 CEH Elective

January 17-19, 2007

55th ISPLS Annual Convention, Indianapolis Adam's Mark Hotel Airport, Indianapolis, Indiana, Hosted by Central Indiana Chapter (Note change of location)

WELCOME NEW ISPLS MEMBERS



Corey Allen - Associate
Jason Armstrong - Associate
Bradley Bennett - Associate
Robert Bigelow - Life
Stephen Bourquein - Member
Wyatt Bower - Associate
Chris Boyd - Associate
John Dybas - Affiliate
DLZ - Firm
Phillip Going - Member
Thomas Harris - Member

John Kelley - Associate Craig Lankford - Student Sean Owen - Associate Alvin Paul - Member Philip Peden - Associate Michael Plumb - Associate Jeffery Stenger - Member Matthew Sutton - Affiliate Derrick Wallace - Associate John Wood - Associate

ALLEN PRECISION EQUIPMENT

1550 Boogs Road Duluth, Georgia 30096 (770) 279-7171

HARRISON MARKER AND INSTRUMENT COMPANY

P.O. Box 66 Anoka, Minnesota 55303 (763) 421-1445

HAYES INSTRUMENT CO.

502 S. Cannon Blvd. Shelbyville, Tennessee 37160 (800) 251-1280

LEICA GEOSYSTEMS, INC.

4855 Peachtree Industrial Blvd, Ste 235 Norcross, GA 03392 (800) 367-9453

POSITIONING SOLUTIONS CO.

7528 Pendleton Pike Indianapolis, Indiana 46226 (317) 542-7673

SEILER INSTRUMENT & MANFACTURING COMPANY

6330 E. 75th Street Indianapolis, Indiana 46250 (317) 849-7090

SURV-KAP

PO Box 27367 Tucson, AZ 85726 (800) 445-5320

TRIMBLE

5475 Kellenburger Road Dayton, OH 45424 (937) 233-8921

STERLING SYSTEMS-Indiana, LLC

9465 Counselors Row, Suite 100 The Precedent Office Park Indianapolis, IN 46240 (317) 846-2900

Gregory Howarth - Associate

FIRM MEMBERS

AMERICAN CONSULTING, INC.



TEL: (317) 547-5580 FAX: (317) 543-0270 CELL: (317) 694-5392

Architects Consultants Engineers

Max P. NewKirk, LS

Department Manager mnewkirk@amercons.com

7260 Shadeland Station Indianapolis, Indiana 46256-3917

TRANSPORTATION FORENSIC ENGINEERING

CIVIL STRUCTURAL

SURVEYING ENVIRONMENTAL

TELEPHONE 317/482-5141 : 317/873-2515

FAX 317/483-0559

ANDERSON & ASSOCIATES

117 WEST MAIN STREET P.O. BOX 508 LEBANON, IN 46052

JERRY L. CARTER REGISTERED LAND SURVEYOR

- BOUNDARY SURVEYS MORTGAGE SURVEYS
- TOPOGRAPHY MAPS
- DRAINAGE PLANS
- SUBDIVISION DESIGN
- · CONSTRUCTION STAKING

LAND SURVEYING

JOHN PHILLIPS, L.S. PH. 765-653-2714 FAX 765-653-1227

7 S. SPRING ST. GREENCASTLE, IN 46135

E-MAIL: asaindsv@ccrtc.com

Hubert L. Longest, Jr., P.E.



Beam, Longest and Neff, Inc. CONSULTING ENGINEERS

8126 Castleton Rd. Indianapolis, IN 46250

1-317-849-5832 FAX 1-317-841-4280



MATTHEW E. WANNEMUEHLER, L.S.

ADMINISTRATOR OF ENGINEERING AND SURVEYING

EVANSVILLE 800.423.7411

INDIANAPOLIS 888.830.6977

WEST LAFAYETTE 800.790.0286

BERNARDIN • LOCHMUELLER & ASSOCIATES, INC.

6200 Vogel Road . Evansville, Indiana 47715-4006 . www.blainc.com ENGINEERING . SURVEYING . PLANNING . ENVIRONMENTAL SERVICES



Rich Hudson, L.S. 219.462.1158 Valparaiso, IN rhudson@bonargroup.com

Rob Hathaway, L.S. 260.969.8845 Fort Wayne, IN rhathaway@bonargroup.com

Indianapolis Scottsburg Valparaiso Fort Wayne

Donald R. Mosson, L.S. Vice President



9105 East 56th Street Suite 2000 Indpis . IN 46216 p 317.876 0064 1, 317,876,0114

dmosson@cea-inc.net www.cea-inc.net Toll Free 1.888.876.0064



James M. Peck, P.E.

p 317-244-1968 f 317-244-1969 c 317-902-5876

2415 Directors Row, Ste. E Indianapolis, IN 46241

jpeck@ civil-designs.com www.civil-designs.com

Civil Engineering Site Design Land Planning Surveying



Land Development Services, Inc.

Michael L. DeBoy, LS

(317) 770-1801 Ext. 100 (317) 770-1821 Fax

miked@deboyland.com 501 South 9th Street, Suite 100, Noblesville, Indiana 46060



(317) 379-3641 cell

DECKARD ENGINEERING/SURVEYING INC.

Phone: 765-361-1510 or 1-800-439-4356 E-mail: deckard@tctc.com P.O. Box 262 · 1517 S. Grant St. · Crawfordsville, IN 47933

Surveys: Boundary · Topographic · Legal · ALTA · Mortgage

Engineering: Commercial/Residential Site Planning/Design Hydrology Studies • Construction Monitoring/Staking • Erosion Control Plans • Water Lines • Sanitary/Storm Sewers · Sanitary Mound Systems/Lift Stations

L. DAVID DECKARD, P.E., L.S.



Robert P. Kirkley, P.E., L.S. Senior Vice President

2211 East Jefferson Blvd. • South Bend, Indiana 46615 Telephone (574) 236-4400 • FAX (574) 236-4471 Mobile (574) 514-8169 E-mail: bkirkley@dlz.com



DONOVAN ENGINEERING

2020 INWOOD DRIVE EXECUTIVE PARK FORT WAYNE, IN 46815

GREG ROBERTS P.L.S. JOHN R. DONOVAN P.E. & P.L.S. FRANCIS X. MUELLER P.L.S.

OFFICE 424-7418

FIRM MEMBERS



VALPARAISO, INDIANA 46383

ERIC N BANSCHBACH PLS

(219) 462-7452 FAX (219) 465-0687 emilbeeg@netnitco.net



Mike Falk, PE, LS President

5979 McCasland Ave. • Portage, Indiana 46368 Phone: 219-762-7024 • Toll Free; 888-965-1143

Fax: 219-764-4261 Net: www.falk-pli.com

FINK ROBERTS & PETRIE, INC.



3307 West 96th Street Indianapolis, Indiana 46268

317-872-8400 Tele 317-876-2408 Fax

Engineers . Architects . Surveyors Geologists • Environmental Managers



Ross Holloway, PE, PLS

phone: 317.831.7918 800.831.7918 317.831.8255

PO. Box 234 Mooresville, IN 46158

Web: hollowayengineering.com

Independent urveying

Mark R. Isaacs, PLS

Land Surveying Civit Engineering GPS Surveying Construction Engineering

820 Sweet St., Brownstown, IN 47220 812-358-2892 Fax 812-358-2605 622 West 2nd St., Seymour. IN 47274 812-522-3821 Fax 812-524-0007

Mobile 812-521-2457 E-mail: misaacs@ilsurveving.com

Marbach, Brady & Weaver, Inc.

3220 Southview Dr

Elkhart, iN 46514

574.266 1010

Fax 574 262 3040

chris@marbachpis.com

Engineering & Surveying Since 1918

Christian F. Marbach, PLS.

MAURER & SMITHERS, INC. LAND SURVEYING, LAND DEVELOPMENT & BUILDER'S SERVICES



Paul K. Maurer

Professional Land Surveyor

Office - (317) 881-3898 Fax - (317) 881-4099 Mobile - (317) 281-7664

3425 West County Line Road Greenwood, In. 46142



CIVIL/SITE • SURVEYING • TRANSPORTATION • AVIATION

P: 317-634-6434 • F: 317-616-2099

JEFFREY A. MEYERROSE, L.S.

PRESIDENT

JMEYERROSE MID-STATESENG.COM
DIRECT PHONE: 317-616-2060 • CELL PHONE: 317-590-8738

WWW.MID-STATESENG.COM



Consulting Engineers Land Surveyors Architects Construction Managers

Danny K. Leek, P.L.S.

4800 Rosebud Lane Newburgh, Indiana 47630 Off: 812-464-9585

Fax 812-464-2514

http://www.morleyandassociates.com



Alex D. Oak, PE, RLS

7172 Graham Road Indianapolis; Indiana 46250 317-842-6777

FAX# 317-841-4798

Architects & Engineers & Londscope Architects Land Planners ▲ Land Surveyors ▲ Environmental Consultants

ROJECTS plus

2555 Fairview Place, Suite A Greenwood, Indiana 46142

OFFICE (317) 882-5003 FAX (317) 882-1082 E-MAIL engr@projectsplus org

LAND PLANNING . ENGINEERING . SURVEYING . PROJECT MANAGEMENT



Bradley A. Rayl, RE, RLS president

1940 East 53rd Street Anderson, IN 46013

Business: (765) 643-5614 • Fax: (765) 643-1874

Email: rse@netdirect.net

FIRM MEMBERS



RICHARD T. O'CONNOR, PE Vice President

RQAW Corporation 4755 Kingsway Drive, Suite 400 Indianapolis, IN 46205-1547 (317) 255-6060 Ext. 241 1-800-886-6062 FAX (317) 255-8354 Mobile: (317) 695-5639 roconnor@rqaw.com

R.W. GROSS & ASSOCIATES, Inc.

Land Surveyors



Robert W^m. Gross, R.L.S. President

420 Columbia Street, Suite 100 Lafayette, Indiana 47901-1300 Phone: (765) 742-0101 Fax: (765) 742-7223

engineering - gis - surveying



Rick Miller, P.LS.

Director of Surveying

The Schneider Corporation Historic Fort Harrison 8901 Otis Avenue Indianapolis, IN 46216

rmiller@schneideroorp.com E-mail www.schneideroorp.com Web

Indianapolis ■ Lafayette ■ Carmel ■ Avon ■ Merrillville

Site Line, Inc.

Land Surveying and Development Services

John H. Silnes, L.S.

461 West Main, P.O. Box 602 • Greenwood, Indiana 46142 Office (317) 882-9301 • Fax (317) 882-2201

Smith Neubecker & Associates, Inc.



453 S. Clarizz Boulevard Post Office Box 5355 Bloomington, Indiana 47407-5355 Telephone 812 336-6536 FAX 812 336-0513 E-mail slsmith@snainc.com

Steve Smith, P.E., L.S. President



Stoeppelwerth, David J., PE,PLS

President, CEO
Dial Direct: (317) 577-3402
dstoeppelwerth@stoeppelwerth.com
(317) 849-5935

CONSULTING ENGINEERS LAND SURVEYORS
9940 Allisonville Rd. - Fishers, IN 46038 - 1-800-728-6917 - FAX:(317)849-5942



1625 N. Post Road Indianapolis, IN 46219-1995

Kent D. Downey, P.E., L.S.

Bus. (317) 895-2585 Fax (317) 895-2596 E-mail: kentd@ucea.com www.ucea.com



Office 8415 East 56th Street Indianapolis, Indiana 46216 Phone: 317-544-4996 Fax: 317-544-4997 Email: dwoo@usiconsultants.com postoffice@usiconsultants.com

> Daniel R. Woo, PLS President

VESTER & ASSOCIATES, INC.

PATRICK N. CUNNINGHAM, R.L.S.

TELEPHONE (765) 742-6479 FAX (765) 742-5271 309 COLUMBIA ST. SUITE 101 LAFAYETTE, INDIANA 47901



WEIHE ENGINEERS INC.

10505 N. College Indianapolis, IN 46280 (317) 846-6611

ALLAN H. WEIHE, P.E., L.S. PRESIDENT

CIVIL ENGINEERS LAND SURVEYORS LAND PLANNERS

Effective Solutions ▶▶▶



7140 Waldemar Drive Indianapolis, Indiana 46268-4192 ►►► 317.299.7500

FAX: 317.291.5805

WOOLPERT

THE HOOSIER SURVEYOR

Indiana Society of Professional Land Surveyors, Inc. 55 Monument Circle, Suite 719 Indianapolis, Indiana 46204

PRESORTED STANDARD U. S. Postage PAID Indianapolis, IN Permit No. 4056

