# HOOSIER SURVEYOR



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

**VOLUME** 

31

NUMBER

2

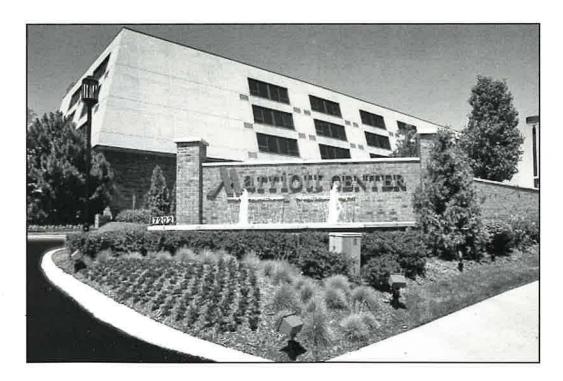
**FALL** 

2004



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#### **ISPLS 53rd Annual Convention**

January 19-21, 2005
Indianapolis Marriott East Hotel, Indianapolis
Note: New Location For Convention
(see pages 11-14 for program)

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#### Editor's Comments

Your editor is indebted to ISPLS pastpresident Roger Woodfill (Lawrenceburg), who serves as the Administrator of the Surveyors Historical Society, for submitting to us, on a somewhat regular basis, material that can possibly be used in the Hoosier Surveyor. We don't use everything he submits but, with regard to this issue, the articles on the Surveyors Rendezvous '04, the Sanborn Fire Insurance Maps, the Lewis & Clark Crossword Puzzle, and the availability of the Lewis & Clark Art Painting Print were all suggested by Roger, Thanks again!

As many times as we have asked for submittals of papers and articles by ISPLS members, we have been disappointed with the number forwarded to us for consideration. There are exceptions, however, and I'd like to thank them! On this list I would include the following: the president's page, Ken Anderson, Gary Kent, Rick Miller, Ronald Koons, David Best, Tony Gregory, John McNamara, John Stephens, Richard Ward, Kendall, Joe Jacobi, Vincennes Univ., Purdue and of course, ISPLS Executive Director Dianne Bennett, who does most of the work on the Hoosier Surveyor with a little help from me. Please put your talents and experiences to work, write them down, and share them with your fellow land surveyors. I'm twisting your arm!

### HOOSIER SURVEYOR

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#### **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;

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 detions as to its contents.

torial Advertising Offices 55 Monument Circle, Suite 1222 Indianapolis, IN 46204 Phone:(317) 687-8859 Fax: (317) 687-5053 Web Page: www.ispls.org EMail: ISPLS@aol.com

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# **ISPLS BOARD OF DIRECTORS (2004)**

1 to r, first row, Ron Wharry, Frankfort; Rich Hudson, Valparaiso; Don Bengel, Valparaiso; John Stephens, Wabash; John Updike, Fort Wayne; Frank Ballintyn, New Albany; second row: Perry Cloyd, Edinburgh; Anthony Gregory, Hobart; Greg Garrison, Boggstown; Mark Isaacs, Brownstown; (not pictured) Ed Sweetland, Indianapolis and Brad Ott, Franklin.

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#### PRESIDENT'S THOUGHTS

by John Stephens, PLS, Wabash, Indiana



Leaves dropping, cooler temperatures and commuting to and from work in the dark has abruptly reminded me that my term as ISPLS president is coming to an end. Many issues have come before the ISPLS board of directors this year and many of them have been resolved; however, there is a much greater need for our professional organization to do more each year. Just as we have upgraded to faster ways of collecting information in the field and disseminating the data in the office and to our clients, we always

have to work harder as the members of ISPLS to improve our professional image to our clients, other professionals and the public.

By the time of this publication, I hope that the ISPLS board of directors approves and implements the updated 2004-2005 marketing plan prepared by Richard A. Reid at Anderson University. The plan has many innovative and aggressive ideas to promote the land surveying profession throughout the state. Another major objective of the marketing plan is to create a consistent and complete picture of the ISPLS in the minds of surveyors.

We have already begun to update our new web site (continually in progress) to include informational resources, on-line shopping cart for purchases and registrations, benefits of membership and much more. The ISPLS board of directors has been receptive in approving nearly every request from our members to include additional information. If there is information that you think would improve the ISPLS web site contact Dianne Bennett at ISPLS headquarters or any of the ISPLS board of directors.

With Indiana legislature approaching, there are several issues the ISPLS government affairs committee will be discussing for preparation and sponsorship into the form of new or revised laws this upcoming year. The statue of limitations for surveyor liability should be of interest to all active and inactive surveyors. Help protect your rights and the right of other surveyors with a simple e-mail to your local legislator when you are contacted to support or oppose various bills this upcoming legislation

It has been brought to my attention that in various ISPLS board of director's minutes and ISPLS publications, that there may be general misconceptions with regard to the PLS-PAC. The purpose of the Professional Land Surveyors Political Action Committee (PLS-PAC) is to support lawmakers who support issues important to land surveyors in Indiana. The PLS-PAC has its' own board of directors, unaffiliated with ISPLS, who raise funds to support law makers who are sympathetic to small businesses and professions. This separate entity helps ensure its continued presence in the legislature, which helps open doors and establish relationships that give surveyors a better chance of fighting harmful legislation or promoting legislation that we support.

The 2005 ISPLS Annual Convention is just around the corner on January 19, 20, and 21 and located outside of the immediate downtown Indianapolis area. The location is the Marriott East near the intersection of I-70 and Shadeland Avenue and near the I-465

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interchange. The convention facilities seem to be similar to last year's convention and there are additional hotels in the immediate area for those who procrastinate in making hotel arrangements. One of the better benefits of not being downtown this convention, is the fact that we will have FREE PARKING. That's a \$45 - \$60 dollar savings for those who have paid for three to four days of parking in the parking garage.

I would like to take this opportunity to thank the Tecumseh Chapter for all of their effort and convention planning that they have put forth to make this a valuable time spent with our fellow surveyors in sharing common problems and experiences. The continuing education programs offer plenty of opportunity to fulfill at least half of the biennium licensure requirement. This year's convention committee has also planned something different – a raffle for an ATV. With all of the money saved with the free parking, everyone should be able to purchase several raffle tickets.

The fall land surveyors exam review seminar was held at IUPUI this year and had fifteen attending the seminar. I would like to recognize our newer members and older members alike for assisting with the seminar. Thanks to: Nathan Althouse, Daniel Blann, Andy Scholle, Bruce Franke, Dennis Grumpp and particularly Ed Sweetland who planned and organized the seminar.

Upcoming in 2005, will be the bi-centennial commemoration of the initial point in Orange County, Indiana. ISPLS members are already in the planning stages to organize a commemoral ceremony and possible rehabilitation of the physical monument and surrounding area. Hopefully, there will soon be information available on our web site regarding the events.

ISPLS has received approval from the Central Indiana Community Foundation (CICF) for our grant to the Indiana Geographic Information Council, Inc. (IGIC). This is the balance of our grant fund originally established to provide grants from ISPLS for projects recommended by the grants committee and approved by the ISPLS board of directors.

The grant will specifically provide funding to purchase approximately six laptop computers and scanners. This equipment will be purchased on behalf of the County Surveyors Association in order to scan each county's public land system reference cards so that they may be organized by IGIC and entered into a statewide database available to the public.

This work is going to be a joint effort by many organizations, and hopefully our local ISPLS chapters will step up to the plate and assist in gathering the needed data from the local county surveyor offices

The administration costs through CICF have recently increased and the ISPLS board of directors has determined to administer our own grants without the assistance of CICF. This action should make more grant dollars available for our members to complete worthwhile projects for the surveying profession. At this time, I would like to thank all of those ISPLS grant commitmembers and CICF for their hard work and cooperation in ISPLS grant program.

In conclusion, I hope everyone has a happy and safe holiday season. See you all at the 2005 convention in Indianapolis.

## ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

July 10, 2004

The ISPLS Board of Directors held a meeting on Saturday, July 10, 2004 at ISPLS headquarters. President Stephens called the meeting to order at 9:10 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.

Officer Activity Reports - Rich Hudson reported that the Illinois Registration Board is proposing to increase the PDH to 24.

Communications - Membership - The following membership applications were reviewed and approved. Professional Member: Ralph Easley Jr. and Charles Ebinger; Student to Associate: Matt Sharp, Seth Johnson, Jason Page and Clem Kuns; Firm Member: DeBoy Land Development Services.

The second membership renewals went out this week.

There was discussion about renewal of life and recipients of free memberships. Several of these members are not signing or turning in their membership forms. A motion was make and passed to write a letter to these members that would address these issues.

Hoosier Surveyor - Any articles to go in the next issue of the Hoosier Surveyor needs to be in to Dianne by July 19th.

Public Information and Marketing - The Surveyors Rendezvous 2004 was attended by Ron Wharry and was found to be educational and enjoyable.

There was discussion regarding the Initial Point Monument and ure repairs that need to be made to the site.

A motion was made and passed to help fund the reconstruction of the site up to \$3000.

Professional Development - Education - The board of directors approved two seminars by email. They were the July 24, 2004 seminar by the Southwest Chapter, "ALTA Surveys" speaker Gary Kent for 6 CEH Elective. This has been approved by the licensing board. The second seminar approved was the September 3, 2004 "Construction Surveying & Estimating and Contracting a Construction Survey" by Milton Denny for 8 CEH Elective. This seminar has been submitted to the licensing board for approval.

The summary for the Initial Point Chapter's seminar held on May 21, 2004 was submitted and reviewed. There were 48 in attendance. The BOD discussed the case of an attendee who left early and his rights to full or partial credit. It is ISPLS's policy to not grant partial credit for seminars.

LS Exam Review - Ed Sweetland reported that Andy Scholle is the first BS Surveying Degree graduate of the IUPUI program who passed the LS exam. He is also a past graduate of the V.U. Program.

Government Affairs - PLS PAC Donation - The chapter presidents were asked to question their members on the issue of ISPLS contributing to the Professional Land Surveyors PAC. The PLSPAC is a separate organization from ISPLS.

Board of Registration - John Stephens updated the BOD regarding the last board of registration meeting.

County Surveyors - John Stephens has talked with the group about ISPLS legislation issues and will be keeping the BOD updated.

NSPS Governor/Great Lakes Council - Don Bengel reported that NSPS is working with a Boy Scout program in Iraq.

Internal Affairs - Budget & Finance - Dianne reported that she will be meeting with the accountant on August 16th to go over the books for the 2003/2004 fiscal year.

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Nominations - The BOD needs the committee's nominations for president elect by August 25, 2004.

Chapter Reports - Northwest Chapter - The chapter's last meeting July 8th was canceled. The June meeting was held at a Gary Railcats Baseball game. Their golf outing is scheduled for August 27, 2004.

Northeast Chapter - They have not had a meeting since the last BOD meeting. The Chapter's golf outing is scheduled for August 6, 2004.

Wabash Valley Chapter - Their last meeting was June 9, 2004. At that meeting the chapter approved the payment of its \$100 Trig Star License.

Central Indiana Chapter - Their last meeting was May 10, 2004. The next meeting will be an Indiana baseball game scheduled for July 29, 2004.

Initial Point Chapter - A local member was questioning surveying rules and feels that ISPLS should be more effective on updating its members on new rules.

It was mentioned that maybe local chapters should be donating items along with the vendors to add to the raffle.

Southwest Chapter - The chapter's last meeting was a hog roast hosted by the VU Surveying Club. The chapter will be hosting an ALTA Survey seminar on July 24, 2004.

Old Business - Ed Sweetland will be writing Dave Devine a response letter on his grant request.

There was discussion on expert witness and conflict of interest within Rule 10.

New Business - ISPLS Logo - There was much discussion on updating the 1954 ISPLS logo. It was decided to have Gary Vittoz to create a modified logo and put it on our web site to get feedback from the membership. The BOD will decide on the ISPLS logo via email.

Marketing Plan Review - The BOD should review the marketing plan with their chapter membership and ask for input.

Grant - The Shelby County Section Corner - GPS grant request was reviewed by the BOD. The Shelby County Surveyor's Office requested \$15,000 in ISPLS grant money. The BOD reviewed the letter and denied the request because the grant money would only serve one county and not the whole state.

Announcement - The next BOD meeting will be held September 25, 2004 at the Marriott Hotel East, Indianapolis, IN.

### **INNER STRENGTH**

If you can start the day without caffeine,
If you can be cheerful, ignoring aches and pains,
If you can resist complaining and boring people with your troubles,
If you can eat the same food every day and be grateful for it,
If you can understand when loved ones are too busy to give you time,

If you can overlook when people take things out on you, If you can take criticism and blame without resentment,

If you can face the world without lies and deceit,

If you can conquer tension without medical help.

If you can relax without liquor,

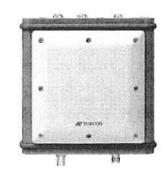
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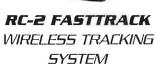
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# STATE BOARD OF REGISTRATION FOR LAND SURVEYORS SCHEDULED MEETING DATES 2005 MEETING TIME 8:30 AM

| Dates                    | Rooms                |  |  |
|--------------------------|----------------------|--|--|
| January 14, 2005         | Conference Center D  |  |  |
| February 11, 2005        | Conference Center D  |  |  |
| March 11, 2005           | Conference Center 12 |  |  |
| April 8, 2005            | Conference Center 12 |  |  |
| May 13, 2005             | Conference Center 12 |  |  |
| Certificate presentation |                      |  |  |
| June 10, 2005            | Conference Center 12 |  |  |
| July 8, 2005             | Conference Center 12 |  |  |
| August 12, 2005          | Conference Center 12 |  |  |
| September 9, 2005        | Conference Center 12 |  |  |
| October 14, 2005         | Conference Center 12 |  |  |
| November 18, 2005        | Conference Center 12 |  |  |
| Certificate presentation |                      |  |  |

December 9, 2005

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# BOARD OF REGISTRATION UPDATE

by Gary Kent, PLS, Noblesville, IN and Randall Miller, PLS, Marion, IN

The Board of Registration has spent considerable time in hearings during the last few meetings. These hearings have been related to complaints against surveyors or in follow-up to surveyors who have been on probation. As a result of those hearings, several licenses have been suspended or revoked. In addition, a number of hearings are currently on the schedule for surveyors who have not met the continuing education requirements of Rule 13.

Members of the Board are also busy reviewing the continuing education forms for compliance with the Rule 13 requirements. Those found to be potentially non-compliant will be sent to a full audit along with 10 percent of those remaining.

On November 1<sup>st</sup>, several changes to the Rule go into effect. These changes increase the fees for application to the examination. Surveyors also are reminded that a change to Rule 13 that went into effect this past May allows - with a couple of qualifications - any continuing education courses approved by another state to be automatically approved by Indiana. The qualifications are important and surveyors should refer to the Rule for more information (865 IAC 1-13-5: Courses from approved and unapproved providers).

The Board of Registration meetings are open to the public and normally take place on the second Friday of each month. Surveyors are welcome and encouraged to attend.

### **CORRECTION(S)**

Summer Hoosier Surveyor 31-1 Firm Identification Numbers

Firm #0008 Stoeppelwerth & Associates, Inc.

9940 Allisonville Road Fishers, IN 46038 (317) 849-5935

Firm #0017 Russell Engineering Associates, Inc.

2527 Scotswolde Drive Ft. Wayne, IN 46808 (260) 482-5300

James L. Russell - LS 80011679 Kenneth J. Russell - LS 80890019 Steven A. Maxwell - LS 29900007

Firm #0033 Ken Herceg & Associates, Inc.

211 West Washington St., Ste 2100

South Bend, IN 46601 (574) 288-4580

Kenneth p. Herceg - LS 80040436

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PROJECT: ESTATES AT HIDDEN CREEK / A Rural Cluster Subdivision / Spohomish County, Washington

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for itself again and again."

#### **SURVEYORS RENDEZVOUS '04**

Roger Woodfill, L.S., Lawrenceburg, IN Surveyors Historical Society Administrator

July 4, 1804 a United States military expedition, officially named "The Corps of Volunteers of North Western Discovery," paid tribute to their country by firing their cannon and naming the nearest tributary to the Missouri River, "Independence Creek." The bicentennial anniversary of this event was the opportunity seized by the Surveyors Historical Society, the Missouri Society of Surveyors, and the National Society of Professional Surveyors Foundation to salute the surveying and mapping of the Lewis and Clark Expedition

Surveyors from as far east as New Jersey and as far west as California rendezvoused July 2<sup>nd</sup>, 3<sup>rd</sup>, 2004 with surveyors from as far north as Montana and as far south as Alabama to bring attention to the part their profession played in this historic adventure. As evidenced in Thomas Jefferson's June 20, 1803 written instructions to Merryweather (sic) Lewis, surveying and mapping might have been the Corps of Discovery's most important goal. In the third paragraph of his very lengthy and detailed instructions, Jefferson writes, "Instruments for ascertaining by celestial observation the geography of the country through which you will pass, have already been provided."

President Jefferson, as portrayed by surveyor David B.H. Best, attending the recent continuing education seminar; and he reminisced about his father's (colonial surveyor, Peter Jefferson) influonce on Thomas' life. The President talked about his struggles with e Ordinances of 1785 and 1787 to obtain an orderly, sectionalized land system and about his rejected plan of 100 sections per township. He commented on his own surveying experiences around his beloved Monticello; and his scientific plans to send an exploratory party in search of an all-water route to the Pacific. President Jefferson continued in the seventh paragraph of his instructions, "Beginning at the mouth of the Missouri, you will take observations of latitude and longitude at all remarkable points on the river, and especially at the mouths of rivers, at rapids, at islands——. The course of the river between these points of observation may be supplied by the compass, ——." The instructions go on in detail down to the suggested use of birch drafting paper, "as it is less liable

President Jefferson had sent Capt. Lewis a year before the Louisiana Purchase to study surveying and celestial observation under Andrew Ellicott of Pennsylvania, who was then President of the American Philosophical Society. Mr. Ellicott, as portrayed in first person by Milton Denny, also lectured at the 2004 reunion. He revealed correspondence between himself, Thomas Jefferson, and Robert Patterson (then a mathematics professor at the University of Pennsylvania, but subsequently appointed director of the U.S. mint) about preparation for the "Voyage of Discovery." They discussed Thomas Parker's chronometer, and a good theodolite versus a Hadley quadrant, the fourth satellite of Jupiter, and the reflection of the sun from the water, etc. (The quote that I like best is from Robert

to injury from damp than common paper."

terson's March 1803 letter to Thomas Jefferson, "——which I commonly use for the computing the longitude from common lunar observations —— which renders the process extremely easy even to boys or common sailors of but moderate capacities." Here I am

two-hundred years later, "of moderate capacities", and still don't get it.

But most good surveyors do understand; and Rendezvousers were treated to a program about how to use an old sextant and an artificial horizon presented by some good future surveyors, the award winning students from the University of Akron. Heather Pierce made an excellent formal presentation despite an uncooperative power point projector; and she with five other students (all decked out in period clothing) provided demonstrations of the techniques during the afternoon laboratory sessions in Klug Park.

The Surveyors Historical Society has an annual swap-meet of "antique" or at least "interesting" historical surveying instruments and/or paraphernalia on the Friday afternoon of a Rendezvous. If you are interested in trading, buying, selling or even just viewing what surveyors collect, come to the next Rendezvous and set up a table. A "picnic in the park" evening meal has also become a part of Rendezvous camaraderie. The '04 "after picnic" speaker was Jackie Lewis of the St. Joseph tourist bureau. She had modified her presentation toward history and the Lewis and Clark expedition. During the question and answer period, she came up with good answers about St. Joseph's connection to Jesse James, the Pony Express, cattle drives, wagon trains, the railroads., etc.

The second day of the seminar featured more Missouri specific surveying history; and it was moderated by Joseph C. Brown, historical Missouri surveyor, as portrayed by Norman L. Brown, a legend in his time. First Norman answered questions about the previous days technical session—then as requested, he related the survey of the Santa Fe Trail. Yes, there really was a route survey conducted by Joseph G. Brown of that historic road conducted between 1821 and 1826—the commerce trading with Mexico made it a profitable route to map.

Past President of ACSM, Jud Rouch, made a presentation about the history of the initial point of the Fifth Principal Meridian. The point is located in Arkansas, but most of the Louisiana Purchase has been sectionalized based on its location. After a fuss between surveyor Rector and Surveyor General Tiffin in 1815 there were instructions issued that the initial point of the Fifth Principal Meridian would be at the intersection of an East-West line running from the mouth of the St. Francis River on the Mississippi with a North-South line that starts at the mouth of the Arkansas River on the Mississippi (if the Indians did not interfere). You need to look at a map (Rouch brought a thirty minute video), but that intersection does indeed occur-and as you might guess, in the middle of a swamp. The base line and the meridian line were separate contracts; but surveyor Prospect Robbins and surveyor Joseph Brown both started work October 27, 1815. Brown, running the baseline, crossed the initial points November 2<sup>nd</sup>, but of course, he did not know it and kept moving along. Robbins crossed the baseline November 10th, zeroed his Township numbering system and kept on moving north for 317 miles and 36 chains. No other record of the initial point can be found for 106 years until surveyors, Tom Jacks and Eldridge Douglas under contract for the drainage

...continued Page 9

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Hoosier Surveyor 31-2



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**....HayesInstrument...** 

Surveyors Rendezvous ...continued from Page 7

strict discovered two bearing trees, and remonumented the initial point.

Now I have gone on too long, but I would like to mention that Norman Brown reappeared and told us a "whopper" of a true story about the establishment of the north line of Missouri. The north line of that Territory was laid out according to some territorial legislation. Then the Platte Purchase (northwestern corner of Missouri) was made; and its north line was described as going through some "river rapids." The second line was monumented 9 to 12 miles north of the old Indian boundary. Then some "bee hunters" from Missouri entered this area; and Iowa territorial authorities arrested them. The Missouri governor got mad, and he called out the militia Then the Iowa governor got made, and he called out his militia thus the stage was set for the "Honey War"....just because two lines did not agree. A federal commission was appointed in 1839, to settle the dispute, and they came up with two other possible solutions for the line. Getting the lawyers involved might not have been the most expedient solution; but there was a Supreme Court decision in 1848—just nine years later—and the war was averted. Lecturer, Norman Brown, says its true; and I believe him.

The after dinner speaker Saturday night was Robert Dorian, a retired history teacher and re-enactor who gave a first person account of life on the Lewis and Clark Expedition in the persona of Private John B. Thompson. Thompson was thought to have worked on a surveying crew before he joined the Voyage of Discovery. The voluntary final activity of Surveyors Rendezvous '04 was to join ith the National Park Services traveling display and "signature event" of the Lewis and Clark bicentennial celebration in nearby Atchison, Kansas. There on the Missouri River bank you could hear the cannon blast, hear the naming of the Independence Creek, and imagine you were on the expedition two-hundred years earlier.

Among the 107 attendees were 13 from Indiana including: Ken Anderson, Mary Sue and David Best, Betty and Orwic Johnson, Wilma and William Land, Betty and Julian Rouch, Louette & Ron Wharry, and Jean and Roger Woodfill.

# Indiana University-Purdue University Indianapolis (IUPUI) Spring Surveying Courses

Three surveying courses will be offered in the spring at Indiana University-Purdue University Indianapolis. The classes, which start the week of

Jan. 10 and end the week of May 2, are:

- GPS and Geodesy for Surveyors, CET 308 (3 credits), 5:45 to 8:25 p.m. Wednesday (Jan. 12 to May 4).
- Legal Descriptions for Surveyors, CET 304 (3 credits),
   5:45 to 8:45 p.m. Thursday (Jan. 13 to May 5).
   Instructor Gary Kent.
- Construction and Route Surveying, CET 312 (3 credits) 1 to 5:50 p.m. Friday (Jan. 14 to May 6).

For information on registration, which is under way, contact the Construction Technology Department by phone at (317) 274-2413, by fax at (317) 278-3669, or by e-mail at et\_cnt@iupui.edu.

# Completed Career Ben Buckner,65, Ph.D, PLS

Ben Buckner,65, Ph.D, PLS Johnson City, TN

Dr. Ben Buckner, 65, of Johnson City, TN passed away October 9, 2004 following an extended illness and is survived by his wifs, Teresa, two sons, and a daughter.

Ben was born October 29, 1939 in Taylorville, IL and was a professor, author, business owner, marathon runner, actor, licensed surveyor, and musician. He had five college degrees including the University of Illinois and a PhD from Wisconsin and in 2003 received his BS degree in Theatre from ETSU.

He developed two surveying programs: one at Ohio State and another at ETSU (East Tennessee State University). He recently received the Lifetime Member Award from Johnson City Community Theatre, one of nine awards ever given. He was a member of Cornerstone Church. A scholarship fund has been established in his name at ETSU (c/o Jeff Anderson, ETSU, Johnson City, TN 37614).

#### Roy Minnick, 66, PLS Rancho Cordova, CA

Roy Minnick, 66, of Rancho Cordova, CA passed away September 29, 2004 in California and is survived by his wife, Jean, and two daughters.

Roy was born November 7, 1937 and was known as an educator, author, speaker, friend, book publisher and provider. He was well-known for his surveying and mapping book supply business, Landmark Enterprises, based in California and was an executive with First American Title Insurance Co. - Waterways, Boundaries, Mapping.

A scholarship fund has been established in his memory by the California Foundation for Land Surveying Education (CFLSE), PMB 231, 13681 Newport Ave, Ste. 8, Tustin, CA 92780-7815

# CONVENTION SPOUSE/GUEST PROGRAM

An itinerary of fun, interesting and educational activities is planned for this year's ISPLS Spouse/Guest program.

First come first serve at the registration table for those registered will receive a Longaberger basket for their gift and a donation was made to the Breast Cancer Society. We will still be doing our silent auction, and we have several baskets planned such as a Indiana Wine basket, plus some of the old standbys.

The formal program will start on Thursday by departing the hotel at 9:30 and go to the Oaken Barrel Brewing Company for lunch around 11:00 a.m.. Then we will take a drive to the Southport Antique Mall. The group will arrive back at the Marriott Hotel around 3:30 p.m. – 4:00 p.m.

Friday's events will begin with by departing the hotel at around 9:30-10:00 a.m. to go to the Easley Winery for a tour, the group will be treated to a little wine tasting. The lunch will also be at the Easley Winery. The group will arrive back at the Marriott Hotel around 3:30 p.m.

The hospitality room at the Marriott Hotel will be open both Thursday and Friday at 8:00 a.m. to 5:00 p.m. A continental breakfast will be available in the Hospitality Room each morning.

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#### PROGRAM SCHEDULE 2005 ISPLS CONVENTION

Indianapolis Marriott East, Indianapolis (Jan. 19-21, 2005)

#### Wednesday January 19, 2005

<u>Surveying Reference Frames and Datums</u> – by Steven D. Johnson, Ph.D. (3 CEH – Elective Credit)

A fundamental task of surveying is to express spatial data in a consistent data set using common geodetic based frames and datums. The objective of this workshop is to review the reference frames and datums encountered in practice and explore the relationships between them. Astronomic, geodetic, geocentric, local Cartesian, state plane, and UTM coordinate systems will be discussed. Elevation reference systems will also be reviewed. Transformations between reference frames and conversions between datums will be covered so that practitioners will be able to correctly merge spatial data sets from different systems.

# <u>**BLM Evaluation of Corner Evidence**</u> – by Stanley French, RLS (3 CEH – Mandatory Credit)

This seminar will focus on recognizing and evaluating elements of retracement evidence for its ability to serve as proof of a corner point. Basic statute law and common law principles of evidence will be reviewed and the primary elements of evidence examined. It will be demonstrated how to evaluate and document several elements of evidence "collaterally" when the evidence at a corner point is fragmentary, conflicting or almost nonexistent.

# inds On Construction Site Erosion and Sediment Control iMPs Selection – by David McCormick, PE, CPESC, CPSWQ (3 CEH Elective Credit)

Learn the basic components of an erosion and sediment control plan, including the requirements for a comprehensive Storm Water Pollution Plan (SWPPP). Learn a systems approach to erosion and sediment control planning. Walk away with a menu of best management practices (BMPs). Learn where to use them and how they work. Discover a method for selecting which BMP, or system of BMPs, is appropriate for your site conditions. Gain hands-on-experience in BMP selection and sizing.

#### Theory of Location and Surveyor Reports – by Anthony Gregory, LS (3 CEH Mandatory Credit)

The objective of this seminar is to provide an overview of the use of Surveyor Reports as a means to display theory of location in boundary surveys. The seminar will include a review of the definition of theory of location and the requirement of providing Surveyor Reports from Title 865 IAC 1-12 (Rule 12), an overview of the types of evidence typically discussed in Surveyor Reports, and a discussion of applicable formats for written surveyor reports.

### ALTA Surveys Update- by Gary Kent, LS (3 CEH Elective Credit)

This seminar has the overall objective of helping persons more fully understand ALTA/ACSM Land Title Surveys and the changes and additions that have been suggested for the next revision. Time will spent discussing surveyor reports and other issues that the audience by bring up. Questions are encouraged and there is ample time for questions and answers. Specific performance objectives include improving participants' knowledge base such that after attending this workshop, they are able to explain the background and application of

ALTA/ACSM Land Title Surveys, understand and outline the suggested revisions to the standards and the reasons for same and better understand the purpose of a Surveyors Report.

#### Thursday January 20, 2005

<u>Rule 12</u> – by Mike Falk, PE., PLS, and Randall Miller, RLS (6 CEH Mandatory Credit)

The objective of this workshop is to review long standing objectives of Indiana's Rule 12 and to update all participants on recent revisions to Rule 12. This seminar is intended to serve as an overview of the rules pertaining to the Competent Practice of Land Surveying, as defined in 865 IAC 1-12-1 thru 865 IAC 1-12-29.

# The Surveyor and the Next Edition of the Manual of Surveying Instructions – by Robert Dahl, RLS (2 CEH Elective Credit)

The Indiana Registered Land Surveyor by state statue, state administrative code, and state supreme court decisions is required to conduct land surveys within the public land survey system in conformance to the current Bureau of Land Management Manual of Instructions for the Survey of the Public Lands of the United States.

# BLM Evaluation of Corner Evidence – by Stan French, RLS (3 CEH Mandatory Credit)

Please see same class offered on Wednesday January 19, 2005

# Rule 12 and the Theory of Location in Simultaneously Created Boundaries – by Gary Kent, RLS (6 CEH Mandatory Credit)

After completing this session, attendees will have been given the basics of interpreting plats and performing surveys based on those interpretations. Attendees will be introduced to statute law and common law rules that outline the principles of boundary location and will learn how to apply those rules in preparing a defensible survey.

### Ethics for the Professional Surveyor/Rule 10 – by Dennis

Mouland, PS (3 CEH Mandatory Credit)

The objective of this course is to expose the professional surveyor to a wide variety of ethical issues and increase awareness of ethical problems.

#### Restoration of Lost Corners – by Dennis Mouland, PS

(2 CEH Mandatory Credit)

The objective of this course is to understand the three corner conditions, learn the seven methods from the manual (and the reasoning behind them) and to identify "special cases".

### G.I.S. and the Surveyor – by Milton Denny, PLS

(6 CEH Elective Credit)

The first part of this course looks at the terminology and definitions of a Geographic Information System, the process of designing a new system and how the information is captured from both existing records and new spatial data. The course contains a short overview of the most popular software and hardware, a case study of an actual operating GIS dealing with the design, implementation, funding, benefits and pitfalls; custom applications of GIS software necessary to implement

...continued Page 12

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#### **Program Schedule** ... continued from Page 11

a successful GIS.

The second part of this course deals with the planning, design, implementation and uses of a GIS. The map projection and coordinate systems used to design a system; data capture for the base mapping including aerial mapping, digital orthophotos, remote sensing, and GPS equipment. Included will be a look at the latest technology used to gather GIS data. LIDAR, digital cameras such as DMC and the ASD 40 will be studied. The future role of the surveyor will be presented with a class discussion on how the surveyor can play a larger role in the future.

#### TR55 Workshop: Hydrologic Computer Modeling for Small Watersheds - by Thomas T. Burke, Jr., PhD., PE (4 CEH Elective Credit)

The objective of this workshop is to gain an understanding of the use of the TR-55 computer program to calculate storm runoff volume, peak rates of discharge, and storage volumes required for Stormwater detention facilities using the Natural Resources Conservation Services (NRCS) methodology and to gain practical solutions and rulesof-thumb for stormwater detention sizing and design.

#### Roadway Safety for Surveyors - by Ron Koons

(2 CEH Elective Credit)

Those attending this course will obtain an understanding of the proper procedures to protect their employees on or around a roadway.

#### Friday January 21, 2005

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#### Question & Answer Session with the Licensing Board of Registration - by Board of Registration

(2 CEH Elective Credit)

To inform the registrants of Board policy and an opportunity for the Board to learn the concerns of the registrants.

# ALTA Surveys Update - by Gary Kent, RLS (3 CEH Elective

Please see same course offered on Thursday January 19. 2005

#### Indiana Boundary Case Study - by Mike DeBoy, LS and Steve (4 CEH Mandatory Credit) Lee, Attorney at Law

This presentation discusses the setup and items required for a survey project and the necessary components required within the State of Indiana from an administrative code and a practical approach. This is followed by a presentation of issues that maybe disclosed from said survey and how they would impact or be impacted from a statute and case law perspective including issues of possession/ownership, easements, encumbrances and resolutions.

#### The Online Positioning User Service Workshop - by Dr.

(3 CEH Elective Credit) Boudewijn van Gelder, Ph.D.

The objective of the course is that the student can successfully plan a measurement strategy, carry out the observations, submit with the proper parameters, and interpret an OPUS survey and its coordinate solution in a correct fashion. Depending on accessibility to the internet during the workshop, OPUS solutions may be evaluated in real time. Attention will be paid to the comparison with classical GPS network measurement and solution strategies.

# Metes & Bounds Retracement - by Bob Jackson, RPLS

(6 CEH Mandatory Credit)

The purpose of this seminar is to provide an overview of Classic. M&B Survey System in non-PLS states and the types of irregular (non-PLS) boundaries commonly found within National Forest System Lands. Discuss principles and methodology (and the commonality) of retracing irregular boundaries in both rectangular and non-rectangular systems.

#### To Accept or Not to Accept......That is the Question - by (6 CEH Mandatory Credit) Dennis Mouland, PS

The objective of this course is to review guidance from state statutes, codes and case law on acceptance and/or rejection of corner evidence, to gain awareness of the questions we should be asking about evidence and to construct a useful list of guidelines for decision making on evidence acceptance.

#### Construction Staking and Estimating - by Milton Denny, PLS (3 CEH Elective Credit)

In this seminar we will look at problem areas and the types of contracts needed to work on a construction site. We will estimate a construction project in class and tailor a contract for the job. You may want to bring your calculator. We will defend and compare estimates.

#### Construction Layout Methods - by Milton Denny, PLS (3 CEH Elective Credit)

Discover what is different about construction surveying. Take a walk through a construction site and learn how to verify the boundary and topographic, rough and finish grade the site, stake the road at sewers, layout the buildings, plumb the structural steel, prepare a record drawing and much more. Learn about the new equipment including Robotic Total Stations, the latest GPS construction control units and about important safety issues that apply to working a survey crew on a construction site. Send your employees to the job site equipped with the knowledge to get the job finished correctly.

### Fundamentals & Update of High-Definition Surveying/3D

Laser Scanning-Geoff Jacobs (3 CEH Elective Credit)

This session will set the facts straight about the basics of the technology (what really makes it different from other survey methods); about its best-suited applications based on today's solutions; about error sources and how to check projects for accuracy; about today's office processing workflows and workflow options used by survey organizations (and their clients); and about what skills and resources are needed today to be successful in providing services that include this technology. Typical metrics will be described for various types of projects in which laser scanning is used today.

#### The Treatment of Section Corners, Sixteenth Corners & Original Corners - Common Errors Made By Surveyors - Pat Cunningham and Tim Beyer (3 CEH Elective Credit)

Comprehensive treatment of surveying theory and practice, touching on several principal topics in the profession. A practical discussion of common errors that surveyors are making in their analysis of section corners, sixteenth corners and original corners Example problems and problem-solving practice.

Hoosier Surveyor 31-2

# Convention Registration Form

|   | Wednesday January 19   | Thu  | rsday January 20 (Afternoon)  |  |
|---|--|--|---|--|
| 0 - 12:00 a.m.<br>12:00 a.m 7:00 j  | Board of Directors Meeting Patriot Board Room p.m. *** Registration ***                                      | 12:00 – 2:50   | Rule 12 Mike Falk & Randy Miller (6 CEH Mandatory) (Part 2of 2)   |  |
| 1:00 – 3:50 p.m.  | Surveying Reference Frames and Datum's Steve Johnson (3 CEH Elective)  | 12:15 – 2:55   | Rule 12 and Theory of Location in Simultaneous Created Boundaries Gary Kent (6 CEH Mandatory) (Part 2 of 2)                 |  |
| 1:00 – 3:50 p.m.  | BLM Evaluation of Corner Evidence<br>Stan French (3 CEH Mandatory)   | 12:30 – 2:55   | G.I.S. and the Surveyor<br>Milton Denny (6 CEH Elective) (Part 2 of 2)  |  |
| 1:00 – 4:00 p.m.  | ALTA/ACSM Land Title Survey - Update<br>Gary Kent (3 CEH Elective)   | 12:50 – 2:50   | Restoration of Lost Corners Dennis Mouland (2 CEH Mandatory)  |  |
| 1:15 – 4:05 p.m.  | Hands on Construction Site Erosion and<br>Sediment Control BMP's Section<br>David McCormick (3 CEH Elective) | 12:50 – 2:50   | BLM "The Surveyor and the Next Edition of the Manual of Surveying Instructions" Robert Dahl (2 CEH Elective)                |  |
| 1:15 – 4:05 p.m.  | Theory of Location & Surveyors Reports<br>Anthony Gregory (3 CEH Mandatory)                                  | 12:50 – 2:50   | Roadway Safety for Surveyors<br>Ron Koons (2 CEU Elective)  |  |
| 3:00 – 7:00 p.m.  | EXHIBIT HALL OPENS (LIBERTY HALL)  | 3:00 - 5:00  | ISPLS BUSINESS MEETING  |  |
| 7:00 – 10:00 p.m.   | Las Vegas Style Casino Party   | 5:00   | EXHIBIT HALL CLOSES   |  |
| 6:00 p.m.   | Board of Directors Dinner  | 6:30   | BANQUET (LIBERTY HALL)  |  |
| Thursday January 20  seminars will be pre-registered. Classroom space may be limited.  rease indicate first choice ( ) and alternate (A). NOTE: Seminars must be attended in full to receive CEH credit. Registration in a seminar that is a Part 1 of 2 automatically registers you in Part 2.</td <td colspan="3">Friday January 21  All seminars will be pre-registered. Classroom space may be limit Please indicate first choice ( ) and alternate (A). NOTE: Seminmust be attended in full to receive CEH credit. Registration in a seminthat is a Part 1 of 2 automatically registers you in Part 2.  7:00 a.m. – 12:00 p.m. *** Registration ***</td> |  | Friday January 21  All seminars will be pre-registered. Classroom space may be limit Please indicate first choice ( ) and alternate (A). NOTE: Seminmust be attended in full to receive CEH credit. Registration in a seminthat is a Part 1 of 2 automatically registers you in Part 2.  7:00 a.m. – 12:00 p.m. *** Registration *** |   |  |
| 7:00 a.m. – 5:00 p  |  | 7:00 d.m. = 12:00<br>7:00 - 8:15   | PAST PRES. BREAKFAST (LIBRARY)  |  |
| 7:00  | EXHIBIT HALL OPENS (LIBERTY HALL)  | 7:00   | EXHIBIT HALL OPENS (LIBERTY HALL)   |  |
| 8:00 – 10:45  | Rule 12<br>Mike Falk & Randy Miller  | 8:10 - 11:10   | Metes & Bounds Retracement<br>Bob Jackson (6 CEH Mandatory) (Part 1 of 2)   |  |
| 8:00 – 11:00  | (6 CEH Mandatory) (Part 1 of 2) Rule 12 and Theory of Location in  | 8:15 – 11:15   | To Accept or Not to Accept That is the Question Dennis Mouland (6 CEH Mandatory) (Part 1 of 2)                              |  |
|   | Simultaneous Created Boundaries Gary Kent (6 CEH Mandatory) (Part 1 of 2)                                    | 8:20 – 11:20   | Construction Staking and Estimating<br>Milton Denny (3 CEH Elective)  |  |
| 8:15 – 11:15  | Ethics for the Professional Surveyor/Rule 10<br>Dennis Mouland (3 CEH Mandatory)                             | 8:30 – 10:30   | Question & Answer Session with the Licensing Board of Registration  |  |
| 8:15 – 11:55  | TR 55 Workshop: Hydrologic Computer Modeling for Small Watersheds Tom Burke (4 CEH Elective)                 | P.20 12-10   | Mike Falk, Randy Miller, Gary Kent, and Others (2 CEH Elective)   |  |
| 8:20 – 11:30  | G.I.S. and the Surveyor Milton Denny (6 CEH Elective) (Part 1 of 2)  | 8:30 – 12:10   | Indiana Boundary Case Study Steve Lee & Mike DeBoy (4 CEH Mandatory)  |  |
| 8:30 – 11:40  | BLM Evaluation of Corner Evidence<br>Stan French (3 CEH Mandatory)   | 8:30 - 11:30   | *Fundamentals & Update of High-definition<br>Surveying/3D Laser Scanning<br>Geoff Jacobs, Sterling Systems (3 CEH Elective) |  |
| 10:45 – 1:30  | Lunch (Staggered start and finish)   | 10:45 – 1:00   | Lunch (Staggered start and finish)  |  |
| .01,0   | (Suppored comments)  | 12:00 <u>EX</u>  | KHIBIT HALL CLOSES  |  |

# Convention Registration Form

#### Friday January 21 (Afternoon)

#### 12:00 - 2:45 p.m. ALTA/ACSM Land Title Survey - Update **ISPLS** Gary Kent (3 CEH Elective) 12:30 - 2:50\* The Treatment of Section Corners, Sixteenth Corners, & Original Pat Cunningham and Tim Beyer (3 CEH Elective) 12:45 - 3:45To Accept or Not to Accept ... That is the Question Dennis Mouland (6 CEH Elective) (Part 2 of 2) 12:45 - 3:45The Online Positioning User Services Workshop Van Gelder (3 CEH Elective) 1:00-4:00Construction Layout Methods Milton Denny (3 CEH Elective) 1:00 - 4:00Metes & Bounds Retracement Bob Jackson (6 CEH Mandatory) (Part 2 of 2) LODGING Indianapolis Marriott East 7202 E. 21<sup>st</sup> Street Indianapolis, IN 46219 317/322-3716 www.indianapolismarriotteast.com group code ISPISPA Convention Rates (below) have been arranged. Please indicate you are attending the 2005 ISPLS Convention when making reservation. Reservations must be received by 12/28/04 in order to guarantee room and availability. Single: \$ 109.00 Double: \$ 109.00 Triple: \$ 109.00

Registrations received after 12/31/04 (including walk-in's) will include a \$50.00 late fee, and will be accepted based on available space, and will not be guaranteed handouts or meals. Refund requests received by 1/07/05, a 50% discount will be made. After 1/07/05, no refunds will

\$ 109.00

#### No further Registration will be accepted after 1/02/05. After 1/02/05 registration will be at the door.

The full time registration fee for the convention includes all handouts, refreshment breaks, two luncheons and the banquet. The registration fee for spouses includes a like number of meals. The student (full time) registration fee includes meetings and luncheons only. One-day registrant's fee include handouts and luncheons for the day

As a reminder indicate your first choice with an (1) and an Alternate (A). It would also be appreciated if you would indicate by a (✓) if you plan on attending the Las Vegas Style Casino Party and/or the Banquet on Friday Night.

#### REGISTRATION FORM

| Indianapolis, IN 46204  |     |
|---|-----|
| Name:   | _   |
| L.S. Number   | _   |
| Firm Name:  | _   |
| Address:  | _   |
| City, State:  |     |
| Zip Code: Phone:  | _   |
| Spouse Name:  | _   |
| SINGLE REGISTRANT & SPOUSE FORM For additional registrants please make copies of this form or conta ISPLS for additional forms. | ct  |
| Fee   | ^   |
| Member \$ 300.0   |     |
| Non-Member \$ 480.0   |     |
| Spouse \$ 125.0   |     |
| Student (Full Time) \$ 30.0  1 Day (Member) \$ 210.0  |     |
| ☐ 1 Day (Member) \$ 210.0 ☐ 1 Day (Non-Member) \$ 310.0   | =   |
| Late Fee (After 12/29/04) \$ 50.0   |     |
| ACSM/NSPS Member (Full Convention) \$ 300.0   |     |
| ACSM/NSPS Member (One Day) \$ 210.0   |     |
| Extra Banquet Ticket Thursday Night \$ 50.0   | - 6 |
| Exhibits Only \$ 30.0   |     |
| ACSM\NSPS Member- Membership #  |     |
| TOTAL   |     |
| -   | _   |
| Firm Member – Deduct 20%  | _   |
| TOTAL AMOUNT ENCLOSED   | _   |
| Method of Payment   |     |
| Check (Please make check payable to ISPLS)  |     |
| Visa Master Card  |     |
| Account Number  | _   |
| Expiration Date   | _   |
| Printed Name:   | _   |
| Signature:  | _   |

The Better Half of the Tecumseh Chapter of ISPLS will once again be having their silent Auction for the Margaret Cunningham Scholarship Fund. All sessions have been approved for Continuing Education Credits with the exception of those referenced by an \*. This information will be submitted to the Board of Registration for their approval.

# **Allen Precision Equipment**



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# An Introduction to Fire Insurance Maps in the Library of Congress

Sanborn Map & Publishing Co.

By Walter W. Ristor

During the past century the Sanborn Map Company has published maps and atlases of more than twelve thousand United State towns and cities, issued in some seven hundred thousand separate sheets, and yet the name Sanborn is known to but a small number of American map users. This anomalous situation has persisted because Sanborn's specialized maps were prepared for the exclusive use of fire insurance companies and underwriters.

Insurance maps and plans originated in London toward the end of the eighteenth century in response to the need felt by large fire insurance companies and underwriters for accurate current and detailed information about the buildings they were insuring. Although a fire insurance company was established in Philadelphia as early as 1752, the number of domestic companies was quite limited before the War of 1812. Both before and immediately after the Revolution, London fire underwriters wrote most of the fire insurance for buildings in American cities. Animosity toward the British grew more intense during he War of 1812, and this feeling plus restrictions on foreign companies operating in the United Sates encouraged existing American companies to expand their activities and stimulated the formation of new companies. New York, Philadelphia, Boston and Hartford became the principal fire insurance centers.

In 1835 a major conflagration in New York City caused losses of more than 20 million dollars and wiped out most of the nation's smaller insurance companies, which had little or no reserve funds. In the reorganization of the industry larger companies were formed, and states and cities passed laws requiring reserve funds and issued other regulations. Personal inspection of properties under consideration for insurance became impossible and a demand for maps giving essential risk information developed.

George T. Hope is generally credited with having fostered the idea of specialized and detailed fire insurance maps in the United States. Around 1850 Hope, who was at the time secretary of the Jefferson Insurance Company, began to compile a large scale map of a portion of New York City for use in calculating fire risks. He engaged William Perris, an engineer, trained in England, to make the surveys. To ensure that the proposed map would include all essential information, Hope formed a committee of fire insurance officials to direct the project. They agreed that the map should identify the construction materials in all buildings by a system of colors, formulated a set of appropriate cartographic symbols, and agreed on a format and scale for the map. The standards adopted by the Hope committee were followed, with few modifications, for a century or more.

D.A. Sanborn, a young surveyor from Somerville, Massachusetts, was engaged in 1866 by the Aetna Insurance Company to prepare insurance maps for several cities in Tennessee. Before working for Aetna, Sanborn conducted surveys and compiled an atlas of Boston, which included twenty-nine large plates showing sections of Boston at the scale of 50 feet to an inch. The success of the Boston atlas and the Aetna commission must have impressed the young surveyor with the importance of detailed and specialized maps for the fire insurance industry. Following his commission in Tennessee, he established the D.A. Sanborn National Insurance

Diagram Bureau in New York City in 1867. From this modest beginning grew the specialized company that has compiled and published maps for the fire insurance industry for more than a hundred years.

'D.A. Sanborn died in 1883. The company he founded, however, continued to grow. In 1899 it acquired the Perris and Browne firm. The firm name established by Sanborn in 1867 was changed in 1876 when the firm was incorporated under the Sanborn Map and Publishing Company, which then became the Sanborn Perris Map Company, Ltd., until, in 1902, the name was shortened to the Sanborn Map Company, the form which the company uses today.

Sanborn appears to have begun systematic registering of maps, with deposit copies, in 1883. With the exception of the Boston atlas, the 1868 map of Toledo, and the 1879 map of Rutland, Vermont, the sheets carrying the 1883 date are the earliest in the Library of Congress. Within the next few years deposit sheets were received for cities in virtually every state, suggesting that the years immediately before and following in corporation in 1876 Sanborn had expanded its insurance map coverage to all parts of the United States. Although some of the growth resulted from absorption of other map companies, most of the expansion must be attributed to good managerial procedures and practices. The Sanborn company successfully produced detailed, comprehensive, and up-to-date maps which met the needs of the fire insurance industry.

Sanborn surveyors were at work in all the states, and during the years of maximum production there were as many as three hundred employees in the field and more than four hundred in the main office and publishing plant in Pelham, New York, and in secondary production centers in Chicago and San Francisco. Unfortunately, Sanborn mapmakers worked anonymously, and their names never appeared on the maps they produced.

To ensure uniform standards of accuracy and presentation on its maps, the Sanborn Company published, in 1905, a Surveyors' Manual for the Exclusive Use and Guidance of Employees. The introduction to the manual emphasized that "Sanborn maps are vastly different from other publications, and the novice must start in with the idea that it is all new, though some former occupation, such as civil engineering and architectural work, should fit a man to readily grasp the primary principles. Our maps," the introduction explained, "are made for the purpose of showing at a glance the character of the fire insurance risks of all buildings. Our customers depend on the accuracy of our publications, and rely upon the information supplied, incurring large financial risks without making personal examinations of the properties." The manual included more than a hundred pages of precise instructions and included sample maps and a comprehensive symbol key.

"The information reported," the Sanborn surveyor was advised, "is technical to the fire insurance world, and you should master the technicalities and ever bear in mind the use to which the map you are producing will be applied." Maps were drawn at a scale of 50 feet to an inch, on sheets 21 by 25 inches, which were cross ruled in one-inch squares. The manual instructed surveyors to map

... continued Page 17

# Fire Insurance Maps ...continued from Page 16

the built-up part of the town or city. "Information," they were told, "is generally available at the Court House, or... some real estate agent may have the necessary data. [However] if records are not easily obtainable do not waste too much time, but proceed to measure up the territory with tapeline, and plot sheets from notes so secured. In plotting put on the street names and widths and real estate description."

Each year Sanborn extended its coverage to additional cities and also issued revised editions and paste-on correction slips for previously published maps and atlases. Production probably reached a peak in the early 1930s. An article about the Sanborn Company published in the February 1937 issue of Fortune Magazine stated that "Sanborn maps describe the houses on every street in more than 13,000 U.S. towns and cities...[and] cost anywhere from \$12 to \$200 [per map] depending on the technical difficulties involved in making them up."

Sanborn maps were lithographically printed in the company's Pelham, New York, plant. With the aid of waxed paper stencils, Sanborn employees colored the maps by hand, because there were usually fewer than twenty orders for a single map sheet. They were issued as unbound sheets for towns and cities with maps of under a hundred sheets. Bound volumes, each with approximately one hundred plates, were published for large cities. Thirty-nine volumes were required for New York City. Around 1920 the company introduced a loose-leaf atlas format which made it possible to blace outdated plates without reprinting an entire volume.

Sanborn early learned that having a monopoly in a very restricted and homogeneous market invited critical observation and evaluation. Most of the company's customers were members of national or regional underwriting associations where they could discuss Sanborn's real or assumed deficiencies. One of the major concerns was the relatively high cost of Sanborn's products and services.

The fortunes of the Sanborn Company did not depend, however, solely upon their relations with fire insurance underwriters. Economic, political, and social conditions also influenced the sale of Sanborn maps and services. Thus, the construction boom in the middle and late twenties had an accelerating effect on fire insurance sales and upon the need for maps. During these years Sanborn prepared maps of a number of new towns and cities and resurveyed previously mapped areas. For particularly active construction areas, revisions of Sanborn maps were issued at six-moth intervals.

The period of economic prosperity did not last and with the financial crisis of 1929 and the depression of the thirties, construction was curtailed, fire insurance sales lagged, and companies again exerted pressure on Sanborn to reduce the cost of its maps and services. Sanborn's response was to offer cash discounts to subscribers, offer the paste-on service for sheet maps (i.e., those for smaller towns and cities), and to mount the sheet maps on cloth to ensure longer life.

World War II placed mandatory restrictions on construction and on the publication of maps. Sanborn, like most other map publishers, survived during these years by producing maps on contract for the military services. The hoped-for postwar prosperity was slow in arriving, particularly for the Sanborn Company. In an

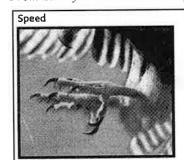
attempt to bolster declining sales, maps were published for a number of cities at reduced scales of one inch to 100 feet and one inch to 200 feet (as compared with the standard one-inch to 50 feet) and issued in small-size atlas format.

By 1960 it was apparent that the fire insurance industry was undergoing major changes and the detailed maps and services offered by Sanborn were no longer required. In its 1961 report the National Bureau of Fire Underwriter's Map Committee noted that some companies had discontinued the use of maps and decided "to review the overall situation from the stand-point of the needs of the business at the present time."

Although Sanborn maps today have minimal interest for the fire insurance industry, the Sanborn Company is supplying updated copies of many of its maps and atlases to various clients. Today municipal governments are Sanborn's best customers, accounting for 60 percent of map sales and services. Engineering and architectural concerns are also significant purchasers of corrected Sanborn maps.

The large file of noncurrent Sanborn maps and atlases constitutes an invaluable historical record of urban growth in the United States over more than a century. Local historians, genealogists, urban planners, geographers, economists, and other specialists and scholars consult the maps today for the wealth of detailed data which they embrace. The largest collection of Sanborn maps and atlases is preserved in the Geography and Map Division, Library of Congress, where there are an estimated 700,000 Sanborn maps in bound and unbound editions.

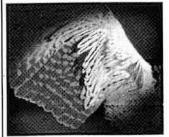
From Surveyor Historical Society, Backsights, February 1998



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# Sanborn Fire Insurance Maps of Indiana Cities and Towns Available

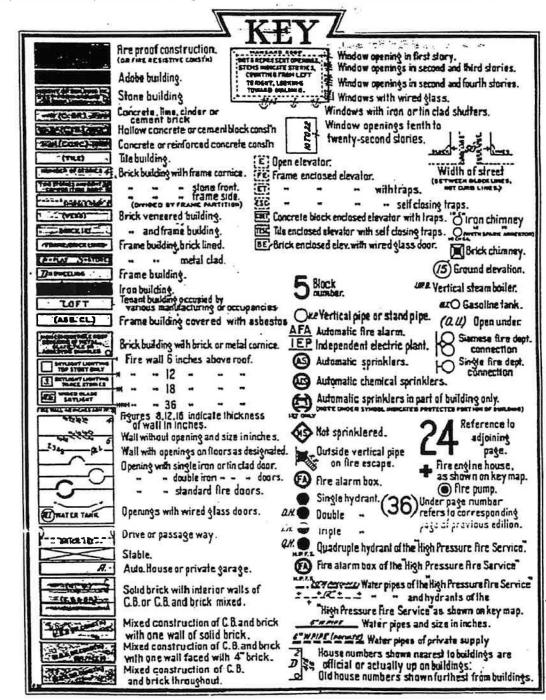
In 1999, the Indiana Division of the Indiana State Library purchased a microfilm set of Sanborn Fire Insurance Maps of Indiana cities and town., These maps can be used to trace the development of more than 400 municipalities from the 1880's to the mid-1950's. As many as ten different editions were produced for some Indiana towns.

Sanborn maps are valuable research tools for genealogists, local historians, urban specialists and anyone who wants to learn about the history, growth, and development of Indiana's cities, town, and neighborhoods.

Among the features depicted on Sanborn maps are: an outline of each building, the size, shape and function of structures, and the location of windows and doors. The maps also give street names, property boundaries, and house and block numbers. The original maps are in color. The microfilm set in the Library is in black and white.

The staff of the Indiana Division is able to make photocopies of particular houses, streets, and other features on these maps. You can find more information about the collection and the specific map editions for each Indiana city at the Library's Web site (http://www.statelib.lib.in.us).

... As seen in Indiana State Library Connection, September 2004 Barney Thompson, Indiana Division, Indiana State Library



Key to Sanborn Map Features as shown on Library's Web site.

Hoosier Surveyor 31-2 Page 19

Stateroom number\_ Crossword Puzzle From Delta Queen Cruíses Gewis and Clark

T B E F F

| ,4cross   | Доми  |
|---|---|
| 1. Direction of return journey                                    | 1. Hazards in river   |
| 2. Difficult animal to kill                                       | 2. Animal highly valued for its meat and hide                               |
| 4. Hired on as cook and interpreter                               | 3. the gauntlet   |
| 8. Men worked as a  | 4. French term for "Peace" Pipe   |
| 10. Type of dog Lewis owned                                       | 5. Color of one of pirogues   |
| 11. Excellent food source near Pacific Ocean                      | 6. One of sergeants in Corps  |
| 14. Name of Lewis' dog  | 7. Our nation, abbr.  |
| 15. What Clark was to make during the journey                     | 9. Tributary and falls to the Columbia River                                |
| 16. One of the Captains of the Expedition                         | resident of   |
| 17. Sometimes used to propel the large boat of the expedition     | 13. "young men from Kentucky"   |
| 18. Fort at western terminus of journey                           | 14. Squaw taken on expedition   |
| 20. What Clark's servant wanted following the expedition          | 19. Youngest enlisted man in Corps (18 years old)                           |
| 22. Number of sergeants at any one time                           | 21. Mule , a food staple  |
| 26. "timid waterman"  | 23. Chief of Shoshones  |
| 28. River traveled from the Mississippi to the Rockies            | 24. Territory of exploration  |
| 29. medal   | 25. Today the journey is thought to be                                      |
| 30. Warlike Sioux tribe   | 26. Indian nation for whom the westernmost fort was named                   |
| 32. Direction of first year of journey                            | 27. Round Indian canoe  |
| 33. Made at ocean fort for diet, trade, and preserving food       | 28. Village where the Corps spent their second winter                       |
| 35. Month that journey began from Wood River                      | 31. Used for food and the making of shirts and pants while at ocean fort    |
| 36. Only member who lost his life on the expedition               | 34. Tasty delicacy  |
| 38. Fort from which Lewis departed on the Ohio River              | 36. First winter's camp   |
| 41. Men parched this for later consumption                        | 37. Privilege afforded both Clark's servant and squaw interpreter           |
| 42. Responsible for selling Louisiana Territory to United States  | 39. Clark thought of squaw's baby as his                                    |
| 45. Indian Nation Clark wrongly translated to mean "pierced nose" | 40. Rank shared by both Lewis and Clark                                     |
| 47. Dr. Benjamin Rush's cure-all                                  | 43. One of Clark's most important duties: the journey                       |
| 48. Camp abode  | 44. Type of gun Lewis shot to impress the Indians                           |
| 49. First Consul of France in 1803                                | 46. Waterway followed to the Pacific Ocean                                  |
| 51. Held authority to make the Louisiana Purchase a Treaty        | 47. Clark's nickname for the youngest member of the expedition not enlisted |
| 53. Great obstacle during journey                                 | 50. French had to obtain Louisiana Territory from the                       |
| 58. Run the   | 52. Greatest land in history  |
| 61. River hazards   | 54. Indian nation   |
| 62. What the Corps would rather eat than salmon                   | 55. Type of large vessel taken on journey                                   |
| 63. Sacagawea's Indian Nation                                     | 56. Also in search of a passage   |
| 64. Falls of the  | 57. Another word for pirogue  |
| 65. Name of Clark's servant                                       | 58. Corps of Discovery's last survivor                                      |
| 66. Deserter dismissed from the permanent party                   | 59. The Louisiana Purchase was made a                                       |
| 67. Corps had to do this near the head of the Missouri River      | 60. What the Corps hoped to get from the Shoshones                          |
| 68 Obstacle near the head of the Micenini Diver                   |   |

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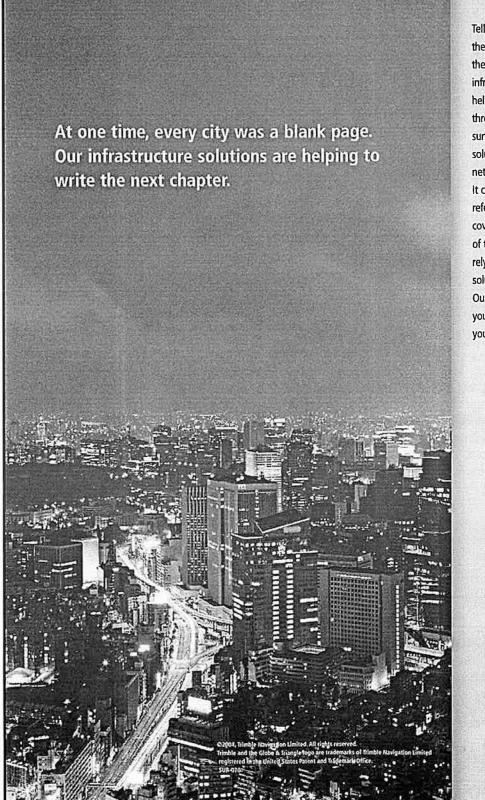
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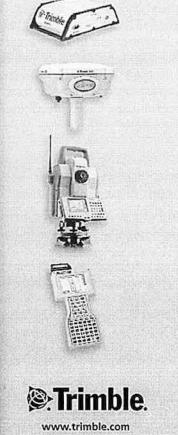
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Lewis and Clark Mapping the Great Northwest By Dean Cornwell

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The Surveyors Historical Society, a national not-for-profit organization, has made this reprint available on the occasion of the <u>bicentennial</u> of the expedition. The reprints are numbered one through two-hundred and are printed on 18" x 24" heave archival stock. The color image is 13" x 18" (same as the original prints), and a matte with an opening of 15" x 18 ½" exposes the title of the artwork, and makes an excellent hanging for your office or home.

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## **MOTOR VEHICLE SAFETY**

By Ronald E. Koons RoSaKo Safety

Over the past 11 years we have presented numerous topics on surveyor safety. One item that probably hasn't received enough attention is motor vehicle safety. I am not talking about traffic safety here, the MUTCD or Workzone safety, but safety of your employees while driving on the roadways throughout this country. On any given day your employees could be driving in parking lots, county or township roads, city roads, state two lane highways, divided highways, or interstate highways. The number one cause of fatalities in the workplace for the past several years has been motor vehicle accidents. If you think about it this fact only makes sense. Of everyone employed in the United States the vast majority use some form of motor vehicle to get both to and from work and there are many of those individuals who must make trips during the day to perform their duties. With the exception of larger metropolitan areas mass transportation just can not reach everyone. Even if your employees could get to work via mass transportation I just can't see them using mass transportation to perform their duties. So it is probably safe to say that all surveying field crews use some form of motor vehicle during their duties. Even if you use a snowmobile or boat during the day you most likely got to them via a motor vehicle. Have I convinced you? Great...now let's talk about how much time they spend in motor vehicle. You may have office personnel that only

nmute to and from work without any time in a vehicle during the day. We then go to the field crews who most likely spend most of their day away from the office. If we take a range of times it would probably be safe to say that your employees spend everywhere from a few minutes a day to several hours a day in a vehicle. Multiply this times 52 weeks a year and there are thousands of hours each year you have potential exposure to motor vehicle accidents. What are some of the things you can do to help reduce this exposure or reduce the potential for injury? Let's look at some basic ideas.

First of all, hire the right people. Always make a condition of employment the results of a motor vehicle license check. If you have an individual who has been caught driving while intoxicated that should throw up a red flag right away. Excessive points against their license for speeding, an abnormal number of wrecks and previous suspensions should all be warning signs. If there is someone who is qualified for the position that is open, but shouldn't be driving you will then have to make a decision as to whether they would fit into your company. Many states now have access for the public to this information via the internet. It appears that most of these do charge a fee for this information to maintain the database. In most cases your vehicle insurance company will perform this check for no charge. (Always give them a list of all employees, even those who only work in the

ce.) In fact, your insurance company probably asks you for a nst of drivers each year just before renewal time. If you do this up front you might save some major problems down the road. (No pun intended) I have heard of many cases where insurance

companies will specify they will not provide coverage for certain individuals. Stay on top of this issue because it could just prevent a major crisis.

What about the condition of your vehicles? Is maintenance performed on a regular basis? Are tires replaced according to manufacturer's recommendations? I have seen some field vehicles that are quite obviously overloaded so make certain you have the correct size of vehicle for your intended load. Do you have seats for everyone? I can't tell you how many lawn chairs and drywall mud buckets I have seen in the back of vans when a third crew member is needed. A simple rule should be that everyone must have a proper seat. On every seat should be a seat belt. The seat belt must be functioning properly and must be used! If you read the accident reports in your local paper I am quite certain at least once per week you will read that someone was killed when they were ejected from their vehicle due to not wearing a seat belt.

With the proliferation of cell phones we wouldn't be doing justice to the issue without mentioning cellular telephone use while driving. We all see far too many people driving while talking on the phone and really not paying attention to their driving. What makes you think your employees aren't doing the same thing? I try never to carry on lengthy conversations while driving. I put on my headset if I know that I might be receiving an important call. Most important is to simply pull off the road in a safe location if you need to carry on more than a very brief conversation. However, when pulling off the road always make certain that you are in a safe location. The only safe way to talk when on an interstate is to get off at an interchange. Parking along an interstate highway with traffic traveling anywhere from 55-90 mph is simply not safe.

How materials are stowed inside your vehicle can become critical in the event of a sudden stop. Even without being involved in an accident employees can be injured when loose materials hit them. Vans should have a protective screen between the passenger compartment and load area whenever possible. Pickup trucks should have a screen across the rear window to allow visibility but stop projectiles. If your crew is using an SUV this becomes a little more difficult but can be managed with a little creative design work. Never carry gasoline cans in the passenger area of a vehicle. There is just too much danger in the event of a wreck.

Sometime in the future we will get a little deeper into this issue with additional suggestions. As a businessperson you simply can not afford to overlook traffic safety for your employees. The overall survival of you company could depend upon how well your employees drive. We hope to see all of you at the convention in January for our presentation. Keep it safe!

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#### **CALENDAR**

December 11, 2004

ISPLS Board of Directors meeting, Indianapolis, IN

January 19-21, 2005

ISPLS (Indiana) Annual Convention, <u>Marriott East Hotel</u>, Indianapolis, Hosted by Tecumseh Chapter. (Note move from Downtown Marriott)

February 16-19, 2005

IPLSA (Illinois) Annual Meeting, Crown Plaza, Springfield, IL March 1, 2 and 3, 2005

Purdue University Surveying School Land Surveying and Geomatics Engineering presents a three day short school covering surveying fundamentals, land surveying, and advanced topics in geomatics. Indiana CEH will be available - both elective and mandatory. Futher information on topics, schedule, cost, lodging and continuing education units will be available at the web page: http://www.ecn.purdue.edu/Geomatics/SurveySchool/SurveySchool\_Main.html or contact: Purdue University, Land Surveying & Geomatics Engineering Program, 550 Stadium Mall Dr., W. Lafayette, IN 47907 Phone: (765) 494-0786 Fax: (765) 496-1105; email: steven@purdue.edu

March 9-10, 2005

2005 Indiana GIS Conference, Crowne Plaza Hotel & Conference Center, Downtown Indianapolis, Indiana.

March 18-23, 2005

ACSM-CLSA-NALS-WFPS 2005 Annual Conference, Riviera Hotel & Casino, Las Vegas, NV. This is a joint conference with California, Nevada and WestFed Societies.

# WELCOME NEW ISPLS MEMBERS

July 10, 2004 DeBoy Land Development Services-Firm Ralph Easley Jr. - Member Charles Ebinger - Member Seth Johnson - Student to Associate Clem Kuns - Student to Associate Jason Page - Student to Associate Matt Sharp - Student to Associate October 8, 2004 Paul Aikins - Associate Clayton Baylor - Student Aaron Carl - Student Christopher Carmien - Student Sean Chambers - Student Nick Charnas - Associate Adam Christenberry - Associate Zachary Despain - Student Kevin Drulik - Member Joseph Dunaway - Student

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October 8, 2004 continued

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