

HOOSIER SURVEYOR

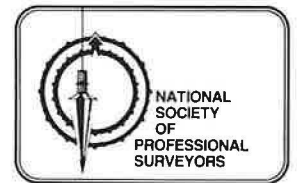


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PROFESSIONAL LAND SURVEYORS, INC.

VOLUME 23
NUMBER 3
WINTER 1997



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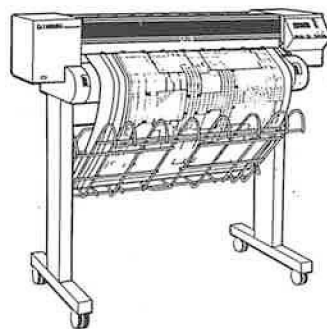
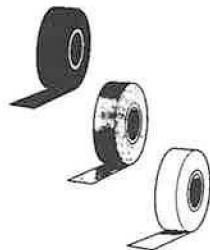
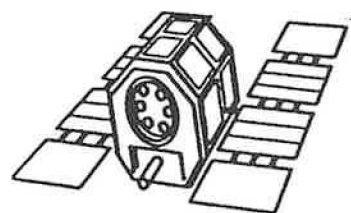
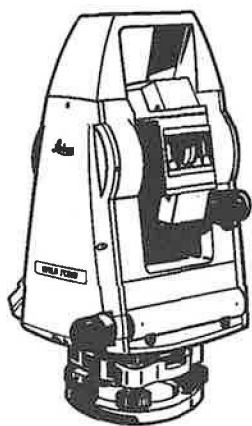
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January, 1997



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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; 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.

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HOOSIER SURVEYOR

VOLUME 23 NUMBER 3 WINTER 1997

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Committee Assignments (1997)

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PRESIDENT'S THOUGHTS

by Perry D. Cloyd, PLS, Edinburgh, IN

To all membership, the staff, directors, friends, and colleagues, Thank You. From my heart, it is truly an honor to be elected your president.



As I reflect on the events that have brought me to this point in my life, I have found commitment to service and an appreciation for other people to be two of the most influential aspects of my life. Service to God, country and fellow man results in the most satisfaction and positive rewards. In reference to the human aspect of life, I have found people to be the catalyst in our daily

actions. People effect us personally, professionally, socially and spiritually. They motivate us, challenge us and reward us with their friendship and trust. In a time of increasing technology, we must never lose sight that people are the common denominator that makes the "world go round".

This society has been dedicated to service to the people who comprise it's membership. New benefits, legislature involvement and continuing education programs have been brought to the table and the effort to continue in this direction remains. To date the board of directors, with support and suggestions from the membership, have worked very hard to keep us on a positive track. I am very proud of the efforts of the board to continue positive accomplishments on behalf of the society. Be assured their efforts to do the best possible for this society are consciences, well thought out and heartfelt. This effort has existed longer than I have been a member of this society and we should find comfort and security in the people who have brought us to this point. Although I will not dwell on the accomplishments of each and every officer, committee or member, I can assure you that the accomplishments of each have been remarkable. Based on the support I encountered as I organized our 1997 committee chairmen, I can say with confidence we will continue on the same path.

The goals of the society for 1997 include an expanded Ethics Committee to offer review AND consultation for members; an expanded GIS/LIS Committee with regional directors to help coordinate the HARN; greater cooperation/coordination with local chapters; more media exposure through the Public Relations Committee; continued expansion by the Membership Committee of member benefits; providing information from all committees and chapters on the new ISPLS WEB Page; creating opportunities for past presidents and previous board members to assist in the direction of the society and increasing the opportunities for members to serve the society as officers and board members.

Before us, as a society and a profession, stands an opportunity

to make our mark on history in the State of Indiana as surveyors in other states have done who have faced the challenge before us. I am making reference to the High Accuracy Reference Network which will be based on GPS Technology. By summer, NGS will be in the State of Indiana to establish a Federal Base Network of GPS points. We have the opportunity to densify the network by adding a Cooperative Base Network of GPS points in which we will choose monument location, make satellite observations, document the results and submit our findings to NGS as a supplement to the Federal Government's efforts in our state.

Since 1990, surveyors and other professionals in our state have continually made an effort to bring this project to reality. For the past two years, this project has seen a concentrated effort toward research, planning, and coordination. Our praise and thanks go out to the County Surveyor's Association for being the backbone of our grass roots efforts to supplement the NGS network. It was the County Surveyor's Association which sponsored legislation to create the Office of State Geodetic Advisor. Purdue University has provided available office space and HERPICC has stepped up to provide funding for the Office of State Geodetic Advisor. ISPLS has done it's part to support the efforts of the others through volunteer manpower and coordination. Now we need the support of the surveying profession as a whole.

There will be three great surveys relative to the contiguous states which will be written into the history books. The first, the greatest, is the public land system. The enormity of such a project is generally beyond comprehension to most of us who practice within our communities and our state. Second came the first horizontal and vertical control networks designed to provide our country the details of our national assets as well as considerable scientific data. Again, this project is generally beyond the scope of our daily work.

The third great survey is the one that will take place this summer. Please do not underestimate the significance of what is about to take place. This event will put Indiana on the National Reference Network as well as on the World Reference System. Think about that for a moment, the World Reference System. In comparison, I believe this network will be to surveying what the personal computers and the Internet will be to world communication. The applications and repercussions cannot be completely comprehended until the network is in place. New resources and applications will continually develop. Again, please do not underestimate the significance of what is about to take place.

Between reconnaissance, monument recovery, local ties, measurements, data processing and final submittal to NGS, we need every available person to assist on this project. Volunteers will be involved in training, operations and documentation, the scope of which will only be available during this project. Consider, as a surveyor, businessman, business owner, manager or supervisor the asset of having yourself and your staff trained to use GPS

do blue booking by NGS. Consider the marketing ability of that training on your personal and corporate resume. Consider the personal and professional pride of being a part of what may be the last great terrestrial survey of our lifetime. Then consider being a part of what we are trying to do. Every person is needed for every hour they can make available. The success of this project depends on what we, as a society and a profession, do right now.

To the Convention Coordinating Committee, congratulations on an excellent convention. The program was informative and the facilities were comfortable. As the society continues to grow, the coordinating of conventions will continue to be a tremendous undertaking. Our membership and local chapters continue to do an excellent job of rising to the occasion. Again, Congratulations!

On the lighter side, I want to commend the Convention Coordinating Committee for the snow event scheduled for this year's conference. Even though it was not in our printed program, I think everyone attending found it to be the most compelling aspect of the convention (chances are those who could not make it to the convention felt the same way). To those who did not stay past Friday afternoon, the Convention Coordinating Committee canceled the Saturday Golf Outing and replaced it with yet another snow event, a truly amazing feat, surely to remain in our minds at least till the next South Bend convention.

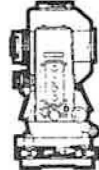
In closing, I dedicate this year to service and the people who make up this society and the surveying profession. I am truly proud to be where I am today, proud to be a citizen of this country, proud to be a professional surveyor and proud to be your president.

1997 ISPLS BOARD OF DIRECTORS SCHEDULED MEETING DATES


DAY	DATE	TIME	LOCATION
SATURDAY	FEB 15	10:00 A.M.	HEADQUARTERS
SATURDAY	MAR 22	10:00 A.M.	HEADQUARTERS
SATURDAY	APRIL 26	9:00 A.M.	THE TRAILS 325 BURNETT RD W LAFAYETTE
SATURDAY	JUNE 21	10:00 A.M.	HEADQUARTERS
SATURDAY	AUG 2	10:00 A.M.	HEADQUARTERS
SATURDAY	SEPT 13	10:00 A.M.	BROWN CO. STATE PARK
SATURDAY	OCT 25	10:00 A.M.	HEADQUARTERS
SATURDAY	DEC 6	10:00 A.M.	HEADQUARTERS
WEDNESDAY	JAN 14	TBA	LAFAYETTE

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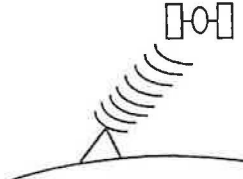
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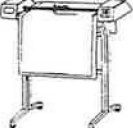
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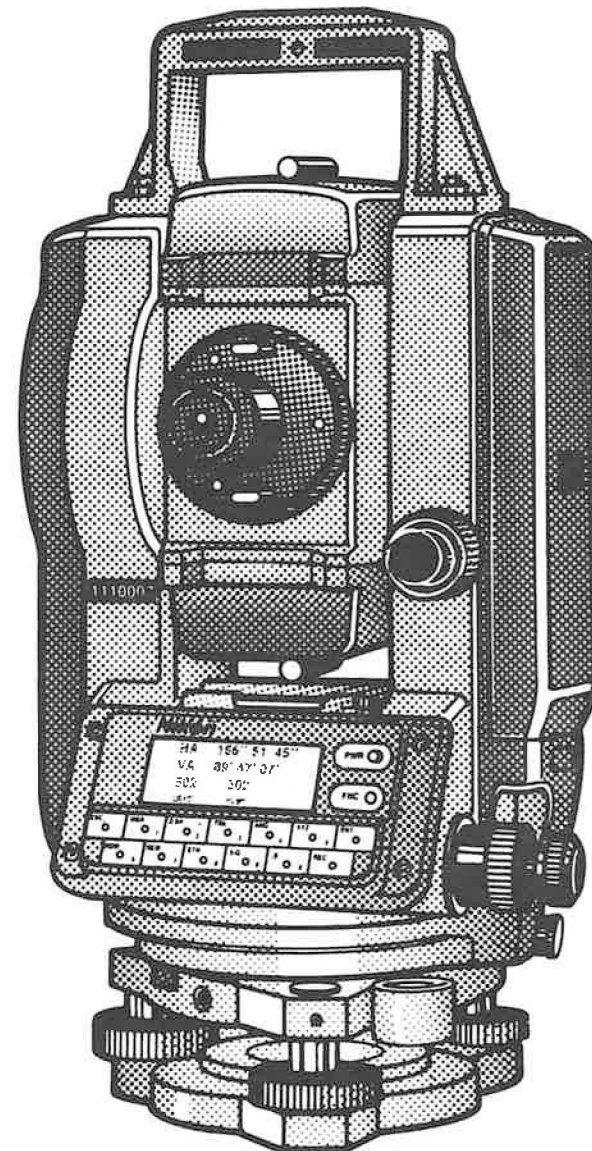
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ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

October 19, 1996

The ISPLS Board of Directors held a meeting on Saturday, at ISPLS headquarters. President Hudson called the meeting to order at 10:03 a.m. Guests present were Ron Wharry, Ethics Committee: John Schneider, Alvin Paul and Emil Beeg. The minutes and treasurer's report were reviewed and approved.

Staff Activity Report - A written report was submitted and reviewed. The report is stated under individual topics listed below.

Chapters - The Northwest Chapter had a meeting October 10th. William Davies, Chapter President passed away September 29th. The chapter voted to make a \$250 contribution to the ISPLS scholarship fund in his name.

The Hoosier Hills Chapter had a meeting on October 16th. Ken Anderson was made aware of ISPLS support of preservation of the Initial Point. Ken is currently working on possible sites. Hoosier Hills would like to host the 2000 convention. Bloomington could be the possible location.

The Initial Point Chapter had a meeting 3 weeks ago.

The Southwest Chapter's next meeting is November 5th.

The Tecumseh Chapter has mailed out the flyer for the tree identification workshop November 16th.

The Purdue Student Chapter is planning the Spring Banquet on Friday, April 25, 1997. The ISPLS board of directors will meet on Lafayette on Saturday, April 26th. A motion was made and passed to ask the Purdue Student Chapter if they could hold their Spring Banquet on Saturday, April 26th.

No chapter reports were received from Central Indiana, St. Joseph, Northeast and Wabash Valley.

Convention Coordinating - The first convention mailing has gone out. All programs have been scheduled.

Education - The Education Committee has reviewed the material submitted for the October 4th "Analysis of Measurement Errors & Survey Adjustments" and the November 16th "Tree Identification" workshop. The committee recommends 6 PDH for each workshop. A motion was made and approved to accept the committee's recommendation.

The Education Committee was asked to respond to a letter from the Pennsylvania Society of Land Surveyors - Harrisburg Chapter about awarding certificates at the conclusion of professional seminars.

Government Affairs - A letter from the Government Affairs Committee outlining the efforts for the next year was reviewed.

Headquarters - A new recorder is needed for taping minutes. Dan Woo will check into this.

Hoosier Surveyor - Next issue is being prepared.

Membership - The following membership applications were reviewed and approved: Member - Kenneth Garrison (Reinstate); Junior - Richard Chapman; Student - Jason Miller, Evia Cherk.

Public Relations - The committee is putting a news information letter together for the local media informing them of upcoming

events.

Scholarship - A letter from the scholarship committee was reviewed. A motion was made and passed to accept the committee recommendations to increase the scholarships to \$3000.00 each to Purdue and Vincennes Universities with \$2,000.00 coming from ISPLS and \$1,000.00 coming from the endowments and to furnish a free convention pass to the two recipients.

Standards - Changes are going to be made to the current standards. A draft copy was submitted. Any changes or recommendation should be submitted to Wes Day.

University Cooperation - The committee met with the Registration Board. Recommendation to have 12 semester hours in math and science and 24 semester hours in surveying.

Indiana State Board of Registration - The certificate presentation will be November 21, 1996.

GIS/LIS - Perry Cloyd stated that HARN is now at a point where the location of monuments must be determined for each county. This information needs to be passed on to those who need to know. All efforts should be coordinated with Dr. van Gelder.

Ethics - The board of directors met with the Ethics Committee after New Business. The committee presented suggestions on handling an ethics case. After lengthy discussion a motion was made and passed to endorse the committee's letter submitted as amended to read that the BOD will not file a complaint at this time.

December 7, 1996

The ISPLS Board of Directors met on Saturday, December 7th at 10:14 a.m. President Hudson called the meeting to order. Guests present were John Wharry and John Stevens (Wabash Valley Chapter). The minutes and treasurer's report were reviewed and approved as amended.

Adjustments to the Agenda - Finance - Chris Martin, Wallington Asset Management, gave a report on the performance of the ISPLS portfolio.

Government Affairs - A copy of the 1993 bill with revisions, was submitted to the board for review and discussion by Wes Day and Tom Dinwiddie. Senator Wheeler, agreed to introduce the bill to the Senate. A motion was made and passed to direct Tom Dinwiddie to submit the bill as amended.

Chapters - The Northwest Chapter had a joint meeting with the St. Joseph Chapter. Pat Cunningham was the speaker.

Central Indiana Chapter has nominated new officers and will be having elections shortly. CIC has committed to two scholarships, one to Purdue and one to Vincennes. CIC has also adopted the model by-laws of ISPLS.

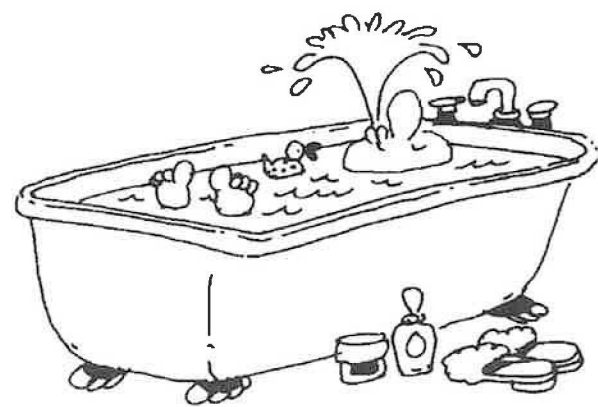
St Joseph Chapter met with the Northwest Chapter.

Southwest Chapter had a meeting on November 5th. They are interested in hosting the 1999 Convention.

No chapter reports were received from Hoosier Hills, Wabash Valley, Initial Point, Northeast and Tecumseh chapter.

...continued Page 7

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ISPLS Minutes

...continued from Page 5

Convention - Convention guidelines will be going out to all chapters to help plan conventions.

Ethics - A response letter on a complaint was sent in reference to a complaint.

Membership - The following applications were reviewed and approved: Member - Willard Johnson; Associate - Mark Harris; Junior - Mark Chamness, Daniel Bordenet, (New SIT) Harold Hart and Rick Trevino; Student - Thomas Boofter, Jr., William Hogstrum, Jason Deckard, Stanley Gilbert, Travis Norman, Kevin Vonderheide, Richard Hodges, Aaron Orelup, Brian Wyatt, Nathan Stevens, Greg Kissell, Ben Russell, Matt Clark, Michael Rozycki, Douglas Bacon, Jay Schoettmer, Steven Blann.

Nominations & Elections - Rick Miller was elected President-elect. Ballots for new directors have gone out.

Scholarship - Vincennes quarterly report was reviewed. A letter from Bob Gross, recommending Jason Copperwaite to receive the John G. McEntyre scholarship.

Technicians - There will be a meeting at the convention.

Indiana Surveyors Historical Society - There will be a meeting at the convention.

GIS/LIS - There was a letter from Dr. van Gelder looking for local volunteers to blue book points, run level circuits, tie new points to existing systems, etc.

Old Business:

Internet - Discussed things to put on the internet.

New Business:

Agency Associates wants to meet with the board to discuss member benefits.

REGISTRATION BOARD NEWS



Gerald Quigley, right, Executive Director, Indiana Professional Licensing Agency, greets Chip Garver, left, Indianapolis, who was appointed in September 1996 by Governor Evan Bayh as the public member of the Land Surveyor Registration Board.

Chip Garver was born and raised in Boggstown, Indiana. He attended Miami University in Oxford, Ohio and graduated with a business degree. He attended the University of Toledo, College of Law and is licensed to practice in Indiana and Ohio. He specializes in government relations with Treacy Boyle Advocacy Group. Previously he served as Legislative Director for Indiana's State Attorney General Pamela Carter.

ISPLS - HISTORICAL SURVEYING EQUIPMENT DISPLAY SPRING 1997

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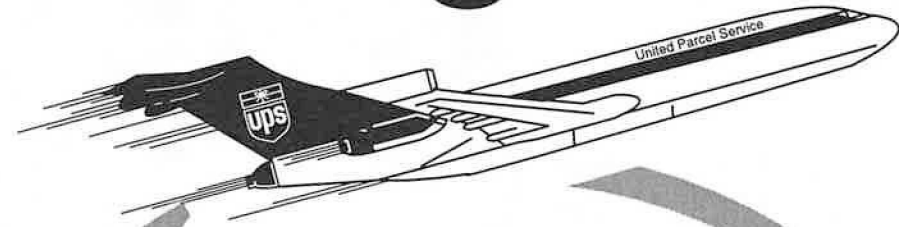


Ruthann Sumpter, left, Marion, accepts an award of appreciation from L.S. Registration Board chairman, John McNamara, South Bend, for her many long years of service and dedication as the public member of the dual Engineer/Land Surveyor Board (1982-1991) and then on the original Professional Land Surveyors Board (when it was created in 1991) to the summer of 1996. She was honored at the Joint Board Certificate Ceremony, November 21, 1996, for her fourteen years of outstanding service to the people of Indiana.

ISPLS 45TH ANNUAL CONVENTION
South Bend, January 15-17, 1997



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CONTINUING PROFESSIONAL DEVELOPMENT COURSES

August 28, 1996 - Hoosier Hills Chapter	
"Indiana Boundary Law 1996 Update"	6 P.D.H.
October 4, 1996 - ISPLS	
"Analysis of Measurement Errors & Survey Adjustments"	6 P.D.H.
ISPLS	6 P.D.H.
Kentucky Hours Approved	6 P.D.H.
November 16, 1996 - Tecumseh Chapter	
"Tree Identification"	6 P.D.H.
January 16-17, 1997 - ISPLS Convention	
"Construction Surveying in the 90's"	5 P.D.H.
"Writing Survey Reports"	1 P.D.H.
"Indiana HARN Blue Booking" (each)	1 P.D.H.
"OSHA and Confined Spaces"	1 P.D.H.
"Surfing the Internet"	1 P.D.H.
"Positioning the Survey Firm"	3 P.D.H.
"Management & Marketing the Survey Firm"	3 P.D.H.
"Practical Applications for GPS"	3 P.D.H.
"Surveying in the 17th-19th Centuries"	3 P.D.H.
"Update on Environment & Land Use Issues"	1 P.D.H.
"Early Court Decisions Re: Land Disputes"	3 P.D.H.
"Innovative Wetland Mgmt in Subdivisions"	1 P.D.H.

ISPLS PRESIDENT-ELECT REPORT

by Gary R. Kent, Chair 1996
ISPLS Nominations Committee

The following comment was received in one of the ballot envelopes: "This does not look good to the membership! This just lends support to the argument that many members in Northern Indiana and Southern Indiana have concerning "The Indianapolis Group" Think!!!"

I will agree with the premise that this does not look good; however, I cannot accept the insinuation that the Committee was not thinking.

It was with regret that the Nominations Committee returned only one nomination for the office of President-elect for 1997. This decision was not made lightly nor without considerable effort to find a qualified second candidate.

The Committee feels that a nominee for President-Elect should have at least two years on the Board of Directors if at all possible. This assures that the nominee has experience on the Board and in the running of the Society's business. The committee also feels that in order to broaden our level of experience, it is important to seek persons other than those who have already served as President.

This year there were only four persons who have not already been President and who have two years or more on the Board of Directors. The Committee felt that two of those persons were disqualified due to potential conflict or because they had trouble making it to Board meetings. The other two were asked to consider nomination and only Mr. Miller accepted.

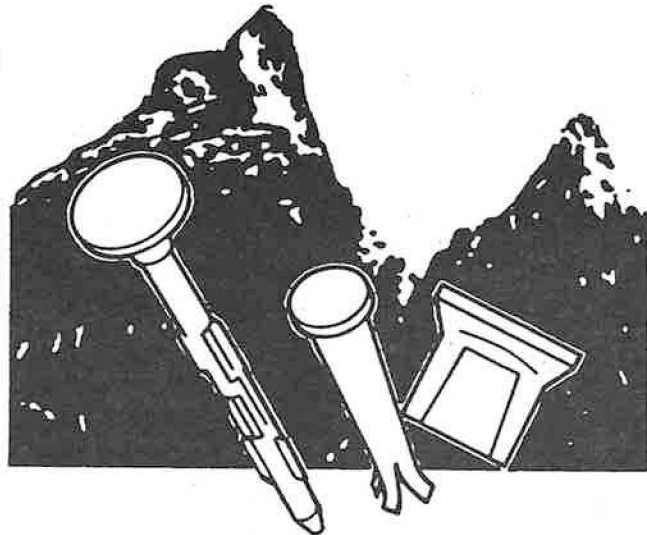
Since the normal methodology resulted in only one candidate, the Committee sought other nominees. Several past Presidents were asked as were other members that the Committee felt were qualified by virtue of having been on the Board of Directors in the recent past or having been active in Society activities over the past several years. Several of these persons were from Southern and Northern Indiana, but none agreed to run.

Members might recall that this situation also occurred several years ago when Rich Hudson (from the Northern part of the State) was nominated and ran unopposed.

The solution is for more persons to take active roles in the Society and for more persons to submit their names as candidates for the Board of Directors election (or to agree to run when asked). The Committee and, I'm sure, the Board of Directors would welcome any members who would like to become more involved in the Society.

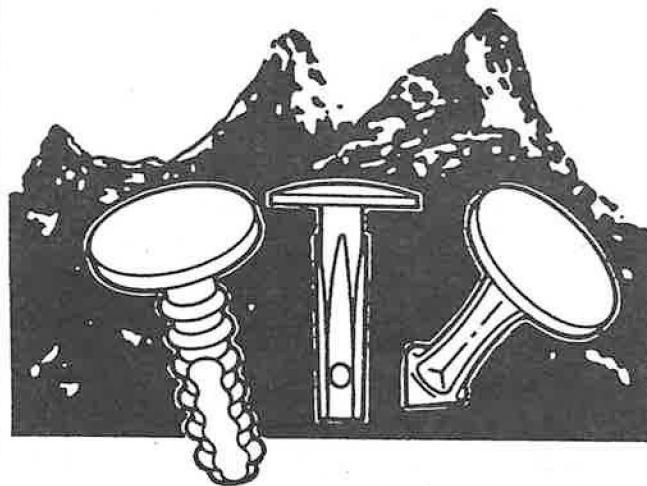
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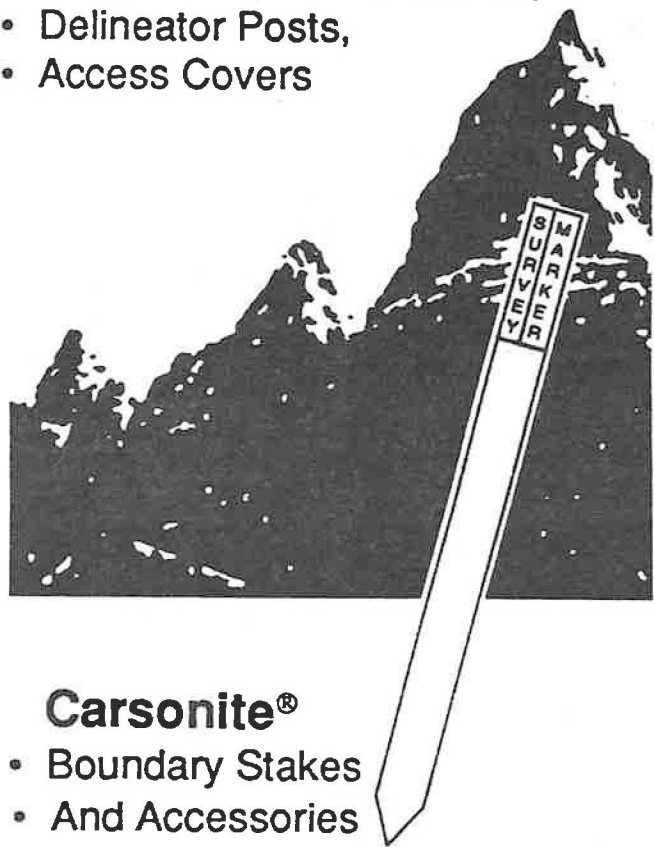
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ISPLS 1996 - A YEAR IN REVIEW

by Richard Hudson, PLS, Valparaiso, Indiana

ISPLS President 1996

1996 for Professional Land Surveyors in the State of Indiana has been another successful year. The Society goals established in October of 1995 for the years 1996 and 1997 are on course. The year's accomplishments are due totally to the hard work of members who have served on committees and the Board of Directors.

The following "A Year in Review" will provide a brief look into some of the year's successes for your society.

Financial stability continues: On January 20, 1996, the ISPLS Board of Directors voted to hire the Indianapolis money management firm of Wallington Asset Management, Inc. to handle ISPLS assets. At the Board of Director's April meeting, the agreement was signed and existing assets totaling approximately \$220,000 were placed under Wallington's control. The Board received financial updates at each meeting. At its December 7th meeting Chris Marten presented the "Long Term Performance by Security Including Accrued Interest" report from 06-30-1996 to 11-30-1996, and the "Portfolio Appraisal" report dated November 30, 1996. The present market value of the ISPLS portfolio as of that date is approximately \$233,000 with the Society's total net worth being approximately \$306,000.

Scholarships: ISPLS is committed to furthering the land surveying profession in the State of Indiana through financial support. The initial beneficiaries of our financial planning were the two scholarship funds. A recommendation by the Scholarship Committee was presented to the Board of Directors on October 19th. At that time the Board voted to increase the "John McEntyre Scholarship" and the "Peggy Archer Scholarship" to \$3,000 each. The original \$1,000 scholarships will continue to be funded through Purdue University and Vincennes University, with ISPLS providing \$2,000 to each of the scholarships. This was a large increase, but a much needed one, considering the fact that the dollar amount has not increased since both scholarships were established in the late 1970's and early 1980's. This additional scholarship funding is under the control of the Board of Directors with the recipients being recommended by the Scholarship Committee. All scholarship recipients will be recognized at the annual convention.

Education: ISPLS, through its Education Committee and the hard work of the individual society chapters, sponsored seminars on legal descriptions, EDM calibration, state plane coordinates, boundary law, update route surveying, tree identification and error analysis and adjustments. A grateful thanks goes out to the following chapters: Northwest Chapter, Initial Point Chapter, Mosier Hills Chapter and Tecumseh Chapter.

University Cooperation/Indiana State Board of Registration: The members of the University Cooperation Committee (UCC) met with the Registration Board to review and discuss the Board's desire to increase the education requirements for registration as a land surveyor. The current requirements call for 12 hours of college level math, 8 hours of physical sciences and 12 hours of college land surveying courses. The Registration Board would like to increase the math requirement to 15 hours and the land surveying requirement to 24 hours. It was the consensus of both groups that this increase was necessary to improve the integrity of land surveying in Indiana.

The major concern of the UCC was not the increased education hours, but rather the appearance by the Board that Purdue University, West Lafayette, was the only school in the State offering a surveying education. The UCC was looking for Board support for allowing land surveying to be obtained at other institutions such as Purdue University Calumet and IUPUI.

Board action on the educational requirement increases will probably begin in early to mid 1997. The UCC and the board will continue with open dialogue. I feel it is important to support our Registration Board, but it is equally important that all Indiana land surveyors become involved in the education process. It is our responsibility to voice our individual opinions when the education issue is heard publicly before the Registration Board.

Purdue University Surveying Equipment: The ISPLS Board of Directors committed funds and purchased some antique equipment from the Purdue University Auction held April 20th. The money raised by the auction was put into a University interest-bearing endowment for the support of the surveying laboratories. The following equipment is available for display in Indiana:

- One K & E Transit dated approximately 1941
- One K & E Transit dated approximately 1952
- One K & E plane table and alidade dated approximately 1951
- One K & E hand transit dated approximately 1898
- One unique cylindrical slide rule dated approximately 1900-1920

Brad Ott, PLS, Chairman of the ISPLS Survey History Committee spearheaded the Society effort in retaining some survey history for the use of our Society. Thanks, Brad.

Government Affairs: Legislatively, our efforts for 1996/1997 will be confined to increasing the number of members on the Board of Registration for Land Surveyors from six to seven. With board member Cunningham being the liaison officer to the Attorney General's office, this leaves five members, and four votes

...continued Page 14

are necessary for the Board to take action. The addition of a board member will allow for an absent member, or a member who cannot vote on a violation due to conflicts of interest.

Public Relations: The Public Relations committee met with the Board of Directors and Dr. Gerald Speth to discuss professional consultant services and whether the Society can afford them.

Internet: ISPLS.ORG is the registered name on the Internet for ISPLS. Sponsorships are being offered as follows: quarter page \$200 per year, business cards \$50 per year. Contact Chris Marbach or Dianne Bennett.

Standards: Revisions to the current survey standards were presented to the membership through the individual State Chapters. Any additional comments should be directed to the ISPLS Board of Directors or the Standards Committee.

Member Services: UPS services for ISPLS members is \$9.00 next day air letter, 10% off next day air packages and 20% off worldwide express. ISPLS members can benefit from a discounted long distance telephone program. Citizens Home and Auto Insurance offers ISPLS members a 5-7% discount. Additional programs are being studied. (Look for information on member programs in the "Hoosier Surveyor".)

Membership: It's up!! Free junior and associate memberships are still being offered to those passing their SIT and NSPS survey technician's exams.

HARN: HARN is still on line for completion in 1997. If you would like more information, please contact Perry Cloyd at 812-526-6209 or Tom Mahon at HERPICC, 1-800-428-7639.

Convention Coordinating: The Committee prepared and presented to all ISPLS chapters and the Board of Directors, copies of "ISPLS Convention Guidelines."

Chapters: Just a "thanks" to those chapter members who have found the time to attend the Board of Directors meetings this year. It is your society if you are willing to get involved.

Continuing on the last comment, Perry Cloyd, your incoming president, will be looking for member volunteers to fill all society committees. Existing programs will continue and new ones will begin only with membership involvement. It is your society, but without leadership from the members, ISPLS could not experience the success it has had. Please volunteer to fill a committee seat or provide leadership as a committee chairman.

I would like to personally thank all ISPLS Committee members for sharing their time and talents for the betterment of

our surveying profession. I also want to thank our Executive Director, Dianne Bennett, for all her help and encouragement. At last, but certainly not least, my thanks to the members of ISPLS for the opportunity to serve as your President. It has been an honor and a pleasure to serve, Thank You.

Finally, Bill Davies, your wisdom and friendship will be missed.
Professionally Yours
Richard L. Hudson, PLS, President, ISPLS

President Rich Hudson presented E.R. Gray, III with The Different Drum award for 1996 and Tony Gregory with the POB Salute to Excellence award at the 1997 conference in South Bend.

ISPLS 2nd ANNUAL MAP/PLAT COMPETITION

This year ISPLS held its second Map/Plat competition. Chris Marbach coordinated this event. All entries were judged on adherence to the minimum standards as set forth by the State of Indiana and NSPS. The winners of the contest were displayed at the Annual Convention in South Bend. These winners will be forwarded on to the ACSM/NSPS '98 national competition at ISPLS expense. The winners are as follows:

Type of Entry	Topographical Maps
Sponsor:	Michael L. Crawford
Entrant's Name:	Michael L. Crawford
Company:	Congdon Engineering Associates, Inc.

Type of Entry	ILTA/ Miscellaneous Maps
Sponsor:	Jeff S. Bislich
Entrant's Name:	William D. Richter
Company:	Certified Engineering, Inc.

Honorable Mention was given to :

Type of Entry	ALTA/NSPS Survey Maps
Sponsor:	Alan B. Cleveland
Entrant's Name:	Patrick A. McCallister
Company:	MTA, Incorporated

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ELLICOTT RESEARCH PROJECT

by Roger Woodfill, PLS, Lawrenceburg, IN

On November 1-2, 1996, I attended a special survey retracement workshop in Mobile, Alabama. Since it was a 1500 mile round trip, I can understand why I was the only Hoosier attending. Let me tell you about the experience because we may all have a chance to attend a similar workshop closer to home late next summer.

HISTORY

A brief review of political history reminds us that before there was a United States of America, the North American continent was being colonized largely by the British, the French, and the Spanish. These European powers often fought with each other. My story starts with the war that ended with the Treaty of Paris in 1763. Although most European histories call it the "Seven Year War", in the colonies we called it the "French and Indian War". During the above referenced treaty negotiations France ceded to the British all the French claims east of the Mississippi River from the river's source to the mouth of the river at Iberville (about 30 degrees 20 minutes north latitude and near Baton Rouge); and thence easterly through Lake Maurepas and Lake Pontchartrain to the Gulf of Mexico. Spain had also been involved with that war. In order to pay some debts, France was allowed to cede to Spain the area called Louisiana (French claims west of the Mississippi and the trading center, New Orleans). Spain transferred their claim in East Florida and West Florida to the British in exchange for the English claims around Havana. King George III of England also had some British debts for the Seven Year War to settle, and soon taxation in the British colonies worldwide increased. This increase in taxes ostensible led to the American Revolutionary War.

Since I was raised north of the Ohio River, I did not realize that the Spanish governor of Louisiana re-captured West Florida from the British in 1781. In fact, the Spanish claimed by this conquest east of the Mississippi River to Georgia, and north of the Gulf of Mexico to the latitude 32 degrees, 28 minutes (the mouth of the Yazoo River, approximately at Vicksburg, Mississippi) at the end of our Revolutionary War. The British had acquiesced to their claims to this more northerly line (1) because the British did not want to deal with various Indian problems in the area, and (2) because they were more fearful of the Spanish than the revolutionaries at that time.

As you know, the colonies gained their independence from England with the Treaty of Paris in 1783. However we forget, that our independence treaty was really just one of a series of agreements made at that time between the British, the Spanish, the Dutch, and the French. With our independence came the British land rights to the area west from the Atlantic Ocean to the Mississippi River and south from what is now Canada to the Spanish claims north of the Gulf of Mexico. The south line was finally negotiated with Spain in 1795 during George Washington's second term, and the agreement is known as the Treaty of San Lorenzo or Pinckney's Treaty.

I have repeated all this political background because it is important to a land surveying epic that transpired two hundred

years ago, and it is the basis for the workshop that I recently attended. The second article of the Treaty of San Lorenzo fixed the line between the U.S. and Spain at the 31st parallel of north latitude between the Mississippi River and the Chattahoochee River; thence down the Chattahoochee to the Flint River; thence on a line to the source of the St. Mary's River; thence down the St. Mary's to the Atlantic Ocean. The third article of the treaty stipulated that the border would be marked in a joint expedition headed by a commissioner and a surveyor from each country. George Washington appointed Major Andrew Ellicott, commissioner, and Major Thomas Freeman, surveyor. King Charles IV of Spain appointed Baron de Carondelet and Lieutenant Colonel Guillimard. Andrew Ellicott was the only one of the four men who actually participated in the survey that delineated the 31st parallel.

Ellicott was appointed May 4, 1796, and September 16 of that year he left Philadelphia on his odyssey. Within two weeks he was in Pittsburgh where he met his military escort. I certainly don't know the navigation properties of flat boats, but according to his journal he arrived with some difficulty in Cincinnati on November 11, 1796. Had I been looking out my Lawrenceburg, Indiana window two-hundred years ago this month I would have been able to see his expedition float within one thousand feet of my survey office! I am told that the Ohio River was low, and that Ellicott had trouble with ice. Anyway, he arrived in Louisville on December 12; he was near Paducah on December 17, and he was at the mouth of the Ohio, on December 18, 1796. (Milt Denny tells me that Ellicott buried a lead tablet near what is now Cairo, Illinois; and that he (Milt) would like to sponsor archaeological dig in that area late next summer. I told him that I would be there to help.)

On the Mississippi Ellicott's problems changed from those of navigation to those of politics. February 1, 1797 he was detained by a Spanish galley; February 2 & 3, he spent at a Spanish fort at New Madrid (about Kentucky-Tennessee line), and February 8, he was detained at another Spanish fort at Chickasaw Bluffs. Then Ellicott was stopped by Col. Howard, an "Irish gentlemen in the service of his Catholic Majesty". I am not sure whose side he was on, but the colonel had two armed galleys with him. Finally, February 24, 1797 Ellicott arrived in Natchez; and he began dealing with a long series of delaying excuses from his Spanish counterparts. His military "escorts" arrived in Natchez mid-March. I think that Ellicott had organized a territorial government in July. Then the U.S. Army showed up December 1, 1797, but it was April 9, 1798 before Ellicott left Natchez and traveled downstream to Alston Lake where he began taking celestial observations necessary to run the 31st parallel. Ellicott had been warned "of the hostile disposition of the Indians, and their determination to stop the demarcation of the boundary", but he started his men east, clearing the boundary line. I am told that a swath between sixty and eighty feet wide was necessary; not only to designate the line, but to accommodate the surveyors, the

...continued Page 16

ELLICOTT

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military, the wagons, and sometimes as many as two hundred Indian observers. The first 111 miles of the line was run by astronomical observations, and it was November 17, 1798 when Ellicott reached the Pearl River (about midway across the present day state of Mississippi). This part of the 31st parallel was marked with posts and dirt mounds, and it is now the state line between Mississippi and Louisiana. Actually, Ellicott had just reached the west side of the Pearl River canebrake, and it was Christmas, six weeks later, before he reached the east side. His journal tells of losing baggage, that his tents were worn out, and about the difficulty moving his observation equipment.

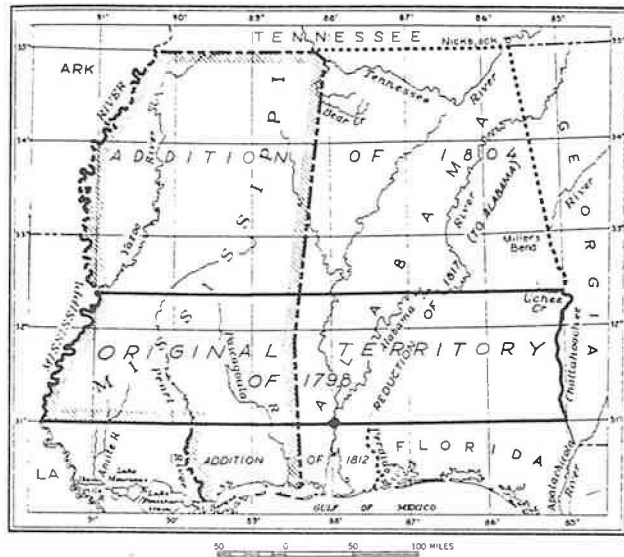
The whole expedition was low on provisions, and Ellicott had been away from home over two years by this time. I assume, he figured that there had to be a better way. Briefly, his new plan was that he would divide his resources -- sending one portion to continue overland following a magnetic bearing, and he would take the other group by water to the next astronomical observation station. When the two groups would rejoin, adjustments to the overland line would be made and the corrected line would be monumented. Ellicott's cross-country party advanced the next 100 miles through the Choctaw Indian nation to the Mobile River during the next three and one-half months. Ellicott's marine party procured a vessel; sailed down the Pearl River; crossed Lake Pontchartrain; took the Spanish Governor's barge to New Orleans; purchased the hull of a ship; obtained permission from the Catholic Bishop to work on Sundays; rebuilt the ship to serve as a scientific schooner; named it after his wife, Sally; had a portrait made; filed four reports about his progress, two in English, two in Spanish; purchased supplies; and sailed the "Sally" across the Gulf of Mexico into Mobile during that same period.

A contingent of his marine group was sent ahead up the Mobile River with a sextant to establish an observation station. They selected a site called Seymour's Bluff, where for the next three weeks Ellicott took celestial observations. The Seymour bluff site was determined to be about 8500 feet north of the 31st parallel. So the survey party measured south 518.55 perches and set a sandstone monument on the true line between the United States and Spanish West Florida. This point is known as Ellicott's stone, and it is the only known physical point remaining from this survey. Personnel was reassigned and one land party was sent easterly cutting a guideline to the next navigable river, and the other land party was sent back toward the Pearl River correcting each mile post to the 31st parallel.

There was another fifteen months of adventure and another four hundred miles of international boundary to run before Major Andrew Ellicott returned to Philadelphia. Indian trouble became severe; Ellicott navigated the "Sally" around the Florida peninsula and north to Savannah; and he makes entries in his journal about the difficulty transporting his surveying instruments by canoe.

My recent little adventure was seeing the Ellicott Stone (which later became the Initial Point for the St. Stevens Meridian and Baseline which controls most of southern Alabama), and standing on Seymour's bluff overlooking the Mobile River. I feel privileged to have been part of the archaeological dig that we started there in

search of Ellicott's two-hundred year old astronomical observation station. Although the site was only one of many, and Ellicott was only there for three weeks; the work he did there made a significant contribution to political history, scientific observation, and surveying professionalism.



WELCOME NEW ISPLS MEMBERS

as of October 19, 1996

Kenneth G. Garrison - Member (Reinstate)
Richard G. Chapman - Junior
Evia Y. Cherk - Student
Jason M. Miller - Student

as of September 21, 1996

Willard Johnson - Member
Mark Harris - Associate
Rick Trevino - Junior (New SIT)
Harold Hart - Junior (New SIT)
Daniel Bordenet - Junior
Mark Chamness - Junior
Jeremy Bridgham - Junior
Thomas J. Boofler, Jr. - Student
Steven Blann - Student
Jay Schoettmer - Student
Douglas Bacon - Student
Michael Rozycki - Student
Matt Clark - Student
Ben Russell - Student
Greg Kissell - Student
Nathan Stevens - Student
Brian Wyatt - Student
Aaron Orelup - Student
Richard Hodges - Student
Kevin Vonderheide - Student
Travis Norman - Student
Stanley Gilbert - Student
Jason Deckard - Student
William Hogstrum - Student

NSPS GOVERNOR'S REPORT

by E.R.Gray, III, PLS, Columbus, Indiana

The "GIS/LIS '96" Annual Conference and Exposition was held in Denver, Colorado in November of 1996. Sponsoring associations included the American Congress on Surveying and Mapping (ACSM), the American Public Works Association (APWA), the American Society for Photogrammetry and Remote Sensing (ASPRS), AM/FM International (AM/FM), the Association of American Geographers (AAG), and the Urban and Regional Information Systems Association (URISA).

The 1997 ACSM-ASPRS Annual Convention and Exhibition will be held in Seattle, Washington beginning April 7, 1997. ACSM and ASPRS are being joined this year by AUTO-CARTO 13 and Resource Technology.

More than 70 technical sessions, user demonstrations, and informational panels were offered at the conference. There were 16 workshops tailored to managerial and technical attendees. Additionally, more than 100 leading hardware, software and service companies were on hand in the exhibition hall.

As the Indiana NSPS Governor, I also serve as the Indiana Delegate to the Great Lakes Regional Council (GLRC). The GLRC has 10 member states, including Indiana, Illinois, Iowa, Michigan, Minnesota, North Dakota, Pennsylvania, Ohio, South Dakota, and Wisconsin. The Council meets in the spring and fall at the ACSM/NSPS Conferences. Motions on issues of concern to the GLRC are sent to the NSPS Board of Governors.

DENVER TIDBITS

Denver has long been a gathering place for all kinds of people. First it was home to the high plains Native Americans - the Sioux, Cheyenne, Arapaho, Apache, Ute, and Crow. Spanish explorers looking for Indian treasure explored and named the area, calling it Colorado or "reddish" after the brilliant red rocks.

The waters of Cherry Creek and the South Platte River meet in the area that would become Denver, and it was here that fur trappers first got together with plains Indians. When gold flakes were discovered at this confluence in 1858, it unleashed the great "Pikes Peak or Bust" gold rush.

Following World War II, the city of Denver boomed with new growth, doubling in population since 1960. In the 1990's Denver's population has increased by as much as 2,000 people a week, growing to more than two million presently in the metro area.

The business meetings I attended include: Great Lakes Regional Council, NSPS Board of Governors, Surveyor's Historical Society meeting, NSPS Board of Directors meeting, ACSM Board of Directors meeting, and the NOAA Constituents meeting.

16th SURVEYING TEACHERS CONFERENCE/ NSPS BARBECUE

The New Mexico Professional Surveyors and the Paso Del Norte chapter of the Texas Society of Professional Surveyors announced the co-sponsorship of the NSPS Biennial Barbecue. The NSPS Biennial Barbecue will be held Monday, June 9, 1997,

in conjunction with and as an "ice-breaker" for the XVI North American Surveying Teachers Conference in Las Cruces, New Mexico hosted by the New Mexico State University Department of Surveying. For information about the conference contact Jim Reilly or Steve Frank at 1-505-646-5375. For more information about the Barbecue contact Jim Botsford at 1-505-382-7066.

HUD FORMS

NSPS incoming President, Curt Sumner, met with HUD officials to discuss changes in the current "Report of Survey" form which HUD requires. Many items in the form are nearly impossible to certify to. HUD is planning revisions in the form and asking for NSPS's input. If you have any comments or suggestions, please contact me.

FEMA MAPS

NSPS President, Wendy Lathrop, is working on the FEMA Technical Mapping Advisory Council to help develop standards for map accuracy's for FEMA's Flood Maps. They are interested in problems that surveyors are having with the current maps. Specific problems may be provided to Wendy or myself.

INTERNATIONAL RIGHT-OF-WAY ASSOCIATION (IRWA)

The IRWA is interested in working more closely with NSPS and state affiliates to provide joint educational opportunities for its members and surveyors. NSPS has secured an exchange of educational sessions at member rates with IRWA. The exchange agreement was in effect at the Denver Conference.

CERTIFIED SURVEYOR TECHNICIAN PROGRAM (CST)

The number of candidates taking the CST exams doubled in 1996. Projections indicate that the CST program may become self supporting in 1997.

SURVEY EDUCATION

There are presently 23 state colleges and universities offering degree programs in 19 states.

PROPOSED STANDARDS OF ACCURACY FOR ALTA/ ACSM LAND TITLE SURVEYS

The proposed relative positional uncertainty standards were tabled. The standards were sent back to the NSPS Standards Committee. Changes should be presented to the NSPS Board of Governors (BOG) at the April '97 meeting in Seattle.

TRIG STAR

A motion was approved by BOG to present a Teaching Excellence Award to the teachers of the first through third place national Trig Star winners. Each winner's teacher shall receive an

.....continued Page 18

NSPS GOVERNOR

...continued from Page 17

award equal to that given the Trig Star winning students. This motion passed and was sent to the NSPS Board of Directors, where it also passed.

NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA)

Wayne D. Brubacher of Canada, presented the following motion: CCLS Motion D-96-16:

BE IT RESOLVED THAT the CCLS Board of Directors ratify the following philosophy under the NAFTA. Land surveying is recognized as a profession under the NAFTA. Boundary and parcel delimitation is one of the primary functions of cadastral surveying and one of the reasons why surveying is a profession recognized by legislation.

Boundary Delimitation is a unique professional activity because it is entirely jurisdiction dependent. The evaluation of evidence for boundary delimitation is dependent upon the history, culture, physical geography, and law of a particular jurisdiction.

For this reason, Boundary Delimitation should be considered a special case under the NAFTA for the surveying profession.

CCLS should negotiate with NSPS to develop a model agreement which excludes Boundary Delimitation. This model should include Geomatics activities including hydrography, engineering surveys, GIS, LIS, cadastral system development, photogrammetry, environmental assessment, etc.

This agreement would allow both licensed and unlicensed professionals to practice in those areas where a surveying license is not required for such activities in a particular jurisdiction.

The NSPS BOG resolved that each NSPS Governor take back the CCLS Motion D-96-16 to their state for comments. All comments are to be presented in April at the Seattle meeting.

STANDARDS FOR CLASSIFICATION OF LAND INFORMATION SYSTEM/GEOGRAPHIC INFORMATION SYSTEM SURVEYS

Model standards were adopted by both the NSPS BOG and the NSPS Board of Directors.

STANDARDS FOR GLOBAL POSITIONING SYSTEM SURVEYS

Model GPS survey standards were adopted by both the NSPS BOG and the NSPS Board of Directors.

Thank you for the opportunity to serve as your NSPS Governor. Please contact me at (812) 372-7398 if you have any questions or comments.

EMPLOYEES TO BE HELD PERSONALLY LIABLE CALIFORNIA STATE BOARD APPROVES "RESTITUTION"

In December the California State Board of Registration for Professional Engineers and Land Surveyors approved a new regulation on "restitution". Under the revised regulation, employees of engineering and surveying firms would be personally liable to the firm's clients. It appears that the only limit to the employees' personal liability would be the amount of the fee which the client paid.

The Board's new regulation is odd, because the client typically pays the fee to the firm for which the employee works, not to the employee personally. The employee just receives his or her regular salary from the firm. Nevertheless, under the Board's new regulation employees would be personally responsible for paying back fees which the employees never personally received.

In general law "restitution" is a form of compensation to a prevailing party in a breach of contract issue. Restitution does not normally apply to professional negligence issues, which have historically been the primary type of issue which the State Board investigates and adjudicates.

The new regulation would apply to registered engineers and land surveyors in California. The vast majority of the 120,000 plus Board registrants are employees of private firms and public agencies. It is unclear how the Board's new regulation would apply to employees of public agencies.

The Board voted 6-5 to approve the new regulation at a public hearing on December 13 in Sacramento. At the hearing no specific evidence of particular problems was presented that the Board's new regulation will cure. Consulting Engineers & Land Surveyors of California representatives testified at the hearing against the proposal.

The Board's new regulation would also eliminate many due process rights. For example, in California law anyone sued in court for civil damages is entitled to trial by jury and rights to prior discovery of evidence. The Board's administrative law procedures have no right to trial by jury and very limited rights of discovery.

The Board's new regulation also exposes registrants to the possibility of "double jeopardy." A person could seek compensation both through the Board's administrative law proceedings and through the already existing civil court system. The defendant would be subjected to two separate and very costly legal proceedings on the same issues.

The Board's regulation also eliminates the possibility of insurance coverage, which is important for consumer protection. Professional liability insurance in California covers civil judgments issued by a court of law. There is no such coverage available covering liability created through administrative proceedings, such as the Board's.

With the December vote, the Board is injecting itself into business transaction disputes in which it has limited time sources and expertise to resolve. Further, the Board is duplicating

...continued Page 19

GENERAL LAND OFFICE RECORDS NOW ON COMPACT DISC FOR ARKANSAS, FLORIDA, LOUISIANA, MICHIGAN, OHIO MINNESOTA, AND WISCONSIN

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Remote access is also available for 10 states: Alabama, Arkansas, Florida, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Ohio, and Wisconsin. Request a GLO remote access information packet from BLM, Eastern States (703) 440-1600.

The Secretary's copies of the General Land Office Records are the responsibility of the United States Department of the Interior, Bureau of Land Management (BLM). Documents for the eastern 13 Public Domain states are maintained by BLM Eastern States, 7450 Boston Boulevard, Springfield, VA 22153 (703) 440-1600. The Public Room is open for research Mondays through Fridays (excluding holidays), 8:30 a.m. to 4:30 p.m.

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024-011-00186-7	Wisconsin

...RESTITUTION

...continued from Page 18

the already existing civil justice system. The Board will only divert time and resources from the professional negligence issues on which the Board has historically and quite properly focused.

In May of this year, the Board approved regulatory language that would have limited restitution orders to a maximum of \$20,000. At December meeting the Board considered raising this to \$50,000. When that effort failed, the Board approved removal of the cap.

To take effect the regulation voted on by the State Board must now be approved by two state agencies: the Department of Consumer Affairs and the Office of Administrative Law. That process is expected to take at least several months. CELSOC will continue to submit comments in opposition to the proposed regulations.

...Reprinted from the CELSOC Update, January 1997.

MSE CORPORATION ANNOUNCES MANAGEMENT CHANGE

INDIANAPOLIS, INDIANA///January 20, 1997///MSE Corporation, the largest full-service engineering firm in Indianapolis, announced several management changes as a part of its continuing growth plan.

Effective January 17th the founder and CEO of MSE, Sol Miller, will become the Chairman of the Board of Directors. Miller will turn over the day-to-day operation of the company to an executive management board headed by Randal J. Sage. Sage, 40, has more than 20 years of experience with MSE. He will become president of this privately-held, multi-million dollar firm.

The management change, announced to the company's employees on January 17th in a presentation called VISION '97, furthers MSE's goals of enhancing the asset value of the company, increasing productivity in all departments, and increasing the offering of knowledge-based services to a variety of new markets. The changes include the promotion of Robert J. Montgomery to Executive Vice President. In addition, the engineering division has been realigned under the leadership of Jeffrey A. Meyerrose, who assumes the role of Senior Vice President. William M. Howell becomes the Senior Vice President, Finance. The company's focus on its three main services, geographic data management, engineering, and surveying, will remain the same.

Focus on Client Needs

The firm has responded to the changing needs of its GIS client base by creating a GIS Client Services group directed by John Buechler. The purpose of this group is to provide operations support, maintenance, applications development, and data migration services to MSE customers, who range from large utility concerns to municipalities and small businesses. In support of this initiative, James Sparks has joined the firm as Director, GIS Consulting Services. He will focus on bridging the gap between utility and municipal needs for GIS services.

Jeffrey Nash has been appointed Director, GIS Data Conversion. Jeff's expertise is in the production and conversion environment. John Dillon joins the firm as a Senior Vice President. Dillon will be responsible for identifying and exploring new business opportunities for MSE.

MSE CORPORATION ANNOUNCES SURVEY MANAGER

MSE Corporation is proud to welcome back Bryan Catlin, L.S.! Bryan will be re-joining the organization in the role of Survey Manager. Bryan received his BSLSE from Purdue, as well as, his MSE in Geodesy and brings with him over 15 years of experience.

One more perk that works! Members take advantage of ISPLS Discounted Long Distance Telephone Program

When we first introduced the ISPLS Discounted Long Distance Program, we knew some of you would be skeptical. Why? Because we were acutely aware of the fact that you, like we, had heard pitches from dozens of different companies, each claiming to give you "better," "more" and "lower" than anyone else.

But, ISPLS had determined there was a real need in our membership for a sound, reliable program, offering service at a considerable discount because of the clout of the group buying power of our membership.

So, as our research and investigation process began, we, frankly, became more than a little skeptical of ever finding a program in which the administrators would actually take a good look at the needs of each business and advise them...without bias...as to the way to go on the most reliable carrier at the lowest possible price. (Most of them only represented one carrier, so there was no doubt as to which one they were going to say was best!)

Well, our doubts have been erased and so have those of other ISPLS members who have signed up for the ISPLS Discounted Long Distance Telephone Program, administered by UWI.

Through group volume and buying power, this program enables members to select the exceptional quality and reliability of one of the top carriers in the world-- including AT&T and MCI--and still cut their long distance phone bill by up to 48%.

If your company would like to find out more about the program, contact UWI today. Remember, your company is guaranteed to receive the lowest price on the top quality network of your choice.

UWI representatives will give you a free written comparative analysis of your phone usage. They'll also counsel you about whether severing a term contract to which your company has already committed to a long distance carrier will ultimately save you money.

It's not too late to join other ISPLS members and reduce your company's overhead immediately through the ISPLS Discounted Long Distance Program. Call UWI at 800-342-9287.

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Fax UWI, your Program Administrator, today...or Call 1-800-342-9287.



OSTRICH OR EAGLE?

by Ron Koons, RoSaKo Enterprises
 Safety Consultants, Middletown, Indiana

Today's business person can not just be aware of how to produce, market, and sell a product, but must also be constantly aware of changing regulations and political correctness that could create problems. The beginning of my previous sentence is a prime example. When I was in school (a long, long time ago) we would have said businessman, not business person. We were taught that if you didn't know what specific gender you were discussing to always use the male form. With the rapid increase of females in the workplace we must be constantly aware that our policies, correspondence, and marketing needs to be directed toward both sexes. Any business that hasn't dealt with this may be in line for a very rude awakening.

Building Codes, Equal Employment, and the Board of Health are just a few of the agencies or regulations surveyors must deal with on a daily basis. Those of you who have been surveyors for years could never have dreamed the myriad of paper work and regulations that must be obeyed just to operate your business without getting into trouble. Likewise, we must be aware that changing workplace safety regulations have to be dealt with...like it or not!

All of us must constantly be aware of the "bottom line". Investments must be protected by making the correct decisions most of the time. To effectively run any business a budget must be developed. Do you include safety in this budget? Safety Training, Personal Protection Equipment, Preventative Maintenance etc. must always be considered as re-occurring expenses.

What happens if you don't consider safety as an important part of your business? Let's look at a few examples of some safety problems that have recently cost businesses a healthy amount of money.

The cut finger...not a major problem you might think. Recently I was conducting a safety audit for a small business of under twenty employees. As I was looking over injury reports one stuck out as being a rather thick file. The injured employee received a simple cut on a finger. Not a major cut, just a few stitches. By the time the case was closed I added up over \$2,500.00 in medical costs. Add to that the employees lost time to get medical attention, another employee's time to transport the employee, office time to complete all paperwork and you see the cut finger can get to be very costly. But are these the only costs? What about decreased productivity of the employee until the finger has thoroughly healed. How about the medical bills that don't get paid on time and someone in your office has to constantly follow up with the insurance carrier. Take a look at your injury reports. Those minor injuries may be costing a lot more than you think.

Before we started our consulting business I worked for a subcontractor on a construction project where a fatality occurred. There is no question that safety regulations had not been obeyed in a number of areas that ultimately lead to the unfortunate death of a 9 year old father. After OSHA citations were levied and workers compensation claims settled, the widow filed suit against

all parties involved. After five years of litigation the case was just settled in the amount of \$ 4.75 million dollars. Add this to attorney fees, OSHA citations, and medical bills and you not only have a tragic accident that cost a worker his life, but you have a major cost to a company. Remember that even though some of these costs may be covered by insurance, coverage may be canceled or rates will soon skyrocket. The unusual part of this case is that the \$4.5 million award had to be paid not by the fatally injured employee's employer, but by the general contractor.

The number of egregious/mega OSHA citations increased in 1996 by over 30%. This is the start of OSHA's efforts to work with those businesses who make an honest effort to comply with workplace safety regulations, and get more aggressive with those who don't. I think we can all agree that no one wants the pain and suffering of workplace injuries and fatalities. Along with that we can also agree that business doesn't need the additional costs involved with these injuries and fatalities. As a manager/owner you are responsible to protect the assets of your company. Making a strong commitment to safety is one way to reach that goal. You can be an Ostrich and bury your head...or an Eagle and soar high to achieve success.

ANTIQU & OBSOLETE SURVEYING EQUIPMENT AUCTION

The Department of Civil Engineering, University of Minnesota, Minneapolis, Minnesota, announces the sale of a group of antique and obsolete surveying instruments and related equipment, for the benefit of the programs of the Department of Civil Engineering. The sale will be held as follows:

Saturday, April 19, 1997
 12 Noon to 3 P.M.

Civil Engineering Building, University of Minnesota
 500 Pillsbury Drive, SE
 Minneapolis, Minnesota

The sale will be by silent auction, with bidding opening at noon and closing at 3 P.M. on April 19th. No mail bids can be accommodated. Payment must be by cash or check, credit cards cannot be accepted.

For more information, and to obtain a list of the equipment to be sold, please phone the Department of Civil Engineering, Phone: (612) 625-5522

Fax: (612) 626-7750
 E-MAIL, benne009@maroon.tc.umn.edu.
 A list will be sent to you when it is prepared.

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CALENDAR

February 18-21, 1997
 Michigan Society of Professional Surveyors Conference, Traverse City, Michigan
March 6-8, 1997
 Kentucky Association of Professional Surveyors & Missouri Association of Registered Land Surveyors Joint Conference, Paducah, Kentucky
April 5-10, 1997
 ACSM/ASPRS Joint Conference, Seattle, Washington
MAY 16, 1997
 Tecumseh Chapter Seminar, Topic - "Rule 12 Theory of Location"
 Speaker-Pat Cunningham, Contact Ted Darnall 765-742-6479
September 26, 1997
 ISPLS Workshop, Pokagon State Park, Angola, IN, Topic TBA
October 28-30, 1997
 GIS/LIS '97 Conference, Cincinnati Ohio
January 14,15, 16, 1998
 ISPLS Conference, Lafayette, IN

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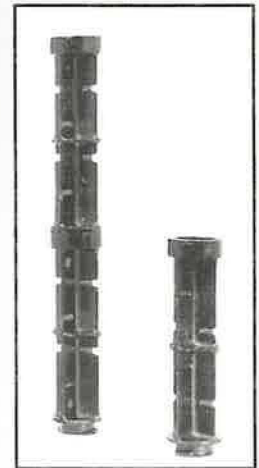
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