

HOOSIER SURVEYOR

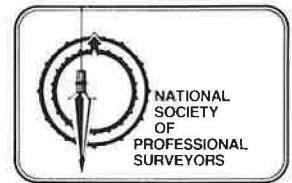


QUARTERLY PUBLICATION OF THE
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VOLUME 21
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FALL 1994



AFFILIATED WITH THE
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SURVEYING & MAPPING



IMPORTANT NEWS

FOR ALL PLS'S

INSIDE THIS ISSUE!!

**OUTLINE OF THE PROPOSED
CONTINUING EDUCATION PACKAGE**

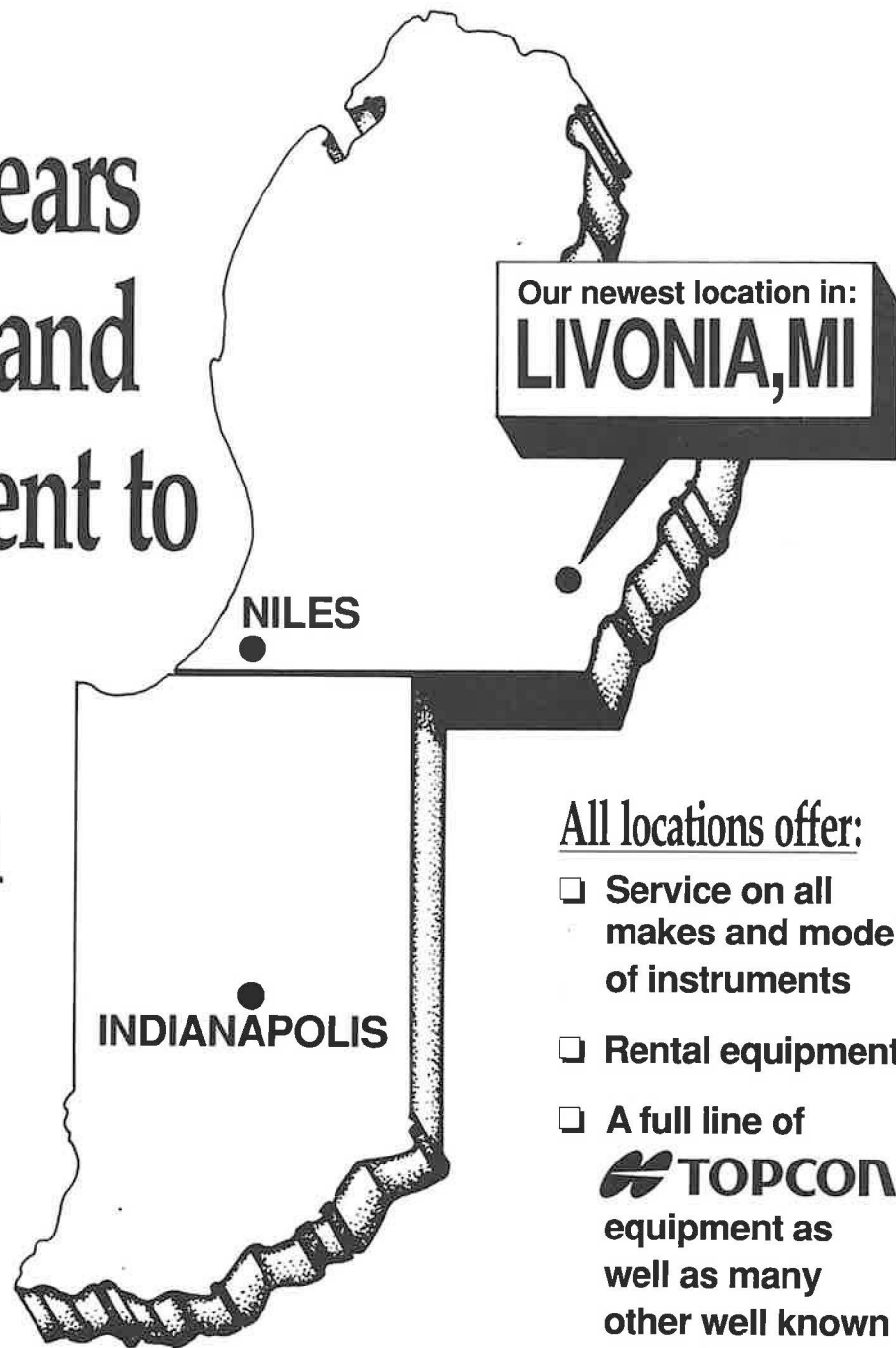
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Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to members, the general public and for the betterment of the surveying profession. No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

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PRESIDENT'S THOUGHTS

by Christian F. Marbach, PLS, Elkhart, IN

"EXTRA, EXTRA READ ALL ABOUT IT!!!"



Continuing education has almost arrived. It is so close that you can read an outline of the package in this publication. I challenge each and every one of you to read it, study it, analyze it, tear it up, and give a copy to a non-member. Hopefully, the chapter

presidents will also provide copies to their members.

This is the first chance the membership will have to see this document, in an attempt to avoid the usual "cop-out" that "We did not get a chance to be involved. The next few months are your chance to make a difference. By the time the annual convention rolls around at the end of January next year you should have much to say and be able to offer alternatives. You will be given a chance to say your piece at the convention. The program committee has set aside a time slot for a discussion on continuing education.

Many hours have been spent working on this project of continuing education. Even though we are restricted by what the enabling legislation created I think we have a good set of rules which will benefit the profession and the public.

What else might we do to benefit the profession....?

Personally, I think the image of the surveyor is a big problem. Image enhancement for the surveying profession is not a task to be left up to ISPLS. It is the continuing responsibility and obligation of each registered surveyor. When I see surveyors in public situations, such as planning commission meetings, wearing muddy boots, dirty clothes, 10 year old baseball hats, with projects files folded up in their back pocket, I cringe! I have also recently seen survey crew trucks leaving their office at the end of the day and driving a couple of blocks, then turning into the nearest liquor store/bar. The name of the business was on the side of the trucks and the trip from the office to the bar was along a major highway. Stand back and look at the scenario I just outlined.

How would you react if you were in court and your attorney came in looking like I described above? Would you have confidence in him? Would you respect him? How about your doctor, dentist, teacher, or accountant? The way a surveyor dresses, the appearance of his office, his manners on the telephone and in public, the conduct and appearance and attitude of his field personnel are all important elements in maintaining a favorable image. A popular television commercial said many times over and over that "Image is Everything". If surveyors would use the motto

"Image Is Half The Battle" then maybe we could begin to regain the prominence in the community that surveyors once had.

Does the following describe the way you think of yourself? The Professional Land Surveyor renders a highly technical and complex service. As a member of a professional team, the Surveyor prepares the foundation upon which the project is based. In case of controversy the Surveyor appears in Court as an expert witness when necessary. No one other than the Surveyor can assume responsibility for the correctness and accuracy of the work. As a Professional Land Surveyor in a rapidly changing environment he must follow minimum standards of practice and continue to grow with continuing education.

Respect is earned, not given.

Now it is time for me to get off my soap box and acknowledge that this is the last time you will have to hear my rhetoric from this page. January will be here before we know it and I will be passing the Gavel to Mr. E.R. Gray. I have had the privilege of working with E.R. on several occasions during my tenure on the ISPLS Board of Directors and he has always maintained a high standard of professionalism. I have no doubt he will lead the society in a manner we will all be proud of.

As in any business, the owner (president) can not do it all! Every employee is a valuable part of the puzzle and if one piece is missing the whole picture suffers. The same happens within ISPLS. Of the seventeen committees we had this year, some were extremely active and others were missing. Since I'm writing this in October, perhaps the missing committees will return before the end of the year. My job was relatively easy (except for the 160 miles @ 55 MPH, one way, to each meeting) due to a dedicated board of directors and to several committees who worked hard all year. Thank You! Finally, the membership as well as myself needs to thank the person who keeps all the puzzle pieces in the same box all year. Without the Executive Director to keep us glued together we would have fallen apart. Thanks Dianne!

The past year has been both hard work and fulfilling on a personal level. Thank you for allowing me to be your leader throughout the last year. I look forward to many more years of education and professional development through the services of ISPLS. Happy & Safe Holidays.

Franklin D. Roosevelt - I think there is only one quality worse than hardness of heart and that is softness of head.

**PLAN ON ATTENDING
ISPLS ANNUAL CONFERENCE
RADISSON HOTEL AT STAR PLAZA
MERRILLVILLE, INDIANA
JANUARY 18-20, 1995**

ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

July 9, 1994

The Board of Directors of the ISPLS held a meeting on July 9, 1994 at ISPLS headquarters.

The minutes and treasurer's report were reviewed and approved.

President Marbach made an adjustment to the agenda for the annual advisory review of Vincennes University curriculum. The report was presented by Art Haase, Vincennes University.

Chapters - The ISPLS Chapters have been requested to send in their ID numbers and chapter by-laws.

Education - At the June 10th workshop on "Rule 12", 80 signed up with 78 attending. The workshop co-sponsored by the Initial Point Chapter on "State Plane Coordinate System" is to be presented by Professor Stephen Johnson on August 5th, in New Albany, Indiana. The Education Committee reviewed the July 7, 1994, "Boundary Law in Indiana" workshop sponsored by the National Business Institute, Inc. with Gary Kent as one of the presenters, recommends that ISPLS grant 6 PDH to any member attending. The seminar was approved for 6 PDH.

NCEES Central Zone Meeting - A "thank you" letter for contributing to the zone meeting was received from the Board of Registration for Land Surveyors.

Membership - The following membership applications were presented and approved: Member - Stephen Servies, John DeMais; Junior - Dean Coon, Brian Rayl, Edward Sweetland, Dennis Helms, Michael Falk; Student - Steven Amos, Matthew Meunier; Life - William Land; Associate - William Finke; Firm - Bonar & Associates, Inc., Major Land Surveying, Inc.

Convention - Doug Herendeen reviewed the final numbers for the 1994 convention with Kentucky and Bob Bigelow reported on the 1995 convention. Doug Herendeen also reported on the 1996 convention to be held in Indianapolis.

Ethics - A written ethics reported was presented and reviewed by chairman Ross Holloway.

Indiana State Board of Registration - Chris Marbach discussed the two meetings that have been held with the Indiana State Board of Registration regarding Continuing Education. Those attending those meeting have been Chris Marbach, Rick Miller, E.R. Gray, Tony Gregory, Wes Day and Diana Gardner of the Licencing Agency office.

August 13, 1994

The Board of Directors of the ISPLS held a meeting August 13, 1994 at ISPLS headquarters.

The minutes and treasurer's report were reviewed and approved.

Education - At the "State Plane Coordinate System" workshop, August 5th, there were 51 signed up. This course was approved by Kentucky for 6 hours.

Finance - The 1993/1994 year end review was completed by the accountant.

Chapters - The Chapters committee chairman, David

Blankenkoper reported on a meeting with ISPLS accountant, Jeff Hatfield, ISPLS attorney and By-Laws chairman, Ron Hansell and Executive Director, Dianne Bennett on August 1st to discuss the local chapters. After lengthy discussion the board of directors asked that the Chapters and By-Laws committees investigate, study, and recommend to the board possible by-law changes.

Ethics - Ross Holloway, chair, presented and reviewed "Procedures on Complaints".

Membership - The following membership applications were presented and approved: Member - Warren Sudhoff, Donald Cochran; Junior - John Dunbar, Perry Jones, Craig Cultice, Carol Morman, Denise Anderson; Associates - Russell Dillon; Firm - Beam, Longest & Neff, Inc.

Indiana State Board of Registration - Chris Marbach reviewed the last Continuing Education committee meeting.

GIS/LIS - Chirs Marbach reported on the "HARN" meeting at the INDOT. There will be a minimum of 92 points in Indiana (one per county). Additional points will also be done.

September 17, 1994

The minutes and treasurer's report were reviewed and approved.

Convention - Rich Hudson reported on the 1995 convention in Merrillville and Doug Herendeen reported on the 1996 convention in Indianapolis.

Education - There will be a fourth workshop on "Rule 12" November 11th, at the Indianapolis Holiday Inn Airport.

Government Affairs - Tom Boofter reported on the committee meeting held at headquarters on August 30th.

Membership - The following membership applications were presented and approved: Member - James Russell; Richard Beaman; Junior - Jonathan Isaacs, Michael Huter, Phillip Van Duyn, Jr., Mike Gibson, Paul Graham; Associate - David Cox; Student - Stephen Roeschlein.

Nominations & Elections - The committee presented the name Richard L. Hudson for President-Elect.

Scholarship - A quarterly report of the Purdue - ISPLS John G. McEntyre scholarship fund was presented for board review.

Indiana State Board of Registration - Chirs Marbach reported on the September 14th meeting on continuing education. There is one more meeting to edit the outline draft requirements, then it will be presented to the Registration Board in October. It will also be written into the Hoosier Surveyor, and discussed at the annual convention.

NSPS Governor - E. R. Gray stated that he would be attending the meeting at the ACSM meeting in October in Phoenix, Arizona.

GIS/LIS - Chirs Marbach reported on the HARN committee. It was noted that the current issue of PROFESSIONAL SURVEYOR featured the Georgia HARN efforts.

Surveying Technicians - E.R. Gray and Art Haase have been

...continued Page 4

ISPLS MINUTES

continued from Page 3

discussing the testing of Vincennes University graduates to measure their achievements, possibly similar to the "SIT". This would be the Level One Survey Technician Test as offered by ACSM. After board discussion a motion was made and approved to direct NSPS Governor E.R. Gray to bring up the subject of survey testing of Vincennes University survey technicians at the NSPS Board of Governors meeting at the ACSM convention in Phoenix.

Requests for a copy of the Registration Act for Land Surveyors, which includes Rule 12 may be obtained from:

Indiana Professional Licensing Agency
Indiana Government Center South
302 W. Washington, Room E034
Indianapolis, Indiana 46204

BOARD OF REGISTRATION HAPPENINGS

It has recently been brought to the attention of the Indiana State Board of Registration for Land Surveyors that there is a question on the correct use of the registration number. For instance, prior to 1986 it was a common practice for a registered land surveyor to use the last four digits of their registration number with an "S" as the pre-fix, for example S0000. Registrants after 1986 may be using, for example LS 2940000. The question that has been raised is which is the proper or preferred use. After some deliberation at their board meeting on October 14, 1994, the board decided that either would still be acceptable, but for future use of either number to add the registrant's or company's name or initials. This will enable the Licensing Agency to access the appropriate registrant to the correct land surveyors registration number. If you have further questions regarding this matter please contact Julie Werner at (317) 232-7208.

OUTLINE OF THE PROPOSED CONTINUING EDUCATION PACKAGE

The Indiana State Board of Registration for Land Surveyors is currently studying the matter of possible continuing education requirements. A joint committee with ISPLS has studied the matter and the following outline is their current thinking on the subject they solicit comments from the ISPLS membership. Bring your comments to the 1995 Annual Convention.

- 1
- 2 ~~Cross-out = Deletion~~ 1
- 3 **Bold = New text**
- 4 Continuing education requirements - **OUTLINE**
- 5
- 6
- 7 (a) As a prerequisite to renewal of a land surveyor certificate of registration, the
- 8 certificate holder shall satisfactorily complete ~~twenty four (24)~~ **thirty (30)**
- 9 ~~continuing education hours of continuing education~~ **as set forth in this rule from a**
- 10 **land surveyor continuing education course provider approved by the board. New**
- 11 **registrants will not be required to comply with these continuing education**
- 12 **requirements at the first renewal of their license. Reactivated registrants will not**
- 13 **be required to comply with these continuing education requirements at the first**
- 14 **renewal of their license following reactivation. The following criteria will apply to**
- 15 **determine the number of hours:**
- 16
- 17 (1) ~~An A continuing education classroom hour (CEH) of instruction is~~
- 18 ~~defined as a minimum of fifty (50) minutes of classroom contact for each~~
- 19 ~~continuing education hour given sixty (60) minute segment. The conversion of other~~
- 20 ~~units of credit is as follows:~~
- 21
- 22 (A). 1 college semester hour 45 CEH
- 23 (B). 1 college quarter hour 30 CEH
- 24 (C). 1 continuing education unit 10 CEH
- 25
- 26 (2) Credit toward the continuing education hour requirement may be
- 27 granted only where the length of the educational offering is at least three (3)
- 28 ~~hours two (2) hours.~~
- 29 (3) Credit for the ~~classroom~~ continuing education hours ~~hour~~ may be
- 30 obtained from the following for the successful completion of classes ~~from the~~
- 31 ~~following~~ on the topics or parts thereof listed in subdivision four (4) herein:
- 32
- 33 (A) Colleges or universities.
- 34 (B) Community or junior colleges.
- 35 (C) Land surveying related organizations.
- 36 (D) State or federal agencies or commissions.
- 37 (E) Proprietary schools.
- 38 ~~(F) Other providers approved by the board.~~
- 39 (F) **Other sponsors approved by the board.**
- 40 (G) **Other providers not pre-approved by the board. The registrant**
- 41 **must understand that the credits from such non-approved providers may not be**
- 42 **approved later if their license renewal is audited**
- 43
- 44 (4) Credit may be granted for educational offerings ~~which cover~~ directly
- 45 ~~pertaining to the practice of land surveying~~ which are consistent with the
- 46 following continuing education topics requirements:
- 47
- 48 (A) College level mathematics.
- 49 (B) College level physical sciences.
- 50 (C) ~~Applicable federal~~ **Federal and state laws, rules, regulations**
- 51 **and practices pertaining to the establishment or re-establishment, and legal**
- 52 **descriptions of land boundaries in Indiana.**
- 53 (D) **Preparation and analysis of legal descriptions.**
- 54 (E) ~~(D)~~ **The design, planning, and platting of subdivisions.**

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1 (F) The ethical, economic, and legal principles that pertain to the
2 practice of land surveying.

3 (G) Preparation of plans and profiles for roads, storm drainage,
4 and sanitary sewer extensions for subdivisions.

5 (H) Distance and direction measurements including statistical
6 analysis.

7 (I) Topographic and hydrographic surveying.

8 (J) Photogrammetry.

9 (K) Surveying applications, such as GIS, LIS, GPS, etc.

10 (L) Advanced surveying procedures and equipment.

11 (M) Computer applications.

12 (N) Communication, such as public speaking, technical writing, etc.

13 (O) Board mandated courses.

14 ****[define courses!!!!]****

15
16 (5)(A) Actual instruction time for the as lecturer, instructor, or discussion
17 leader of a class may be included the first time only. There will be no preparation
18 time as a lecturer, instructor, or discussion leader granted for lecturers, instructors,
19 or discussion leaders of a repeated course.

20 (B) Three (3) hours of preparation time shall be granted to the
21 preparer of a continuing education course per one (1) hour of continuing education
22 credit allowed for the course. This credit may be claimed only once. for a
23 maximum of thirty six (36) hours ~~There will be no preparation time as a lecturer,
24 instructor, or discussion leader granted for lecturers, instructors, or discussion
25 leaders of a repeated course.~~

26 (C) At the discretion of the board, (1) hour of continuing
27 education credit may also be given for each hour of research and authorship of
28 books or papers specifically related to the practice of land surveying for a
29 maximum of thirty six (36) hours.

30
31 (6)(A) A certificate holder is not entitled to continuing education credit for
32 the following:

33
34 (1) Any education obtained for required prelicensure education
35 under 865 IAC 1-2.

36 (2) Self-study courses.

37 (3) Meetings conducted during eating periods.

38 (4) Motivational classes or seminars.

39 (5) Business meetings -- election of directors, officers, treasurer's
40 reports, committee reports, etc.

41 (6) Committee work with local, state, and national professional
42 organizations.

43 (7) Firm staff meetings which are oriented toward administrative
44 housekeeping matters.

45 (8) ~~duplicate~~ duplicate courses duplicated less than four (4) years prior to
46 renewal, other than those mandated by the board.

47
48 (9) ~~Incomplete or partial course or seminar completion~~ Courses or
49 seminars not completed. No partial credit may be given.

50 (10) Courses that are deemed inappropriate by the Board because
51 of Indiana law or other circumstances.

52 (11) Courses completed prior to [insert effective date].

53 (12) Courses completed more than four (4) years prior to renewal
54 for which credits are claimed.

1 Application for sponsor of continuing education courses

2 (a) Applicants for sponsor approval must submit the following information
3 on a form provided by the board:

4
5 (1) Name, address, telephone number and facsimile (FAX) number (if
6 any) of the sponsor:

7 (2) If the ownership of the sponsor is a partnership, the names and
8 addresses of the partners.

9 (3) If the ownership of the sponsor is a corporation, the names and
10 addresses of the officers and directors.

11 (4) If the ownership of the sponsor is a limited liability company, the
12 names and addresses of the members and managers.

13 (5) A course content outline describing the each subject subjects to be
14 offered during the approval period, a clearly expressed objective, and including
15 the number of continuing education hours proposed to be granted for each course.

16 (6) A statement that the sponsor shall provide the licensee or certificate
17 holder who successfully completes an approved course, a certificate of course
18 completion indicating the following:

19 (A) Name, and address, and signature of the sponsor.

20 (B) Name, address, and license number of the attendee.

21 (C) Title of the course.

22 (D) Course location.

23 (E) Date of the course.

24 (F) Number of continuing education credit hours completed.

25 (G) Name, address and signature of the instructor.

26
27 (8) A statement that the sponsor shall conduct a student course
28 evaluation and that it shall be provided to the board upon request.

29 (9) A statement that the sponsor shall submit to the board not more than
30 thirty (30) days after a course is presented:

31 (A) An alphabetical list of all land surveyors who attend the
32 course.

33 (B) A certified statement of the hours to be credited to each land
34 surveyor.

35 (C) A certified statement signed by the instructor that those
36 participants who received a certificate of course completion were in attendance for
37 the entire course.

38 (D) A certified statement that the sponsor understands that the
39 Board reserves the right to send a representative to evaluate a course and related
40 aspects, such as the facilities, course outlines, handouts, presenter and presentation
41 at no cost to the Board. When a representative is designated, his or her name will
42 be submitted to the sponsor prior to the date of the course. The Board
43 representative shall receive credit for the course if they complete the course work.

44 (E) A certified statement that the sponsor understands that the
45 course presentations shall contain an appropriate mix of lecture, applications,
46 problems, and some interaction between the instructor and the participants.

47 (10) Application fee in the amount of fifty (50) dollars.

48
49
50
51
52
53
54 Sponsor renewal

1 A sponsor of a continuing education course shall submit by June 1 of each
2 even- numbered year, the following information to request approval renewal:
3

- 4 (1) A letter requesting such renewal.
- 5 (2) A renewal fee of fifty dollars (\$50).
- 6 (3) Updated information as required by section two (2) herein.

7
8 Facilities

- 10 (a) Courses shall be taught in a facility with adequate space, seating,
11 equipment, and instructional material to accommodate the number of students
12 enrolled.
- 13 (b) The premises, equipment, and facilities shall comply with all local,
14 city, county, state, and federal regulations, such as fire, building, sanitation codes,
15 and handicap accessibility.

16
17
18 Instructor; qualifications

- 20 (a) Continuing education course sponsors shall affirm, upon application
21 for continuing education course sponsor approval, that the course instructors shall
22 possess special skills or knowledge of the subject being presented, speak English
23 clearly and fluently, and at least one (1) of the following minimum qualifications:
24
- 25 (1) An instructor of land surveying courses who is or has been
26 engaged in the practice of teaching at an accredited institution of higher education
27 in the United States , or a comparable degree from a school of a foreign country.
- 28 (2) Possession of a bachelor's degree from a college or university
29 in the United States in a related field to that in which the person is to teach, or a
30 comparable degree from a school of a foreign country.
- 31 (3) Five (5) years full-time professional experience in a
32 profession, trade, or technical occupation in the land surveying field.
- 33 (b) An instructor whose professional license or certification has been
34 limited, suspended, or revoked in any jurisdiction may not instruct in approved
35 programs while the disciplinary action is in effect.
- 36 (c) An instructor whose professional license or certification has been
37 suspended, or revoked in any jurisdiction may not instruct in approved programs.
38 while the disciplinary action is in effect.
- 39 (d)(e) Any substitute instructor shall meet the qualifications of this section.
- 40 (e) The board shall be the sole judge of the equivalence of any foreign
41 degree.

42
43
44 Advertising

- 46 (a) No approved land surveyor continuing education course sponsor
47 conducting a course of study shall advertise or make any reference in its
48 advertising, promotional material, brochures, and/or registration forms that the
49 land surveyor course provider is endorsed, recommended, or accredited by or
50 affiliated with the board.
- 51 (b) An approved land surveyor continuing education course sponsor may
52 indicate that the course provider has been approved by the board, but may not
53 indicate that any course, review course, or supplemental course of instruction has

1 the approval of the board. However, the sponsor may indicate the credit to be given
2 for the course or seminar.
3

4
5
6 Course Records

- 7 (a) An approved land surveyor continuing education course provider must
8 retain records of students who complete the course for a minimum of six (6) years.
9 The records must include:
10
- 11 (1) Attendance records;
- 12 (2) Examination score records (if applicable); and
- 13 (3) Duplicate copies of completion certificates.
- 14 (b) Course evaluations conducted by the sponsor must be retained
15 for a period of not less than three (3) years.

16
17
18 License activation

- 20 (a) To reactivate an inactive license, a licensee must apply to the board
21 for reactivation on the form supplied by the Board and:
22
- 23 (1) pay any reactivation fees due, and;
- 24 (2) pass part IIB of the next regularly scheduled examination or; show
25 proof of having obtained, within the three (3) years preceding the filing of the
26 reactivation application, twelve (12) CEH's of continuing education, including any
27 board mandated courses, for each year, or portion thereof, that the license has
28 been inactive.
- 29 ~~and show proof of having obtained twelve (12) classroom hours of qualifying~~
30 ~~continuing education for each year, or portion thereof, that the licensee has been~~
31 ~~inactive, within the three (3) years preceding the filing of the application.~~
- 32 (b) ~~For licensees who have been inactive for a period of ten (10) years~~
33 ~~or less, inclusive, no~~ No more than thirty-six (36) hours of continuing education
34 shall be required to activate the license.

35
36 Renewal

- 38 (a) The board has adopted the following to clarify and implement the
39 payment of renewal fees on a biennial basis:
40
- 41 (1) For purposes of biennial renewal, the postmark on the envelope
42 containing the remittance will be considered the date of payment.
- 43 (2) When the renewal fee and any required ~~(including the~~ continuing
44 education fee) is not paid on time:
45
- 46 (A) The certificate of registration becomes invalid;
- 47 (B) The individual cannot lawfully practice or offer to practice land
48 surveying; and
- 49 (C) The individual's name will be deleted from future rosters; until
50 the renewal fee and required delinquent fee is paid.
- 51 (b) When renewing a license, a licensee may apply for and receive an
52 inactive license. Such an individual is exempt from the continuing education
53 requirements stated in **this rule** The holder of an inactive license may not
practice land surveying, but is required to pay the regular biennial renewal fee.

1 (c) An applicant for license renewal shall certify on the application that
2 the applicant has complied with the continuing education requirements under **this**
3 **rule**.

4 (d) The board may request verification of any information submitted by
5 the applicant and may request the applicant to submit evidence supporting the
6 course credit claimed.

7 (e) It is the responsibility of the licensee to retain documentation which
8 supports the courses taken by the licensee for five (5) years after the end of the
9 biennial period for which the continuing education is claimed. This
10 documentation shall include a course outline and all information cited in lines
11

12 (f) The board may request applicants to ~~prove~~ provide information as
13 ~~provided~~ required in subsection (e) in order to verify continuing education hours
14 claimed in the renewal application. Failure to do so shall subject a licensee to the
15 sanctions provided for under IC 25-1-11.

16 (g) The Board has final authority with respect to approval of courses,
17 credits, CEH value for courses, and other methods of earning credits. However, the
18 Board may establish a review committee of volunteer land surveyors to provide
19 recommendations to the Board concerning courses and appropriate credits.

20 Fees charged by board

21 The board shall charge and collect the following fees which shall all be
22 nonrefundable and nontransferable:

23 (1) For review of an application for examination for license reactivation
24 or registration as a land surveyor other than a comity, a fee of ten dollars (\$10).

25 (2) For the examination or reexamination of any applicant for any
26 purpose under the act, a fee in the amount of sixty dollars (\$60).

27 (3) For the processing and review of qualifications for registration as a
28 land surveyor by comity or for license reactivation, a fee of seventy-five dollars
29 (\$75).

30 (4) For issuance of the original certificate to practice as a registered
31 land surveyor following passage of the examination or approval for registration on
32 the basis of comity:

33 (A) when the certificate is dated between August 1 of an odd-
34 numbered year and July 31 of the following even-numbered year, inclusive, fifty
35 dollars (\$50); or

36 (B) when the certificate is dated between August 1 of an even-
37 numbered year and July 31 of the following odd-numbered year, inclusive, one
38 hundred dollars (\$100).

39 (5) For biennial renewal of the certificate to practice as a registered
40 land surveyor, one hundred dollars (\$100) payable prior to July 31 of each even-
41 numbered year.

42 (6) For renewal of an expired certificate to practice as a registered land
43 surveyor, ten dollars (\$10) for each year, commencing August 1 of such year, or
44 part of a year, thereafter, of delinquency, plus all unpaid renewal fees for the
45 four (4) years delinquency. A certificate may not be renewed after four (4) years
46 of delinquency.

47 (7) For a duplicate or replacement certificate to practice as a registered
48 land surveyor, twenty-five dollars (\$25).

1 (8) For a replacement pocket card to practice as a registered land
2 surveyor, ten dollars (\$10).

3 (9) For examination and enrollment as a land-surveyor-in-training, a fee
4 in the amount of twenty-five dollars (\$25).

5 (10) The fee shall be seventy-five dollars (\$75) for the proctoring of
6 examinations taken in this state for purposes of registration in other states.--The
7 ~~continuing-education-fee, which shall be paid when a land-surveyor-certificate-is~~
8 ~~renewed, is forty-dollars-(\$40).~~

9 (11) The continuing education fee, which shall be paid when a land
10 surveyor certificate is renewed, is forty eight dollars (\$48).

11 (12) The continuing education fee, which shall be paid when a land
12 surveyor certificate is reactivated, is two (2) dollars for each continuing education
13 hour required for the reactivation with a minimum of forty eight dollars (\$48) and
14 a maximum of seventy two (\$72).

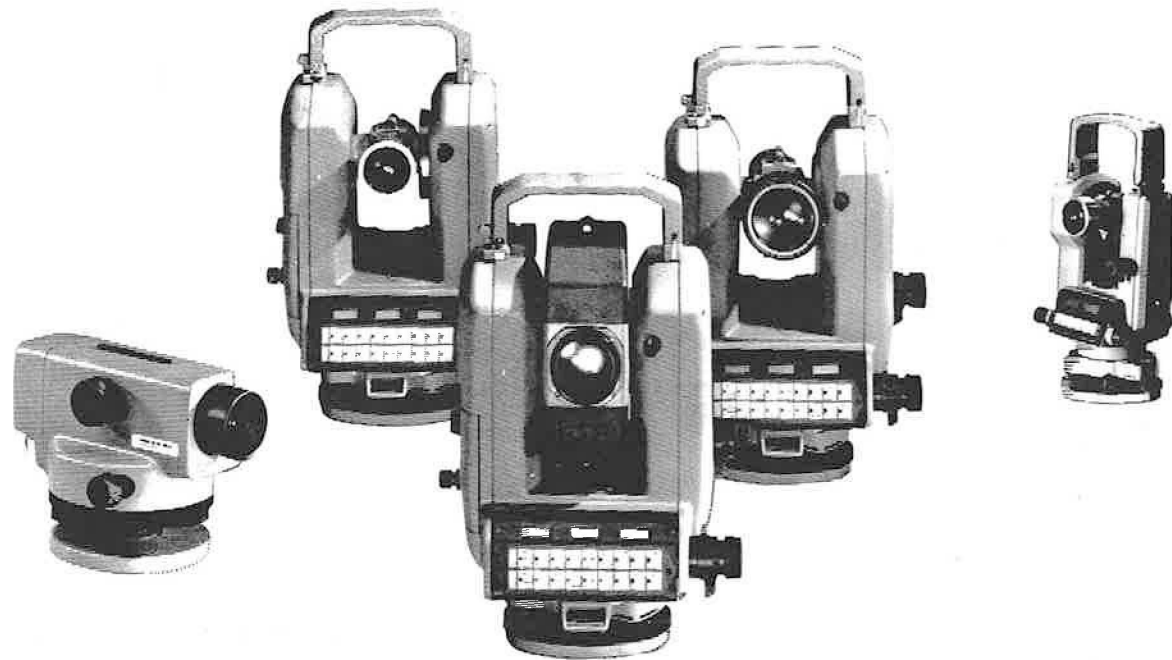
Questions for which we have not yet fully developed answers include:

1. Credit for classes or seminars taken from non-approved sponsors. see line #40, page 1
2. Defining high quality educational standards for the continuing education program - for reference see paper previously passed out entitle "From Behind The Podium" by Ben Buckner. see line #26, page 1
see line #14, page 3
see line #38, page 3
see line #41, page 3
see line #47, page 3
3. Carry-over credits. see line #53, page 2
4. Evaluation of outlines, handouts presenter qualifications, and overall quality of presentations given by approved sponsors. see line #41, page 3
5. Board mandated courses. see line #13, page 2
6. Hardship waiver
7. Significant changes.
8. Reciprocity [see Ohio & Tenn.]
9. Advisory committee. see line #17, page 6
10. Renewal audits.
11. Sponsor sanctions.
12. Dual registrants.
13. Exemptions.
14. Non-compliance.



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A SUMMARY OF THE 1994 ISPLS RULE 12 SEMINARS

by Gary Kent, PLS, Zionsville, Indiana

The most recent series of ISPLS seminars on Rule 12 were, by most accounts, very well received. All sessions were filled up in advance and a fourth was added (in Indianapolis on November 11th).

The primary emphasis at each session was three-fold. First, to discuss and explain what I believe to be the fundamental elements of the standards. Secondly, to try to clarify the main areas of confusion and concern with Rule 12. And thirdly, to get good examples of surveys applying the Rules out into the hands of practitioners.

Evaluation sheets filled out at each session generally indicated that the goals were met and that the attendees were very satisfied with the information presented.

At the first seminar in Plymouth on April 15th, considerable time was spent discussing the Registration Board's interpretation of Rule 12. It was helpful that there were two members of the Registration Board present at that session who were able to explain how the complaint process works and what involvement and input the Board does and does not have at certain points.

During the review of the panel's surveys, members of the Northwest Chapter of ISPLS indicated that the Chapter is developing a checklist for use in reviewing surveys for compliance with the

standards.

At the second session in Indianapolis on June 10th, there was a substantial amount of audience participation during the afternoon session when surveys from the panel were reviewed and discussed. Perhaps the most significant point was that we found that it is important to carefully review all surveys for compliance with the Rule. Once again the issue of developing a checklist was discussed.

At the latest session, at Brown County on September 30th, there was relatively little discussion on the example surveys presented by the panel. It was difficult to ascertain whether this was because those present were generally already in compliance with the standards and they weren't seeing much new, or because they were perhaps overwhelmed with the materials.

Hopefully, our opinion that the sessions have generally met the goals is correct. In any case, we are always looking for new ways to bring Rule 12 to the Surveying community in a beneficial way and anyone with ideas along those lines should contact the ISPLS education committee. Several persons have suggested a new session specifically on Route Surveys now that they have been a part of the Rule for several years.

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Vincennes University senior David R. Boblitt, II (left), Anderson, is the recipient of the \$300 scholarship from Friends of Surveyors. Congratulating Boblitt is Art Haase, professor and chair of the V.U. Surveying Technology Department. David's thank you follows:

I would like to thank the Indiana Society of Professional Land Surveyors for selecting me for the "Friends of Surveying" scholarship at Vincennes University. The money is greatly appreciated and I assure you it will not go to waste.

*Thank you,
David R. Boblitt, II
Anderson, Indiana*

Vincennes University senior, Jeff Ridener, (left), St. Croix, is the recipient of the \$1,000 Peggy Archer Memorial Scholarship Award, presented by the Indiana Society of Professional Land Surveyors. Congratulating Ridener is Art Haase, professor and chair of V.U. Surveying Technology Department. Jeff's thank you follows:

I would like to thank ISPLS for the Peggy Archer Memorial Endowment. It was an honor to be presented such an award. The endowment will allow me to continue my education at Vincennes University in Surveying.

*Sincerely,
Jeff Ridener
St. Croix, Indiana*



Vincennes University senior Kurt Vonderheide, (left), Vincennes, is the recipient of a \$350 scholarship from the Southwest Indiana Chapter of the Indiana Society of Professional Land Surveyors. Vonderheide is also the recipient of the \$300 scholarship presented by the Central Indiana Chapter of ISPLS. Congratulating Vonderheide is Art Haase, professor and chair of V.U. Surveying Technology Department. Kurt's thank you follows:

I would like to thank the Indiana Society of Professional Land Surveyors, specifically the Central and Southwest chapters, for selecting me as a scholarship recipient at Vincennes University. The money is appreciated and will be used to further my education in the surveying profession.

*Thank you,
Kurt Vonderheide
Vincennes, Indiana*



ACCREDITATION OF SURVEYING AND MAPPING SCIENCE PROGRAM AT ETSU

by Dr. Ben Buckner, LS, PE, CP, Professor and Surveying Program Coordinator

The Bachelor of Science in Engineering Technology (Surveying and Mapping Science major option) at East Tennessee State University was accredited this year by the Accreditation Board for Engineering and Technology (ABET), Engineering-Related Accreditation Commission (RAC). The RAC of ABET is the commission formed for accrediting programs which serve engineering-related professions such as surveying, whether the programs are within engineering colleges or not. The accreditation standards are on a par with the engineering accreditation commission (EAC), but are more suitable for the unique and separate profession of surveying. The program at ETSU contains essentially the same rigor as an engineering based program, as regards mathematics, physics, and the analytical depth of the curriculum. The program contains over 50 semester hours of surveying and mapping sciences and closely related support courses.

Although the program is still administered through the College of Applied Science and Technology, the degree title has now been changed to Bachelor of Science in Surveying and Mapping Science, rather than Engineering Technology. Also, as a result of the accreditation visit, the course titles will be changed to SURM (surveying and mapping science), which gives the program more distinct identity.

The program, in its present form, has been in existence since March 1987. It was developed by Dr. Ben Buckner, licensed surveyor, engineer, and planner, who came to ETSU from Ohio State University in 1985, where he had developed a similar program, and Dr. Marian Clark, who has been on the surveying faculty at ETSU since 1986. The program started with about 8 students and there has been a steady increase of about 5 to 7 students each year. There have been approximately 18 graduates of this specialized program, with the number growing each year.

The program is only one of two RAC accredited programs in the southeastern states, the other one being at the University of Florida in Gainesville, which has been in existence since 1974. There are only about a dozen such professional surveying programs in the United States. Currently students from Alabama, Kentucky, South Carolina, Maryland, and Mississippi are enrolled, or have been enrolled in the program, paying in-state tuition under the common market agreements. Several students attended from Virginia under this arrangement, before the common market was eliminated for Virginia residents attending ETSU. The program is already approved for the educational requirement for surveying licensure in several states in the southeast, and it is expected that accreditation will give the program the status to be approved by licensing boards anywhere in the United States.

As most surveyors and licensing boards are beginning to recognize, quality education cannot be developed in surveying unless programs are regional in nature, serving several states. If

REPORT ON RECENT ACTIVITIES OF THE REGISTRATION BOARD

by Gary Kent, PLS,
ISPLS Liaison with the Indiana State Board
of Registration

The Indiana State Board of Registration for Professional Land Surveyors held hearings in July and August regarding a complaint of substandard work against a registered Land Surveyor in north central Indiana.

The Board suspended the Surveyor's license at an emergency hearing in July and followed with a full hearing in August at which time the Surveyor's license was revoked.

The allegations, which the Registration Board clearly agreed with, dealt with a severe lack of understanding of the basic principles of land surveying and virtually no compliance with the Indiana Survey Standards of Rule 12.

Having attended the August hearing, I agree that this is a case of a surveyor having virtually no understanding of basic land surveying -- not to mention a complete lack of knowledge of Rule 12. The Board clearly performed a public service by revoking this particular license.

This is the fourth license revocation in the last three years with an additional two licenses having been temporarily suspended.

Over the past few months, 13 Registered Surveyors have negotiated settlements with the Attorney General's Office and the Registration Board in response to complaints of substandard work against those surveyors.

Other cases are pending in the office of Deputy Attorney General David McGruder.

In addition to enforcement issues, a Registration Board committee continues to study the issues of continuing education. The committee hopes to have a rough draft ready for the Board's consideration by its September 8th meeting.

states having only a few million population attempt to develop individual programs, the enrollments will not reach a level where money and other resources, such as more than one faculty member, can be placed into them. If ETSU's newly accredited program is supported by most states in the southeast, it has the potential to grow to possibly 150 students or more, which would warrant having perhaps five faculty, a graduate program, and modern laboratories and instrumentation. With time, and support from within and outside the university, this unique program should continue to grow in status and in enrollment. It is hoped and expected that it will become accepted as a regional program serving the residents of several states.

Anyone interested in this program should write or call Dr. Ben Buckner, Surveying Program Coordinator, P.O. Box 70522, ETSU, Johnson City, TN 37604; phone 615-929-5691.

SURVEYORS HISTORICAL SOCIETY NEWS

GREENVILLE-GROUSELAND TREATIES

Editor's Note: As part of a recent project Roger Woodfill had occasion to identify the intersecting point of the Greenville and Grouseland Treaty lines. The significance of this point was brought to the attention of the Brookville Historical Society. That organization then asked Roger's help in preparing an application to erect an Indiana Historical Marker commemorating the work of our forefathers. The following article is the research paper written by Roger as part of the application process.

Roger will be working with the Franklin County Surveyor in recovering and monumenting the actual intersection point. We will be following this process in future issues of The Hoosier Surveyor.

The Northwest Territory, officially known as "the Territory Northwest of the Ohio River", was established on July 13, 1787; and it included about 250,000 square miles bounded by the Ohio River, the Mississippi River and the Great Lakes. According to the Ordinance of 1787, territorial government would be composed of a governor, three judges and a secretary. When population reached 5000 male voters, the territory could elect an assembly to work with the appointed governor. When the population reached 60,000, the area could become a state.

Initially the populace of the territory was located mostly along the Ohio River, and there were only five counties in the entire 250,000 square miles. After Gen. Anthony Wayne's victory at Fallen Timbers in August 1794 the number of settlers moving north and west rapidly increased, and representatives of the territorial government made various treaties with the area's native inhabitants in order to provide safety for the settlers. Simultaneously, land surveyors began laying the land off into mile squares, commonly called "sections", each containing approximately 640 acres. After being surveyed settlers could purchase clear land title from the United States Government by reference to the square mile grid. This orderly process not only raised cash for the fledgling United States of America, but it provided security for private land ownership. The square-mile pattern of land division is easily recognizable to the air travelers today, but we should remember that it is unique to the United States settled after 1787.

In August 1795 a treaty was made at Fort Recovery, Ohio that attempted to define the limits of white men's settlement claims in the Northwest Territory. The Indians conceded the "Clark's Grants" (Illinois tracts) on the north side of the Ohio River (near the falls of the river), but they did not entirely recognize the boundaries to the Vincennes tract (because it had been established in a pact between white men only). The French traders had made agreements with some of the Indian tribes, but not all the tribes conceded all parts of the Vincennes tract. There was an agreement reached as to the general westward limit of the white man settlement.

That limit was to be a new line commencing at the mouth of the Kentucky River (at present day Carrolton, Kentucky across the

Ohio River from present-day Lamb, Indiana) and extending northeasterly to Fort Recovery. This line is commonly called the "Greenville Treaty Line", and it was run in 1798 by Israel Ludlow. The land between it and the Indiana-Ohio stateline is called the "Gore". The "Gore" was "sectionalized" using the First Principal Meridian for control. Nearly all the other lands in Indiana were surveyed using the Second Principal Meridian as a basis. The Greenville Treaty Line still serves as the line between Dearborn and Ripley Counties as well as thousands of private ownership lines.

On March 1, 1803 the Northwest Territory ceased to exist with the admission of Ohio as a state. The western boundary of Ohio became a line running north from the mouth of the Great Miami River known as the First Principal Meridian. Consequently, the "Gore" area became part of the Indiana Territory. William Henry Harrison had been appointed Secretary of the Northwest Territory in 1798 and Governor of the Indiana Territory in May 1800. Being governor it became his responsibility to continue negotiating treaties for settlement in the Indiana Territory. The Treaty at Fort Wayne, June 1803, went a long way toward clearing title around the Vincennes Tract. The treaty at Vincennes, August 1804, opened up the area south of the Vincennes Tract and easterly along the old Buffalo Trace to the Clark Grants.

Harrison's third major treaty is dated August 21, 1805; and it is known as the Treaty at Grouseland, no doubt named after Harrison's home near Vincennes. The north line of this treaty was to extend northeasterly from "Freeman's Corner" (the northeast corner of the Vincennes Tract) to a point on the Greenville Treaty Line fifty miles north of the Ohio River.

Surveying this line through uncharted Indiana forest land provides an interesting story. Arthur Henri, a United States Deputy Surveyor, was given the assignment. In July 1806 he started running a line N 65°00'00" E from Freeman's Corner toward present day Brookville, Indiana. Eighty miles and 38 chains (2508 feet) later, he intersected the Greenville Treaty Line; but he had fallen only about thirty-five miles north of the Ohio River. He moved up the line to the fifty mile post and started back. Returning August 9, 1806; after surveying an additional 89 miles of line; he crossed a Vincennes tract line. Then moving to Freeman Corner, he started back toward Brookville at N 57°00'00" E correcting his second line to the true treaty line, and referencing his mile points. Henri's field notes show that he ceased witnessing his new points at mile number sixty-eight. This indicates to me that he probably intersected his second line near there. Henri also lists the deviation of his magnetic compass from true north at three points along the line. Therefore I would not be surprised if a deflection exists in the Grouseland Treaty Line between sixty and seventy miles from its west end. The Grouseland Treaty Line still serves as a county line between Ripley and Decatur Counties as well as a boundary for numerous private holdings.

...Continued Page 1

Greenville-Grouseland

BIBLIOGRAPHY

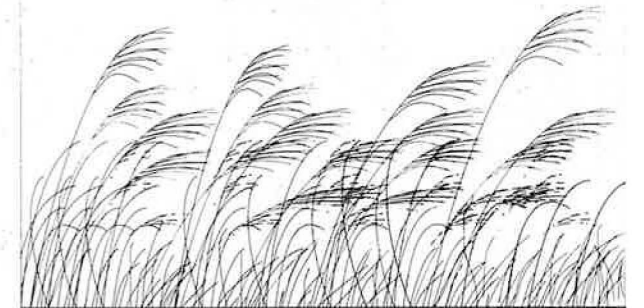
1. History of Franklin County; Reifel, August J.; (1915) Chap III
 2. Early Indiana Trails and Surveys; Wilson, George R; pg. 61 and 76
 3. "First Public Land Surveys in Indiana; Freeman Lines", Article from Indiana Magazine of History Vol. XII (1916) by Wilson, George R.; pg. 1-33
 4. "Settlement of the Whitewater Valley 1790-1810" Article from Indiana Magazine of History Vol. XIII (1947) by Lawlis, Chelsea L.; pg. 23-40
 5. North Boundary of Grouseland Purchase (Surveyors Field Notes) by Henri, Arthur; copies from Archives in basement of State Library, Indianapolis, Indiana.
 6. Franklin County Atlas; Beers, J.H. & Company (1882) Pg. 5 & Pg. 32
- Maps are generally Public Domain
1. Reduction of USGS 7.5 minute quadrangle map "Brookville" Indiana
 2. "Indiana Land Cessions in Indiana" from above referenced Wilson, George R. article and book
 3. "Point to be marked" adopted from Illustrated Historical Atlas of the State of Indiana; Publ., 1875 by Baskin, Forster Co.; Reprinted by Indiana Historical Society 1968

NEW REGISTERED LAND SURVEYORS IN INDIANA

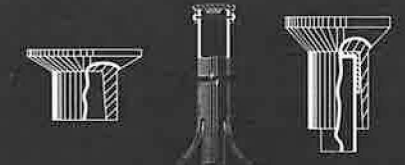
The Indiana State Board of Registration for Land Surveyors will hold the certificate presentation for Professional Land Surveyors on Friday, November 18th, 1994. The ceremonies will be held at the Government Center South Auditorium, Indianapolis. The following land surveyors will be awarded with certificates.

Gordon W. Bell, Jr.	French Lick, IN	29400007
John B. Irr	Lafayette, IN	29400011
Dale L. Kesler	Edwardsburg, MI	29400013
Robert P. Kirkley	Mishawaka, IN	29400014
William MacSteele	Sullivan, IN	29400009
James D. Myers	Terre Haute, IN	29400006
David M. Pruett	Indianapolis, IN	29400008
Rodney M. Renkenberger	Kendallville, IN	29400012
Paul V. Schwimmer	Ann Arbor, MI	29400015
Brian Woodrow	Charlottesville, IN	29400010

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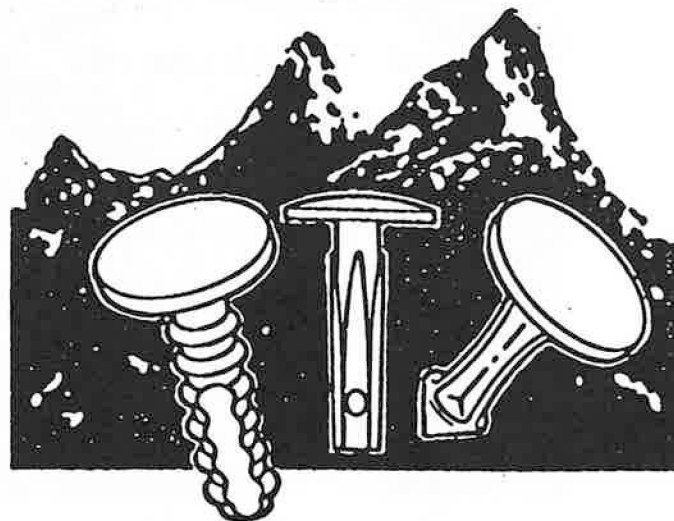
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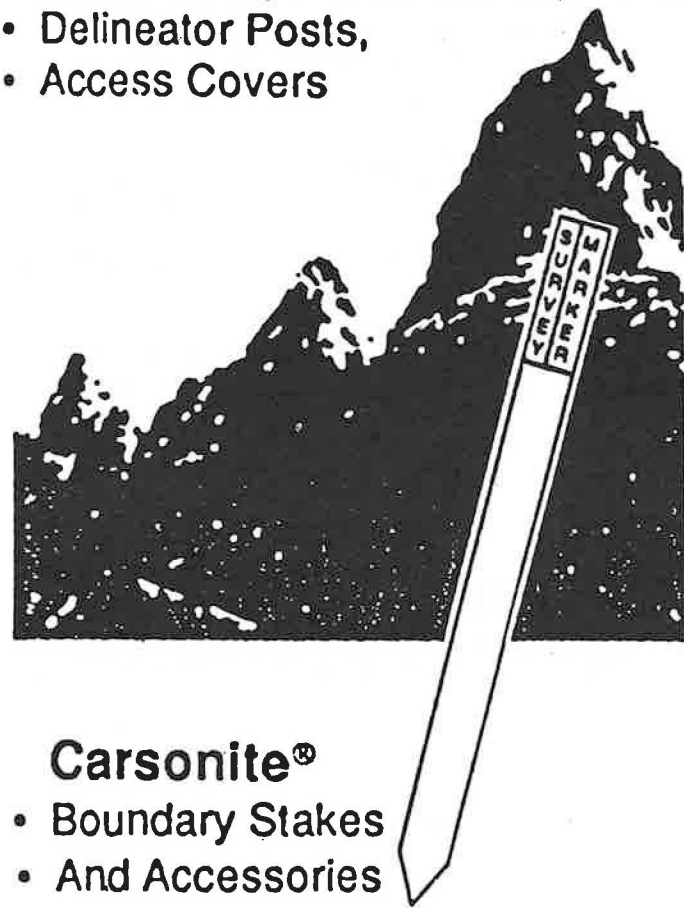


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HAZARD COMMUNICATIONS

by Ron Koons, RoSaKo Enterprises, Middletown, Indiana

Since the birth of OSHA in 1970, no other single event has had more effect on the workplace than the promulgation of the Hazard Communications Standard. What started out as an attempt to deal with hazardous chemicals has grown into a monster that has generated Material Safety Data Sheets (MSDS) on hundreds of thousands of products. To give you an idea on what was intended, we need to go back to the purpose of the standards as given in 29 CFR 1910.1200(a)(1):

Purpose - The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training.

It appears that the intent was clear; this standard deals with hazardous chemicals, Right? Well What do you have to deal with are MSDS on virtually every product and substance available. I suggest that you request MSDS on every product that you purchase.

Three of the top ten regulations cited by IOSHA last year had to deal with Hazard Communications. Lack of a Written Hazard Communications Program, Missing Material Safety Data Sheets, and Ineffective or no Training on Material Safety Data Sheets were the sections most cited in Haz-Com. Just having a box full of MSDS in the back room won't keep you out of trouble. The MSDS must be organized and a list established. You must train your employees on the hazards and how to deal with them in your workplace. An effective Written Hazard Communications Program must be established.

Small businesses also get inspected by IOSHA. If you have at least 1 employee and effect commerce in any way, then you are subject to IOSHA regulation. I have heard of citations for failing to have MSDS on items as simple as white out (used in your office) and a can of spray paint. By requesting a MSDS for all items you purchase, you will hopefully eliminate your chance for a citation on not having the MSDS readily available. Yes I did say ALL items you purchase. Don't assume that an MSDS is not available for any given item. Besides the white out we discussed, I have MSDS on lumber, rebar, gravel, and many other items you use every day. Will you get cited if you don't have an MSDS on these items? I can't really say that you will or will not get cited, but why take a chance if you can get the MSDS free from your supplier?

Don't under estimate the importance of the Written Hazard Communications Program (A portion of your overall Written Safety program). This program must meet certain guidelines as established by IOSHA. Along with the Written Haz-Com Program comes the Training. Just having the MSDS and the Written Program won't put you in compliance if your employees have not received training.

If you have established your Written Program, obtained your

MSDS, and done the appropriate training, then you have made tremendous progress on your way to compliance. There are other items such as labeling, sharing of information, etc. that will come along as you do the training on your Written Program. No one can guarantee that you won't get a citation if a Compliance Officer comes for a visit, but accomplishing the above items should put you well on your way to compliance. Good Luck!

ACSM Initiative on Flood Insurance Reform Signed Into Law

September 23, 1994; Bethesda, MD

The American Congress on Surveying and Mapping (ACSM) recommendations to improve the nation's flood insurance rate maps were signed into law by President Clinton today as part of the Community Development Banking bill (H.R. 3474). Flood insurance rate maps are the underpinning of the National Flood Insurance Program since these maps determine whether homes in a given community are located inside or outside of flood hazard areas.

The new law incorporates the ACSM initiative on the "National Flood Insurance Reform Act of 1994." It mandates the establishment of a Technical Mapping Advisory Council. The Council will:

- * recommend improvements in the accuracy, general quality, ease of use, and distribution and dissemination of flood insurance rate maps; and
- * recommend mapping standards and guidelines for flood insurance rate maps.

In effect for five years, the council will submit an annual report on its activities and progress to the FEMA director.

The ten-member Council will include... "a member of recognized surveying and mapping professional associations and organizations." All members must possess... "demonstrated knowledge and competence regarding surveying, cartography, remote sensing, geographic information systems, or the technical aspects of preparing and using flood insurance rate maps."

"ACSM members should take enormous pride in our win on this congressional initiative since the critical issue of improving flood map quality would not have been adequately addressed without our persistence" noted ACSM President A. Nicholas Bodnar.

Other ACSM recommendations adopted include: the publication of all changes and revisions to flood insurance maps every six months; and the inability to rely on previous determinations on the standard hazard determination forms used by lending entities if map revisions or updates have occurred.

ACSM is a national professional and technical association representing nearly 10,000 surveyors, cartographers, geodesists, and land/geographic information specialist.

COMPLETED CAREERS

RICHARD E. LOMAX, PLS, 58

January 25, 1936 - August 20, 1994

Richard E. Lomax, PS, was manager of the Subdivision Control and County Zoning Unit in the Property Development Division of the Michigan Department of Commerce, a position he held for 33 years.

Lomax was very involved in state and national surveying associations. At the time of his death he was president-elect of the American Congress on Surveying and Mapping (ACSM); he had also served as its vice president. In addition, he had been chairperson of the Great Lakes Regional Council of ACSM. Within the National Society of Professional Surveyors (NSPS) he had served as president, president-elect, Area 5 director, and governor for Michigan. In 1985 he was technical program director for ACSM and NSPS. On the state level Lomax was a past president of the Michigan Society of Professional Surveyors (MSPS), and was named its "Surveyor of the Year" in 1989. He was also a past president and trustee of the Michigan Museum of Surveying (Lansing).

Locally, Lomax was a member of the Tri-County Regional Planning Commission and the Charlotte Planning Commission.

Lomax was a frequent visitor of ISPLS conventions and the Purdue University student dinner.

MARGARET S. CUNNINGHAM, 44

Executive Secretary of

Vester & Associates, Lafayette

Margaret (Meg) Cunningham, Battle Ground, died Friday, August 12, 1994 after an extended battle with cancer. She was the wife of Patrick N. Cunningham, a past director and past president of ISPLS. She was born and raised in Crawfordsville and married Pat in 1970. She was a secretary at R.R. Donnelly and Sons, in Crawfordsville from 1968 to 1977. She and Pat were owners and operators of Vester and Associates, Inc. in Lafayette. She was executive secretary of the company and had helped her husband manage the company for the past 17 years. Surviving with her husband, Pat, is a daughter, Christie Anne, at home. She was well known to active ISPLS members and spouses. We will miss her!

TWO PROMINENT ACSM MEMBERS DIE

Charles A. Whitten, 84, who retired in 1972 as chief geodesist of the U.S. Coast and Geodetic Survey, died of cancer July 12, 1994. A charter member of ACSM (since June 1941), he was always an active participant on their committees, namely; control surveys, publications, metric system, and served as national director 1969-71.

Charles H. Andregg, 76, who retired in 1979 as senior civilian official with the Defense Mapping Agency at the Pentagon, died of cancer July 6, 1994. He was very active in ACSM activities and served as President 1969-70. He also participated in the American Society of Photogrammetry and it was his dream to eventually integrate the splintered fragments of the surveying and mapping profession into a unified whole. At the end, he was very active in ABET accreditation activities.

SURVEY OFFICIAL PLEADS GUILTY, MUST RESIGN

by Joe Gerrety, Journal and Courier

Crawfordsville - The Montgomery County surveyor must resign as part of a plea agreement filed this week.

Harvey Keller, who was charged in February with 15 criminal counts connected with ghost employment and filing false claims with the county, pleaded guilty to one count of deception and three counts of official misconduct.

Keller pleaded guilty to submitting a false gasoline credit card slip for reimbursement by the county, using two county employees to help him on a private surveying job, performing a survey without being a licensed surveyor and filing a false claim with the county auditor.

County surveyor is an elected office in Indiana, and those elected are not required to be licensed surveyors.

All of the offenses occurred in 1992, and all of the crimes admitted are misdemeanors, each carrying a maximum penalty of a year in jail and a \$5,000 fine.

The plea deal requires Keller to resign when he is sentenced Aug. 26 by Judge Thomas Millgan. Keller also must pay restitution to the county.

County Prosecutor Joe Buser said the county's probation department will determine how much money the county lost because of Keller's misdeeds.

In exchange for the guilty pleas, Buser will drop 11 other charges, including five felonies. Buser will not make a sentencing recommendation.

...taken from Lafayette Journal and Courier, August 5, 1994

LOWELL H. FORD, PLS, 76

ISPLS Life Member and

former Newton County Surveyor

Lowell H. Ford, 76, of Kentland, died Monday, July 25, 1994 in St. Mary's Hospital in Kankakee, IL, after a brief illness. He retired from the Indiana Department of Transportation in 1983. He built and operated Kentland's first drive-in restaurant, and served as Newton County highway superintendent and as Newton County Surveyor before working for the state. He was a lifelong resident of the area and married Kathlyn Warrick in 1940 and she survives.

He served in the Army in the South Pacific during World War II and was an Indiana state policeman after the war and until his appointment as Newton County Sheriff in 1951. His hobbies were fishing, genealogy, and computers. Surviving with his wife are two sons, Dennis Ford of Lawrenceburg and Dean Ford of Brook.

PRELIMINARY PROGRAM FOR JANUARY 1995 ISPLS CONVENTION MERRILLVILLE, INDIANA "THE FUTURE IS NOW"

by the Convention Program Committee, Northwest Chapter

At the time of the writing of this article, the planning of the program for the ISPLS Convention to be held at the Radisson Hotel, Star Plaza in Merrillville, Indiana on January 18-20, 1995 is nearing completion. Some minor changes in presentation times and scopes of presentation are surely going to be encountered. The following is a summary of the convention program at this time (any cited continuing education or professional development hour values are proposed and are subject to individual state reviews and approvals):

- Dr. David Knowles, of Elgin, Knowles and Senne, Inc. from Rolla, Missouri will present a 4-hour seminar on "State Plane Coordinates" on Thursday afternoon (January 19th), and a 4-hour seminar on "Practical Analysis and Adjustment of Survey Measurements" on Friday morning (January 20th). Dr. Knowles, who is a professor at the University of Arkansas, is known nationally for his presentations. Each seminar will be worth 4 hours of continuing education credit or professional development credit.
- Don Plumb of Plumb, Tuckett and Associates and Dave Owen of Cadd Management and Integration, both of Merrillville, Indiana, will make a 3-hour presentation on the practical usage of GPS and GIS for land surveyors. A representative from Softdesk, Inc. may also be involved in the presentation. (3 hours of continuing education or professional development credit)
- Dr. Boudewijn H.W. Van Gelder, Professor in the Area of Surveying Engineering, Geodesy, Satellite Surveying and Data Adjustment, Purdue University will head a 1-1/2 hour presentation on the progress of the HARNIS project in Indiana.
- Wilbur Cox, Director of the Lake County, Indiana Plan Commission, will head a group of planners and attorneys in a 3-hour presentation on rules and regulations regarding subdivision bearings. A mock hearing may be included. (3 hours of continuing education or professional development credit)
- John Schneider of Schneider Engineering in Indianapolis, Indiana will make a 1- 1/2 hour presentation on professionalism. (1 hour of continuing education or professional development credit)
- John Harris, a former Valparaiso University professor in Psychology who is now in private practice, will make a 1-1/2 hour presentation on the topic of Ethics. (1 hour of continuing education or professional development credit)
- Gary Kent of Schneider Engineering in Indianapolis, Indiana will make a 1-1/2 hour presentation on Indiana Case Law pertaining to surveying. (1 hour of continuing education or professional development credit)
- A representative of NSPS will provide an update on the discussion on washout policies on Surveyor Location Reports.
- Pete Arnold of Arnold Land Surveying with John White of INDOT will make a 1-1/2 hour presentation on Metrication and how surveying work is being impacted. (1 hour of continuing education or professional development credit)
- Anthony Gregory, Assoc. Professor of Civil Engineering Technology at Purdue University Calumet in Hammond, Indiana will make a 1-1/2 hour presentation on computations and coordinates (for technicians)
- A group from The Health Institute of the Methodist Hospital will make a 1-1/2 hour presentation on General Health Management, covering stress, exercise and nutrition.
- Attorney Mike Riley will make a 1-1/2 hour presentation on Estate Planning.
- There will be a 2-hour discussion of the proposed Mandatory Continuing Education requirements (on Friday afternoon just prior to the Annual Business Meeting).
- The State of Indiana Board of Registration for Land Surveyors will meet during the convention, and 1-1/2 hours of the scheduled meeting will be open to convention attendees.

PLEASE NOTE THAT MERRILLVILLE,
INDIANA IS ON CENTRAL STANDARD TIME

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CALENDAR

November 19, 1994
ISPLS Board of Directors Meeting, ISPLS Headquarters

January 18-20, 1995
ISPLS Conference, Merrillville, Indiana

February 1-4, 1995
Kentucky Association of Professional Surveyors Annual Conference, Holiday Inn Cincinnati Airport, Contact: Bonita Fentress, KAPS Executive Director, Phone (502) 695-2349

February 9-11, 1995
Professional Land Surveyors of Ohio Annual Conference

February 27 - March 3, 1995
ACSM/ASPRS Annual Convention and Exposition, Charlotte, NC

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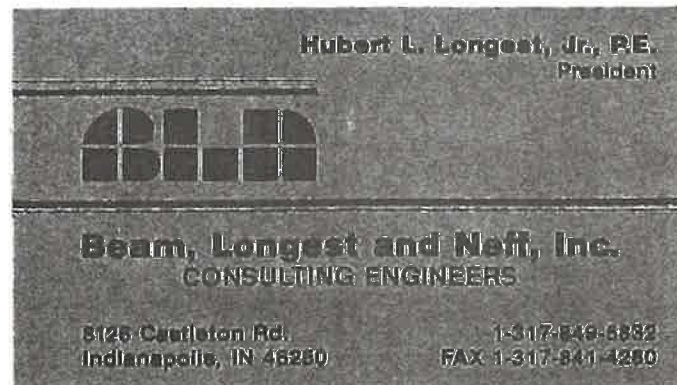
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