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THE OREGON SURVEYOR

A publication of the Professional Land Surveyors of Oregon



2010
Surveyor OF THE Year
Joseph Ferguson, PLS

AFFILIATED
WITH



WFPS

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The Lost Surveyor *From the back cover*

LAT 44° 56' 21" N LONG 123° 01' 50" W

Question: The "Moon Tree" is the Rocky Mountain Douglas Fir in the center. Can you tell me where it is planted?

Answer: This Douglas-fir was raised from seed carried to the moon by astronaut Stuart Roosa of the Apollo 14 space mission in 1971. It was the first "Moon Tree" to be planted in Oregon and was planted here by Governor Bob Straub on Arbor Day, April 30, 1976, to celebrate America's bicentennial. It is located just west of the Capitol building in Salem, Oregon.

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From Your Chair

■ Gary Anderson, PLS



Building a Foundation Today for Success Tomorrow

This formidable yet alluring claim was the catchphrase for our recent conference. Allow me to reiterate some of my opening day quotes and Annual Meeting comments for those who may have missed hearing them. The conference was a really great event with excellent presentations and very “special” attendees. (That means YOU if you were there!) I believe the conference helped set a loud and clear tone for our efforts this coming year. I would sum this up with a question—are we going to visualize ourselves headed for Chaos or Community?

As I said prior to the keynote speech given by Curt Sumner, ACSM’s Executive Director, I find useful meaning within the following quotes. Gunther Greulich (past ACSM President, ’91–92) writing in April of last year shared that: “these are fractious times we find ourselves in” and that this “urges us to rethink and relearn before we act divisively instead of decisively”. He also suggested that the American Society of Photogrammetry and Remote Sensing (ASPRS) is a model organization to learn from. And so I shared this quote from James Plasker, ASPRS Director: “only better knowledge and greater wisdom can overcome what may be a misguided ego, possibly disguised as a suspected but uncalled for inferiority complex.” Lastly from the American Congress on Surveying and Mapping (ACSM) Structure Committee, “for an organization to advance itself it must be aligned and respected with all other organizations, even if it feels initially threatened by them.”

Their comments and the following quote from a colleague give hope to our struggles. “Those periods of largest growth that I have experienced in my career, and in my life, were also periods of significant struggles and hard work.” Yes, we are living in interesting times. Some of us are struggling, but all of us can be learning and growing wiser from our present experiences. I would ask that you all strive to share your hard learned wisdom with others.

Paraphrasing, PLSO’s mission as a not-for-profit professional organization is to unite all licensed land surveyors in Oregon; promote legislation and education; improve our professional status; and promote high standards and ethics while serving the public’s interest. Unfortunately, as of the end of 2010, only about 33% of Oregon’s resident licensed surveyors are PLSO members. This gave me some consternation, particularly after reading that Utah has 80% of their state’s licensees in their professional organization. Clearly, this is an area where we can strive for improvement.

PLSO is fortunate to have a committed group of folks including Scott Freshwaters, Dan Linscheid, Fred VanNatta (our lobbyist) and your entire Board focusing on Legislative issues. On our Educational efforts PLSO is doing a variety of things well, both through individual Chapter efforts and with the Education Goals and Action committee (for more details see page 12, *The Oregon Surveyor*, Dec. 2010/Jan. 2011). Willamette Chapter is working with Chemeketa Community College to revive their suspended surveying program. It also pleases me to point out that in our State’s career promotional material <www.qualityinfo.org> “Surveying” is not just listed as available, but it ranks surveying in the top seven percent of income producing careers!

In order for PLSO to continue to improve our professional status, we must each redouble our efforts with outreach to “others”. Presently, there is an ACSM developed PBS segment “Spotlight on Surveying” airing nationwide (this is a six-minute video which “explores the vital work of surveyors in keeping the public safe”); we are helping sponsor Daniel Helmricks (PLSO member and OIT student), as the U.S. Regional Coordinator for Young Surveyors Network, at the next International Federation of Surveyors (FIG) event <www.fig.net/fig2011> in Morocco May 18–22; and PLSO is joining with WestFed member states to sponsor local teacher participation in a regional Teaching with Spatial Technology (TwIST) short course this June in Las Vegas, Nevada.

This year “National Surveyors Week” is March 20–26 so let’s all look for ways to leverage positive PLSO exposure at that time. Also this year is the bicentennial of the David Thompson Brigade <www.2011brigade.org> and PLSO is supporting their reenactment canoe trip (several of our members are participating), June 1–July 16. There are a number of opportunities developing for public outreach with PLSO through that group and various chapter activities. Of course we have already begun conference planning for next year. PLSO will be convening together with the Oregon Urban and Regional Information Systems Association (ORURISA) in March 2012. ORURISA has nine users groups that overlap half of our chapters. If you aren’t already, get involved with them this year to enhance our relationship with each other ahead of that event. Their upcoming conference “GIS in Action” will be at Portland State University on March 29–30. For those of you who

Continues on page 5

The Oregon Surveyor is a publication of the Professional Land Surveyors of Oregon (PLSO). It is provided as a medium for the expression of individual opinions concerning topics relating to the Land Surveying profession.

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The Oregon Surveyor welcomes your articles, comments and photos for publication. PLSO assumes no responsibility for statements expressed in this publication. Send prospective materials to Lisa Switalla, lisa@llm.com.

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Editor's Note

■ Oran Abbott, PLS, oranabbott@gmail.com



I was attending the Awards Banquet at the PLSO Annual Conference when I overheard one of the older surveyors ask, "How come so many retired surveyors show up at the conference?" It might be because of the type of people surveyors are (or become). A comparison could be a letter that some people received recently from PGE, NW Natural, and the Energy Trust of Oregon regarding your Personal Energy Report. The report compares the energy use at your house with your neighbors. It does not mention your neighbors by name, but addresses them as "Efficient Neighbors" and "All Neighbors." You are to review the report about your energy use, construct a "customized energy-saving action plan," do "Action Steps"—tips chosen for you based on your energy use and housing profile, "share energy efficiency tips" by "talking with household members, friends and neighbors about saving energy...making a commitment to a few key things..." and are to track your progress. Efficiency is an important part of surveying and 30 years ago surveyors mostly used the energy that came from their body (hardly any battery use at all). How do you define efficient energy use vs. non-efficient energy use?

There is a very good article in this journal addressing GPS in construction and whether we should have the work completed by licensed surveyors. The article relates some of the problems involved; one of the solutions was see who is accomplishing the work without a licensed surveyor. Is this a similar comparison to comparing my energy use with my neighbors? If people can do our job without a license, maybe we need to examine the criteria for a license and upgrade the qualifications?

In February 2011, the monthly publication, *Florida Surveyor*, started publishing online only. Seeing this, a few questions regarding this method of publishing came to mind:

- Do our dues pay for the journal?
- Would you read an online journal?
- Would you read the advertisements?
- How often would you view the publication online?
- Would you show it to anyone or give anyone else the weblink?
- Who else sees it besides you?
- Would it be available for all visitors or access-coded for PLSO members only?
- Will advertising still pay for space?

I am going to watch the progress of the online-only *Florida Surveyor* for a year and then review the results. I think a hard copy journal is far better than an online version. We send a copy of our journal to most of the other state surveying societies—how would they receive it if it is access-coded?

In 1993, I was involved in a team climb of Mt. Hood to get the elevation on the summit with a GPS unit. Our team consisted of one group of climbers going to the summit of Mt. Hood, and other members stationed with a lot of equipment at various points below. I read in a recent (and excellent) article in the *American Surveyor* that teams in Washington state summited Mt. Rainier in 1988, 1999, and 2010 to get the elevation. The article relates that now they can get the elevation data with just one person with one piece of equipment in their pack. How much have we changed in the last 30 years? What is surveying going to be like 30 years from now? ◉

View from the PLSO Office

■ Mary Louise VanNatta, CAE; PLSO Executive Secretary



2011, Now What?

The PLSO Conference is over and by all accounts it was a big success! Great attendance, food, fellowship and education—plus a chance to engage with vendors—hit the mark. Behind the scenes, volunteers and members of your PLSO support team worked hard to keep the process running smoothly. You might wonder, now that this work is behind us, what will we be doing with all our free time? Well, here's our update:

Membership Development: While we were promoting the conference, the PLSO office has also been coordinating and encouraging membership renewals. One of the most important elements of organizational success is a strong and engaged membership. Just attending the conference does not give a professional surveyor the depth of knowledge and relationships that being engaged with PLSO can offer. At press time we have 671 members, but that is out of a possible pool of 1515 licensed surveyors who live in Oregon. Our new PLSO Board Chair, Gary Anderson, expressed to us that membership development will be an important goal for the organization. That is a job we all share. The most successful membership recruiter is a current member who invites a potential member to a meeting or event. Volunteers, with true passion for the organization, have the best chance of recruiting and retaining members.

Leadership Development: PLSO has a strong leadership structure with a past chair guiding the current board chair and a chair-elect preparing for service. Each chapter has leadership, with president-elects watching and waiting for their turn. A finance/budget chair and local secretary-treasurers work with our office to monitor the funds coming in and disbursements going out. Reporting is done to create an accurate picture for the Board and membership. Committee chairs in the areas of education, awards, nominations, legislation, membership and conference work all year long to reach out in areas of special interest. Members come to the board from a variety of backgrounds to spend many hours working together, making decisions and guiding the organization to success. As association managers, we work to help the board members understand their roles—legal, ethical and organizational. Preparation for board meetings is an ongoing process.

Relationship Development: PLSO as an organization has always reached out to the community. We will continue to assist PLSO in its educational outreach by helping to coordinate member attendance at career fairs and in giving presentations to students, scouts and other groups. Supporting the legislative committee while they draft and lobby for meaningful legislation that helps our profession will be a priority over the session.

These goals and the daily tasks of handling phone calls from the members and the public and using social media to our advantage will all be on our plate and more as the winter continues! *Stay warm!* ◊

From Your Chair, cont. from page 3

haven't explored Geographic Information Systems (GIS) as a tool for your business, I encourage you to do so.

Now, let me remind you that it is never too late to get involved locally with Trig-Star. This is a great opportunity to connect with high school students in your area. The program awards students that excel in mathematics. The teachers really appreciate our providing exposure to a real world career that employs trigonometry. Plus you may claim PDHs for your efforts. (Contact Joe Ferguson at joe_fls@qwestoffice.net for a full outline of program features).

In conclusion, one last quote which seems quite fitting in my new role as PLSO chair. "...as I learn more about the territory, so I adjust my opinions": this attributed to David Thompson in Jack Nisbet's *The Map Makers Eye: David Thompson on the Columbia Plateau*. This is a wonderful book and I recommend reading it. You can look for more book recommendations to come in my future reports from the chair.

You can usually find me at: North 45 degrees 24 minutes 37.75 seconds & West 122 degrees 44 minutes 54.25 seconds, or easier yet, you can call or e-mail me with your input. ◊

PLSO Board of Directors Meeting Minutes

December 11, 2010—Salem Conference Center, Salem

Attendees

Officers

CHAIR Tim Fassbender | PAST CHAIR Gary Johnston | EXEC. SECRETARY Mary Louise VanNatta

Board Members

CENTRAL (1) Scott Freshwaters, President
MIDWEST (2) Renee Clough, President | Jeremy Sherer, President-Elect
PIONEER (3) Joe Ferguson, President | John Thatcher, President-Elect
ROGUE RIVER (4) Craig Claassen, President | Stephan Barott, President-Elect
SOUTH CENTRAL (5) Mason Marker, President | Alan Hart, President-Elect
SOUTHWEST (6) Walter White, President | Michael Erickson, President-Elect
UMPQUA (7) Randy Smith, President | Ron Quimby, President-Elect
WILLAMETTE (8) Lee MacDonald, President-Elect | Jack Burrell
BLUE MOUNTAIN (9) Bob Butler, President

Committee Chairs

LEGISLATIVE Scott Freshwaters, Fred VanNatta | CONFERENCE Tim Kent | BYLAWS Brent Bacon
EGAC Gary Anderson | WFPS Greg Crites | WEBMASTER Tyler Parsons

Call to Order

The meeting was called to order at 10:02 am by Chair Tim Fassbender. Welcome and introductions were made.

Review and Approve Agenda

The agenda was reviewed and approved.

Approval of Minutes

The October minutes of the PLSO board meeting were reviewed.

MOTION: Quimby moved minutes be approved as submitted, Clough seconded. Motion passed.

Report FROM THE Executive Secretary

VanNatta-Gail reported that there is \$91,241.08 in the account. The last membership count for 2010 was 742. So far renewal numbers equal 138 corporate, 25 associates, and 75 students which equals 238 members.

Report FROM THE Chair

Fassbender reminded the group that all renewals are online. Online registration was discussed and it appeared to be working well. PLSO will host a breakfast Thursday morning during the conference for chapter secretary-treasurers.

Report FROM THE Chair-Elect

Sherer reported that Chair-Elect Mathews has his surgery next week. There will be a fund set up for people to help him.

Report FROM THE Chair

Minor reported on their Chapter's desire to do donations and to set up a 501(c)(3). The process of setting up a foundation was discussed. Discussion regarding how LSAW handled a similar organizational structure ensued.

(For more information on why the BOD is considering a foundation set up as a 501(c)(3) charitable organization, refer to the IRS publication on exemption requirements at www.irs.gov/charities/charitable/article/0,,id=96099,00.html)

MOTION: Clough moved that VanNatta and Fassbender begin the process of creating a 501(c)(3), and study the cost and how it will function. Freshwaters seconded. Motion passed.

Kent will look into getting copies of similar organization plans.

Chapter Activities

Central Chapter—Freshwaters said they held their last meeting in November. Officers were elected and legislation was discussed. The group wanted to recognize a member who had worked for a long time in the business.

Midwest—Clough reported that the next chapter meeting is this coming Tuesday. They are hoping for a white elephant exchange. Sherer is coming in as President and is hoping to help educate the group on land use law.

Pioneer—Ferguson reported that their December meeting was in conjunction with LSAW and 75 people attended. It was a good time. They had a magician and 153 pounds of donated food was given to Oregon Foodshare. They are ready for next year. The President-Elect, John Thatcher, attended.

Rogue River—Claassen reported that all is well. Their group supports the Oregon Coordinate Reference System (OCRS). They will soon decide who will be secretary/treasurer.

South Central—Hart reported that he wants the chapter meetings to involve PDHs. A brief discussion ensued on how to accomplish this. They will work on getting a good turnout of students.

Southwest—White said their chapter discussed the OCRS, but want to discuss it further. They want to get a survey display at the local library and they can put up any display they want.

Umpqua—Smith reported that they discussed the Boundary Line Agreement issue. Marshall Wagstaff attended and answered questions on ODOT issues. It was a dynamic meeting. They are now meeting at Elmer's.

Blue Mountain—Butler said they had a seminar on FEMA or on machine

control. They want to have a survey problem to solve at each meeting

Willamette—MacDonald reported that they are working on ramping up participation. Burrell reported that they had a good meeting in November. There was some discussion on the proposed legislation. Getting people to serve the chapter has been an issue. They want to work on membership and help keep meetings fun.

Old Business

There was a presentation from Terry Schiele concerning Chemeketa Community College's survey program. Schiele reported that Chemeketa decided to put their geomatics program on hold for three years. They will be working with various Salem-area high schools to bring students out and use the college equipment. The CAD students have to take Civil 143 and he is developing something for them. The advisory board would like the CAD students to take another course, so one is being developed. They have about 15–16 students. Low attendance is 7–8 students. The Willamette Chapter will be inviting Schiele to their February meeting. Schiele suggested members contact him with questions at tshiele@my.chemeketa.edu.

Kent said that we need to get people out to Chemeketa—having meetings there and getting people to know about surveying is important. Smith told the story of how Umpqua went from almost closing their program to being overcrowded. Burrell said he supported a local task force to help bring the survey program back to CCC. Kent reminded them that there are issues with CCC not putting the program in the catalogue. The geomatics certificate is still online.

Fassbender suggested that the Willamette Chapter needed to lead a task force. To get schools involved, Kent reported that TrigStar and MathCounts (junior high) are two programs that are used to promote the

profession. Crites said he supports TwiST, because it brings the program to the people who develop the message. Crites said we need to get in front of the students with the stories. Lee MacDonald will lead a task force and bring a report to the next meeting. Anderson said that they are mentioned in the "Consider a Career" brochure. They are distributing brochures, speaking at high schools, TrigStar and other presentations. There are no formal outreach programs to get into high schools. This should be part of our strategic plan.

Other Old Business—Proposed By-Laws changes. Bacon proposed changes in the by-laws which are attached to these minutes. They were reviewed and discussed.

MOTION: Quimby moved that the proposed changes to the by-laws be accepted as prepared and to choose Proposal 1. Ferguson seconded. Motion passed.

The Chapter presidents need to take these changes back to their chapter and then have the members vote on them. Central Chapter will only have four meetings a year.

MOTION: Spurgeon moved that the decision from the Chapters about the bylaws should be extended to February 28. Clough seconded. Motion passed.

New Business

Election of 2011 PLSO BOD Chair—John Mathews resigned his Chair-Elect position for health reasons. Leadership succession was discussed.

Motion: Joe Ferguson nominated Gary Anderson to serve as Chair of PLSO next year. Quimby seconded. No discussion. No nominations from the floor. Motion passed.

Voting on Awards—Life Members were presented to the board and secret voting was held. Associate of the Year was nominated and motion passed.

Committee Reports

Strategic Planning—(Gary Johnston) They hope to put priorities for strategic plans into the January meeting at the conference. Johnston asked for feedback on the budget for 2011. There are only a few from chapters and he is looking for the rest. Hopefully each incoming secretary-treasurer will attend the breakfast meeting orientation held at the hotel on January 20.

2011 Conference—(Tim Kent)

Tony Cuomo is the headliner. There are programs on social media and insurance. There are 36 speakers on 42 topics; the budget for speakers is \$12,000. There are only two levels of registration. January 4 is the cutoff for early registration. We have 17 paid exhibitors. On Wednesday afternoon, a speaker room will be used to display auction items. Then they will move into the ballroom for the auction. At the evening events there will be significant door prizes available, but you must be present to win.

The high school student program is going well. There are 30 students who will be coming from the area. Students will also be helping.

Paul Galli and Paul Rydell will leave the committee after this year. Jared McGrath and Jeff Whittaker from Pacific Survey, will be joining the committee.

South Central will be the host for next year. The conference will be at The Red Lion on the River for 2012.

Scholarship—Haddock was not in attendance. Fassbender encouraged people to get their items in to the office or bring them to the conference.

TrigStar—(Joe Ferguson)

Ten or 15 people have signed up and received their packets. The state test is written and needs to be reviewed. The State test will be given the first week of May, 2011.

Education Goals and Actions—Gary Anderson reported that he is

Continues on page 8

Chair-Elect, he wants to have someone take over the EGAC committee. Reprinting the “Choose Your Path” brochures was mentioned. A student from OIT has been asked to attend a meeting in Morocco next May and has requested support to attend an international surveying meeting. The student has traveled to Australia to make presentations and he is the US Ambassador to Federation International Geomatics (F.I.G.).

MOTION: Marker moved that we support Daniel Helmricks with \$750 for his trip to Morocco. Ferguson seconded.

Discussion was held whether more funds should be donated.

Motion amended: Marker moved that PLSO provide support for Daniel Helmricks’ trip to Morocco with a minimum \$750 up to \$3000 with the amount being dependent upon need. Motion passed.

Marker will follow up with Helmricks about his needs.

Legislative—Scott Freshwaters gave his 2009–2010 report. The main issue was increasing the corner preservation fund. That motion failed and there was opposition to this. There is nothing in the building codes division budget or discussions that shows they want to place OSBEELS under the building codes division. Fred VanNatta is monitoring the issue. Through 2010 the committee has held 4 in-person meetings.

- **PLSS Corner Preservation Fund:** Increasing fund from \$10 to \$20. (It is optional and the individual counties would have to approve any increase via board of commissioners action.)
- **Right of Entry Bill:** Make it optional and legal to notify people by US Postal Service or personal notice. It isn’t a big change, but deals with the issue of absentee land owners. There is an AG report on Right of

Entry. Notification by mail does not meet the letter of the law, but you still have to do it by personal notice.

- **Boundary Line Agreement Bill:** Everyone is aware of what this entails. OACES is behind the bill as long as county surveyors sign off on the agreement that is filed with the county clerks.

Other issues—There is a proposal by ODOT to rewrite ORS 93 to make the Oregon Coordinate Reference System optional for legal description. A legislative committee meeting was held on December 10 and there were some reservations from the committee about giving support to this proposal. ODOT’s draft rewrite of ORS 93 is intended to enable OSBEELS to define and regulate the OCRS via administrative rule. There would be a committee to work with the change and that might be helpful. OACES is proposing legislation to change chapter 92 slightly and it mainly defines tracts (limiting the number that may be created). The lobbyist contract expired and the committee wants to extend.

MOTION: Freshwaters moved that the contract with Fred VanNatta be extended to December 2011 with exactly the same terms. Quimby seconded.

Discussion. Burrell asked how renewing these types of contracts affects the budget. Johnston said that everything has a budget impact, but the organization has money to enter into this contract. Whether we should enter into a contract today or wait was considered. It was noted that there is a 30-day termination notice. The legislative session is coming up and we need a lobbyist.

MOTION PASSED.

During the conference, the legislative committee wants to have some time for PLSO members to go to the Capitol and meet with their Representative/

Senator. F. VanNatta wanted to bring some people over to the session. He would also like to create a special commendation that is passed by the legislature for the historic canoe trip in commemoration of the David Thompson Bicentennial.

PLSO Liaison to OSBEELS—(Gary Anderson) The names of the new licensees was sent to the leadership.

Webmaster—Tyler Parsons reported on how to update the PLSO calendar. Committee e-mail lists will be going out soon.

Membership—Shaun Fidler was not present. Smith asked how many PDHs should be promoted at each meeting. Response was “hour per hour”. M. VanNatta reminded the board to encourage members to keep good personal records of their PDHs in case of an audit.

Professional Practice—Bob Neathamer was not present.

NSPS—Lloyd Tolbert was not in attendance. There are two different levels of leadership. Kent represents the NSPS members, the Governor represents the society. A discussion was held on the role of the national organization and opportunities to join.

WFPS—Greg Crites mentioned the upcoming Westfed Conference on March 2–5 in Spokane.

PLSO liaison to OSBEELS Liaison—Dan Linscheid was not in attendance.

PLSO Liaison to OACES—Freshwaters reported he is attending as many meetings as possible.

Oregon GPS Users Group—(John Minor) John English will speak at the conference on the LiDAR Consortium. Ron Singh will speak and Minor encourages people to attend these presentations on Friday morning at the conference. Mike McInnis will be teaching a class on Trimble Business Center, TBC, and Trimble Geomatics Office, TGO. Class will be held in the

spring in the Albany area. Contact John Minor, 541-756-3537 for details. It will not be a PLSO sponsored class.

Publications / Oregon Surveyor—Articles are due now. PLSO wants to have something out before the conference.

Other issues—Clough said she is putting together a triathlon team and is looking for participants. Paul Galli is looking for pictures for the conference. Please send them to him.

Fassbender provided some parting comments and received a standing ovation for his service.

Good of the Order

The next meeting will be at the PLSO Annual Conference on January 21.

The meeting was adjourned at 2:47 pm. ◉

Extra-Ordinary Meeting Minutes

Attendees: Freshwaters (alt Huston), Sherer, Spurgeon, Thatcher, Barott, Cone, Hart, Minor (alt Dodge), Quimby, Smith (alt Sweden), MacDonald, Butler (alt Posada), White (alt Erickson) Anderson called the meeting to order at 2:48 pm.

MOTION: It was moved that Marker be elected as Chair-Elect, Quimby Seconded. Motion Passed.

The meeting adjourned at 3:00 pm. ◉

To contact the PLSO office

PHONE: 503-585-4551

MAIL: PO Box 2646, Salem, OR 97308

FAX: 503-585-8547

EMAIL: office@plso.org

WEBSITE: www.plso.org

FACEBOOK PAGE: Professional Land Surveyors of Oregon

LINKED IN: Join the PLSO group at www.linkedin.com

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Upcoming PLSO Board Meetings

March 12

Springfield
(Tentatively at Mookies)

May 14

Salem (Location TBA)

September 10

Springfield
(Tentatively at Mookies)

October 22

Klamath Falls, OIT

December 3

(Location TBA)



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PLSO PROPOSED BYLAWS CHANGE ADDENDUM

ARTICLE III; SEC. 2;

B. Only persons enrolled as (*removed a*) students (*replaced* fulltime students) in an approved surveying curriculum shall be eligible to be admitted as affiliates under the classification of Student Member.

D. Any group of 5 or more (fulltime *removed*) students who are Student Members of this Corporation attending the same school may petition the PLSO Board of Directors for organization as a Student Chapter of PLSO. Additions (*replaced* deletions)

SEC. 5

A. Membership in this organization shall run from July 1 through June 30 of the following calendar year. (*added in*)

B. Applications for membership shall be submitted to the Executive Secretary and shall be accompanied by an application fee as spelled out below and by the dues then payable. The new member shall be entered immediately onto the rolls. Dues shall be prorated by the months left in the membership period (*replaced year*) up through March. After March (*replaced* September) a full year's dues shall be paid and membership granted through June (*replaced* December) of the following calendar (*added* calendar) year. Dues for reinstatement shall be paid as spelled out in Article X, Section 2,C. Application for membership will be considered for approval by the PLSO Board of Directors.

ARTICLE X; SEC. 1

A. Annual dues shall be paid by all Members to this Corporation on a membership period (*replaced* calendar year) basis in such amount as the Board of Directors may from time to time determine, provided that the amount of such dues shall be determined prior to the commencement of the membership period (*replaced* calendar year) for which such dues are payable and shall not be modified during such membership period (*replaced* calendar year). The annual increase in dues, which may be approved by the Board of Directors, shall not exceed five-percent (5%) rounded to the nearest dollar. No annual increase in dues shall be greater than the aforementioned without the approval of a majority vote of the Corporate Members present at the annual business meeting subject to Article IV, Section 4. In the event that the Board of Directors fails to establish the amount of annual dues for any specific membership period (*replaced* calendar year) the amount of such dues shall be same amount as was payable during the preceding membership period (*replaced* calendar year).

B. The annual dues payable by each Member to the Corporation shall be remitted to the Executive Secretary on or before July (*replaced* January) 1 of each membership period (*replaced* calendar year).

C. The Executive Secretary, by August 1 (*added*), will inform Chapter Treasurers (*removed* February 1) of those (*removed* each year of) chapter Members whose dues are in arrears.

SEC. 2—PENALTIES

A. On August (*replaced* February) 1 of each membership period (*replaced* calendar year) the Treasurer of each chapter of this Corporation shall notify all Members of this Corporation who are affiliated with such chapter, and whose dues are not paid for the current membership period (*replaced* calendar year), that their dues are in arrears. All Members whose dues to this Corporation are not paid by September (*replaced* March) 1st for the current calendar year shall be automatically suspended from membership or affiliation without further notice or action by this Corporation.

B. By September (*replaced* March) 15 of each membership period (*replaced* calendar year) the Executive Secretary shall notify the Chapter Presidents of all non-paid Members. Any Member who fails to pay dues and or assessments as of the date prescribed by this Section, or as otherwise prescribed by the Board of Directors, shall be removed from membership status.

C. Reinstatement of such Members shall be upon such terms as the Board of Directors may determine and shall include payment of the (*the added*, a *removed*, membership period *added*) full membership period (*removed* years) dues.

D. The right of a Corporate Member to vote or to be elected to or hold office in this Corporation and the right of any Member to participate in the affairs of this Corporation shall cease during any time while said Member's dues to this Corporation remain unpaid.

[Amended 5/15/93]

Additions (*replaced* deletions)

PROPOSAL 1; ARTICLE; SEC. 6

A. All state, chapter and committee annual operations budgets shall be submitted to the Board of Directors at or before the Last Regular meeting of the Board of Directors prior to December 31. Final budget approvals shall be given at the first regular meeting of the Board of Directors after January 1, or by a special meeting of the Board of Directors, which special meeting shall be held no later than February 15.

PROPOSAL 2; ARTICLE X; SEC. 6

~~A. All state, chapter and committee annual operations budgets shall be submitted to the Board of Directors at or before the Last Regular meeting of the Board of Directors prior to September 1. Final budget approvals shall be given at the first regular meeting of the Board of Directors after October 1, or by a special meeting of the Board of Directors, which special meeting shall be held no later than November 15.~~

Additions

ARTICLE XI; SEC. 4

A. All chapter officers except President shall be elected during the month preceding the month of the Annual State Meeting, but in no instance later than December 31. Their term commencing on January 1st of the following calendar year. A Nominating Committee, consisting of the President-elect and at least two (2) members of this Corporation who are associated with the chapter from which the officers are to be elected, will be appointed by the President not less than forty-five (45) days prior to the date of the annual chapter election. The committee shall submit at the time of the annual chapter election at least two (2) nominees for each office to be filled. Any Corporate Member of this Corporation who is associated with such chapter may make additional nominations from the floor. Upon a majority vote, the chapter, at a regularly scheduled meeting, may suspend the need for a nominating committee and the need for (2) nominees. Nominations may be made from the floor by any Corporate Member of this Corporation who is associated with such chapter. The balloting for chapter officers shall be a secret ballot and a majority vote of those Corporate Members voting shall be required to elect any chapter officer.

ARTICLE XI; SEC. 9

A. The chapter President-elect shall have the same powers and shall perform all of the duties of the chapter President in the absence of the chapter President or in the event of the chapter President's disability or inability to act or refusal to act. The President-elect will automatically succeed to the office of President in the event that such office becomes vacant for any cause prior to the end of the term of the office. As a member of the Board of Directors the President-elect shall attend all meetings of the Board of Directors unless a chosen alternate is sent per Article VI section 1,B.

SEC. 10—DUTIES OF THE SECRETARY

A. The chapter Secretary shall be responsible for the maintenance of all records of the chapter, transcribe the minutes of all meetings, within fifteen (15) days forward a copy of these minutes to the Executive Secretary, be responsible for the chapter business communications and correspondence, prepare all contracts or written obligations for signature by the chapter President, check the chapter roster furnished by the Executive Secretary for correctness, submit any revisions to the Executive Secretary and perform any other duties as directed by the chapter President.

SEC. 11—DUTIES OF THE TREASURER

A. The chapter Treasurer shall:

1. Receive and deposit chapter monies;
2. Submit chapter bills for payment or reimbursement to the Exec. Sec.;
3. Check transaction statements provided by the Executive Secretary for correctness;
4. Assist the chapter President with preparation of the chapter budget.

B. All deposits shall be reported on properly encoded deposit slips within 30 days of the deposit to the Executive Secretary.

SEC. 13—FINANCES

A. All disbursements in payment of the chapter expenses shall be approved or ratified by the chapter Corporate Membership. All checks, drafts or withdrawals drawn upon Corporate funds shall be executed by the President or Treasurer.

B. All monies collected by a chapter in the name of Professional Land Surveyors of Oregon, Inc. (PLSO) become a part of Corporation finances and must be accounted for.

Additions



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2010 Surveyor of the Year Joe Ferguson, PLS



Experience

Owner, Ferguson Land Surveying (2005–present)
Civil Engineering Industry

Chief of Parties, W&H Pacific (2003–04)
Privately Held; Civil Engineering Industry

Owner, Wolf Surveying, Inc. (1997–2002)
Civil Engineering Industry

Education

Mt. Hood Community College—AA, Forestry

Involvement in PLSO (Became a member in 1990)

Current Pioneer Chapter President
Former Secretary-Treasurer of Pioneer Chapter

Nomination Letter

I'm writing to show my support for the nomination of Joe Ferguson as 2010 PLSO Surveyor of the Year. I've been a member of PLSO since 2001 and have regularly attended the chapter meetings. Over the years I have witnessed many selfless acts of kindness and support by Mr. Ferguson, and he's always willing to lend an ear and give his opinion. I'm sure the list of wonderful things Joe has done for the organization is lengthy, but I would like to list a few that I have witnessed or have had the opportunity to assist with:

- Pioneer Chapter Secretary/Treasurer at least twice
- Participated in N.W. Youth Career Expo
- Active in the Trig-Star program
- Proponent of the Pioneer Chapter summer picnic
- Took charge of the field work and map production for the Blue Star Mother's memorial project at the Willamette National Cemetery
- Incorporating food drive into December joint meeting with LSAW
- Assisted the conference committee with the 2009 conference in Portland
- Currently raising funds for the PLSO Scholarship Fund
- 2010 Pioneer Chapter President
- Assisted with hosting the 2010 chapter seminar on survey research

I appreciate your consideration in the nomination of Joe Ferguson for 2010 PLSO Surveyor of the Year.

Regards,
Ryan Godsey

2010

Associate Member of the Year Brent Knapp, PLS

Brent Knapp was nominated by colleagues of the Umpqua chapter and was selected as Associate of the Year by the PLSO statewide board. He works as a civil engineering and land surveying instructor at Umpqua Community College.

Note: Brent recently passed the PLS exam and is now a registered surveyor for the state of Oregon and Corporate member of PLSO.

Nomination Letter

Brent has been active in PLSO for the past four or five years. He is a graduate of the engineering program at Umpqua Community College and is a professor at Umpqua in the engineering program. Brent has worked in the private sector, has his LSIT Certificate, Brent has been secretary/treasurer for the Umpqua chapter of PLSO for the past two years.

What say?!

The surveyor ought to work in solitude. He must no more admit company while mapping than a writer admits visitors to his study while writing. This applies even to geological company, nay, even to the company of a skilled fellow-surveyor... The two authors of this book [Edward Greenly and Howell Williams] once thought that it would be pleasant to have a day's mapping together, and decided to break through their rule. The result was a ludicrous paralysis. The commonest operation seemed a mountain of difficulty. Next day the senior author (whose ground it was) swept an india-rubber over every line and went out again, when, hey presto! And all was clear.

— Edward Greenly
Edward Greenly and Howell Williams,
Methods in Geological Surveying
(1930), 375–6.

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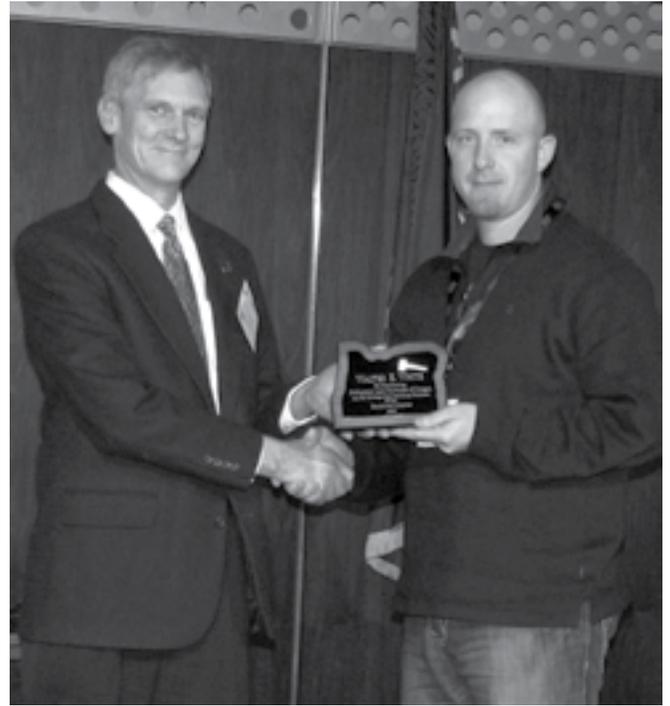


PLSO 52nd Annual Conference

January 19–21, 2011 ★ Salem Conference Center







Survey Olympics Results

2011 Angle Measurement

Sarah Burgi
87-45-00 vs. Measured 87-35-54

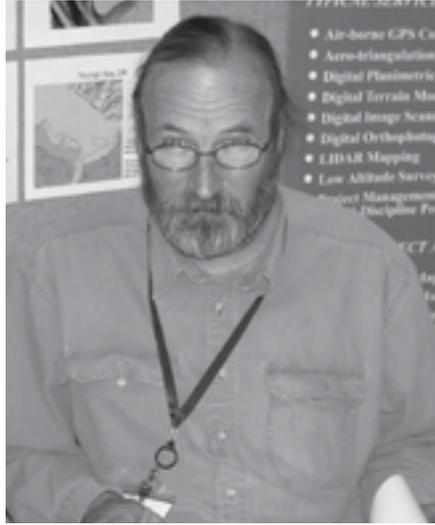
Distance Competition

(tie) Paul Ejgird
Alex Swenson
380 feet vs. Measured 378.96 feet

Height Competition

Abandoned due to technical difficulties

Each winner received a \$100 gift card with an additional card going to a random competitor.



Look for more photos and the Annual Conference report in the next issue of *The Oregon Surveyor*...

Thank you from Ed Graham, PLS (Retired)



On or about December 16, 2010, I received a letter from Charles L. Wiley, PLS, CWRE, Protocol Committee for the 2011 Conference. It presented a complimentary invitation to the annual awards and entertainment banquet for my wife and myself.

I'm always suspicious when someone offers a free meal and doesn't appear to want something in return. However, when that offer comes from PLSO, one should jump on it immediately! By the time the next meeting rolls around, the committee could reverse the decision and rescind the offer. Of course I was suspicious, but I know of no surveyor, respectable or otherwise, who—regardless of the possible frightening consequences—would pass up a free meal. Given the dynamics of our ever-changing organization, I could only wonder what rationale precipitated such a generous offer.

Egotistically, my first thought was some sort of recognition or acknowledgment for service to the profession, but that thought quickly evaporated. Recognition can't be the objective. I've done nothing for PLSO for over a year. Besides, everyone who joins PLSO is, as I have already been, recognized, honored, praised, and cursed, usually more than once! Those of us on the fringes of the current paradigm either received subsequent awards or were repeatedly sanctioned without mercy. Thanks to mass confusion often witnessed during regular meetings, PLSO has bestowed more honors on me than I ever deserved. All were greatly appreciated, but none were actually earned. Most of the participants with whom I talked after the vote had been recorded thought banishment was the motion on table. Then it hit me!

I immediately thought of this organization's capacity to shame even the laziest surveyor into volunteering for something they believe in, but don't really possess the heart to pursue. I refer to this action as the defibrillator or resuscitation maneuver. This has to be it, but what do they want me to do? They know I'm completely out of ideas!

Another more practical, but completely absurd thought occurred: "soylent green". It's from the movie where those who achieve uselessness become an ingredient in a food source for those who remain productive. However, based on the high level of bovine excrement that naturally exists in most surveyors, a better alternative would be fertilizer instead of fodder.

The one thought that hadn't occurred to me was that PLSO just wanted to do something nice. I admit to being more than a little embarrassed at the time! It was an honor to be recognized during the same event where Life Member awards and Surveyor of the Year were presented. They did deserve the spotlight. I want to express my sincere appreciation for the gifts bestowed on this old surveyor and I apologize for over analyzing the original invitation. It's something I picked up from my 50 years of committee dynamics. ☉



Ed Graham, PLS

High School Survey Competition Results

Placing	Student and High School	Bearing/Distance to correct point
Compass / Pacing		
1st	Josh Sniezak, Morrison Alt.	N85°E / 2.1'
2nd	Jacob Atkinson, Sprague H.S.	S43°E / 2.9'
3rd	Amanda Mathews, Morrison Alt.	N13°E / 3.1'
Height to "George Washington's nose" on the Mt. Rushmore picture on wall. 10.2' correct height.		
1st (tie)	Amanda Mathews, Morrison Alt.	10.2'
	Kyle Stoltz, Morrison Alt.	10.2'
3rd	Kyle Woods, Morrison Alt.	10.08'



Mark E. Boyden, PLS

August 16, 1924–January 6, 2011

Mark E. Boyden, 86, of Medford, Ore., died January 6, 2011, at Rogue Valley Medical Center. He was born in Medford on August 16, 1924, to Charles and Grace Boyden. Mark graduated from Medford High School and attended Oregon State University. During World War II, he served in the US Army's 11th Armored Division. He fought in Germany in the Battle of the Bulge in 1944. Mark then returned to OSU and finished a degree in Civil Engineering. On December 30, 1952, he married Joan Neil of Ashland. They were married for 54 years and were blessed with two children.

Mark and his father before him were prominent professional land surveyors in Jackson County. Mark served as Jackson County Surveyor from 1956–65, and is regarded as one of the finest surveyors in Oregon (PLS 281). In 1989, PLSO honored Mark as Surveyor of the Year.

He was loved and admired by many and known for his integrity and faith in his Savior, Jesus Christ. ◉

Note from Gregory A. Crites, PLS

I remember Mark from my earliest years in the profession when I worked as a logging engineer for a large timber company on the Oregon coast.

That was back in the late 70s when I was beginning my education in woods surveying, working alongside the likes of John Carlich (then Tillamook County Surveyor) and the son of a GLO surveyor, Leonard Whitmore.

They both spoke very highly of Mark and made a point of telling me that if I ever had the chance to meet him, I should go out of my way to pick his brain regarding some of his more memorable experiences through his career. It was my great good fortune to do so on several occasions and I will never forget his infectious enthusiasm and his incredible ability to recall intricate details about projects he'd worked on many years earlier in his career. I tried to make a point of hunting him up at PLSO conventions just so I could sit and listen to his stories. As I get older, I have begun to admire the institutional knowledge guys like Mark had tucked in the corners of their brain. I only wish we'd had the chance to catalogue some of his memories for our use. Those personal reflections would make for a rich addition to his legacy of recorded land surveys.

He will be missed. Thankfully I will have my personal recollections of him burned in my brain until I, too, cross the great river. ◉

PLSS Initial Points exhibition needs your photos

The Institute of Marking and Measuring, in collaboration with the National Museum of Surveying and the Center for Land Use Interpretation is designing a travelling exhibit on the Initial Points of the Public Land Survey System. The exhibit will introduce the PLSS to a curious audience and will include historical information, maps/plats, and photos of each Point of Beginning. While we have visited many of the Initial Points and have the indispensable work of C. Albert White, we are looking for contemporary photographs of each point for the exhibit. In particular, we are looking for high-res images (ideally 1,200 x 1,600 at 200dpi) of the Initial Points in their context. Ideally, we would like the monuments photographed head-on, centered in the photographic frame, showing their context, background, and horizon. We will credit every photograph we use. We are looking forward to your contributions! Please contact Jesse Vogler, imam@markingandmeasuring.org, 505-977-5391 for more information.

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Legislative Report

■ Scott C. Freshwaters, PLSO Legislative Committee Chair

“Every man owes a part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere.” —Theodore Roosevelt

This report was adapted from a Scott’s speech given at the PLSO Conference on January 20, 2011

Let me throw out some rhetorical questions to you, in light of Teddy’s truism about us owing a part of our time and money to this profession.

- Are you a PLSO member?
If not, why?
- If you are a member, do you attend your chapter meetings and have you ever been a chapter officer?
- Have you ever spoken to a school group or in a classroom, Boy Scout troop, presented the TrigStar program, or manned a booth at a career fair?
- Are you a member of a service club or other organization where you have opportunities to educate others about our noble profession?
- Have you approached associated trade groups and associations about giving a brief talk explaining our profession?
- Have you encouraged your local chapter to seek out service projects such as surveying a Habitat for Humanity lot or subdivision.
- Have you served on a PLSO statewide committee?
- Do you have a few minutes to contact your elected representative and explain our legislative bills and the importance of them to the public and our profession?
- Lastly, are you content with watching others do their best in giving of their time and talents to better the profession?

Three of us met this morning with our lobbyist, Fred VanNatta to formulate a plan to build relationships of support with associated industries and trade groups such as the Oregon Home Builders, the Oregon Cattleman’s Association, and the Oregon Association of Realtors, just to name a few. These relationships are critical to passing our legislation, along with the relationships that all of you can develop with your House and Senate members.

These relationships and contacts are critical to passage of our bills, and can serve another purpose—to have an open door to discuss issues that may not be survey related, but one that you may have a passionate opinion about.

To help make those contacts, Fred prepared a list of all of the Senate and House members, their office location numbers and their phone numbers. He added the first two letters of the respective chapter to each official’s name so that you can quickly see who represents you. Also, we have prepared a brief position paper that explains these bills. All of this information, in downloadable PDF or Excel format, is listed on the legislative page on the PLSO website (www.plso.org/surveyors/legislation.html).

In order to promote these bills and give a better understanding of the process, anyone who would like to help is welcome to join our lobbyist, Fred VanNatta, myself and some members our Legislative Committee on a tour of the state House and visits to legislator’s offices.

In closing, I implore you to please give some of your time for the



betterment of this profession. It doesn’t have to be a lot, you may not be rewarded with a plaque or other formal recognition, but you will have satisfaction in knowing that you have helped to improve the lot in life of your fellow professional, and that my friends, is enough. *Thank You!* ◊

A brief overview of the three bills

HB 2892

Boundary Line Agreement Bill

This bill specifies that when a boundary is uncertain or in dispute the owners may follow a procedure to fix the boundary.

This will be done via record of survey and a recorded agreement.

The agreement will be checked for compliance by the respective county surveyor before recording.

One reason for this legislation is that some county clerks will not record a document entitled “Boundary Line Agreement”.

HB 2893

Modifies Right-of-entry

We are adding language to make notice by US Postal Service an option.

HB 2351

Corner preservation fund increase

We are attempting to raise the fee added to property transfer recording from a maximum of \$10 to \$20.

Legislative Update

■ Scott C. Freshwaters, PLSO Legislative Committee Chair

Fred VanNatta, Chuck Pearson, and Dan Linscheid testified on February 14, in the House Committee on Business and Labor regarding **HB2893**, the Right of Entry Bill.

We are asking to add notification by US Postal Service. Three of the House Committee Members were adamant that there be a time period between notice and entry, some wanted as much as ten days. Seven days was agreed upon.

HB2892 The Boundary Line Agreement bill is undergoing some minor modifications as a result of a meeting held February 9 in Salem and attended by Dan Linscheid, Chuck Pearson, Fred VanNatta, and Scott Freshwaters representing PLSO. Arthur Schlack and Jon Oshel of AOC were also there.

Jim Just of 1,000 Friends of Oregon attended, and had many questions and comments. Chuck Pearson is preparing the revision, and after review by Jim Just and Steve McCoy (their legal counsel), we should reach agreement.

HB2351 The corner preservation fee increase bill will be capped at \$15 instead of the \$20 that we were hoping for. Gene Whisnant, District 53 Representative and Co-Chair of the General Government and Consumer Protection Committee told me last week that the bill was still “on the table,” but that he would need some help if it stands any chance of passage. It was decided to reduce the increase by 50% in order to make it more “palatable” during these tough economic times. We will also have a provision inserted to exempt the

miner’s “Proof of Labor” annual affidavit from the fee. This is only fair as the proof of labor affidavit does not convey or place a mortgage on property. ☉

“If an American is to amount to anything he must rely upon himself, and not upon the State; he must take pride in his own work, instead of sitting idle to envy the luck of others. He must face life with resolute courage, win victory if he can, and accept defeat if he must, without seeking to place on his fellow man a responsibility which is not theirs.”

—Theodore Roosevelt
Man in the Arena, Paris 1910

National Surveyor’s Week

Preparations to celebrate the National Surveyor’s Week are well under way. This important annual event, which this year begins on Sunday, March 20, will kick off on March 19 with NSPS Surveying USA events taking place throughout the nation. The goal of these events is to give the public an opportunity to learn about surveying in face to face encounters with surveyors and the technology they use in their work. Background information, as well as NSPS Surveying USA signs created by NSPS Governor (VA) David Holland are posted at the website at www.nspsmo.org. The sign is available in two image sizes and can be downloaded for use during your NSPS Surveying USA event.

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Meet our Newest Life Members



These members were honored at the Annual Conference for their career-long service to PLSO by receiving Life Member status. Life Member status is the highest membership level granted to a PLSO member. *Congratulations!*

Midwest Chapter

Paula Norness

PLSO Membership

- Member since 1974
- Midwest President: 1992
- Midwest Secretary
- Served several PLSO state committees
- PLSO Board Chair: 1993
- Surveyor of the Year: 1994

Pioneer Chapter

R. Charles Pearson

Clackamas County Surveyor

PLSO Membership

- Member since 1974
- Pioneer President: 1979
- PLSO Board Chair: 1985
- PLSO Board of Directors: 1978–1979, 1984–1986
- Surveyor of the Year: 1988
- Involved with the Finance, Conference, Legislative, Ethics, and Membership committees



R. Charles Pearson



Roger Roberts

Rogue River Chapter

Roger Roberts

PLSO Membership

- Member since 1978
- Rogue River Secretary/Treasurer, President Elect and President
- Rogue River President: 1981, 1999
- Former chair of the Registration Committee for PLSO Annual Conferences

Rogue River Chapter

Richard Bath

Hardey Engineering

PLSO Membership

- Member since 1978
- Rogue River Secretary-Treasurer, President Elect and President
- Served on numerous Rogue River committees, both within the chapter and as a representative in community.
- Rogue River President: 1979, 1990
- Corporate Member: past 35 years.

South Central Chapter

Dale Cross

Dale A. Cross Surveying

OR PLS 993, Licensed July 1973

CA PLS 4763, Licensed May 1979

PLSO Membership

- Associate member: 1969–1974
- Corporate member: 1974–present
- South Central President: 1975, 1993, 2005

Southwest Chapter

Ron Stuntzner

Stuntzner Engineering & Forestry, LLC

PLSO Membership

- Member since 1973
- Southwest Chapter President

Umpqua Chapter

Romey Ware

Douglas County Surveyor's Office

PLSO Membership

- Member since 1973
- Umpqua President: multiple times
- Surveyor of the Year: 2004

News from the Chapters

Umpqua #7

■ Brent Knapp, Secretary/Treasurer

December 13, 2010

Chapter President: Randy Smith
Called to Order: 6:30 pm

Location: Elmer's Restaurant, Roseburg
Attendees: 18 members and 3 students

Approval of Minutes

The minutes from November's meeting were approved with noted corrections. Ron Quimby motioned, David Beedle seconded. All approved.

Committee Reports

Legislative: Ron Quimby gave a report from the December Board meeting.

- Corner Preservation fee increase is ready for a vote. The rate increase would be from \$10 to \$20.
- First Class mail notification was approved as a means of notifying a land owner of the surveyor's right of entry.
- Boundary By Agreement—Section 3e was objected by the Umpqua chapter but will remain intact. 2(5) the word ESTOPPEL to stay as written. Randy Smith added that the goal is to keep the Boundary Line Agreement simple and out of the planning department's hands. Kris Degroot asked if the Planners have come out in opposition to this new legislation.
- ODOT's proposed law changes were discussed. The board is waiting for something official to be proposed. Tim Moore asked why the Oregon Coordinate system should be made law.

PLSO Board: Randy Smith gave a Board report from December's meeting.

- Online membership renewal is available now.
- A 501(c)(3) charitable foundation will be researched for cost and benefits.
- John Mathews will have surgery and a fund is being set up to help with costs.
- Terry Sheile gave a report on Chemeketa's Geomatics program. The Willamette Chapter is inviting him to speak at their meeting.
- Gary Anderson will be 2011 chair. Mason Marker will be 2012 chair.
- Those wishing to participate in TrigStar tests, schedule for first week of May.
- There are three PLSO amendment changes to the bylaws:
 1. Removal of the requirement of Student members to be "full time" students in a Surveying program. Joel Smith motioned, Kriss Degroot seconded. All in favor.
 2. PLSO dues would be paid on July 1 to offset costs of conference/winter months. Ron Quimby motioned, Bartt Heichel seconded. All in favor.
 3. Budget will be reported to the Board by the last regular meeting of the year. Tim Moore motioned, Kris Degroot seconded. All in favor.

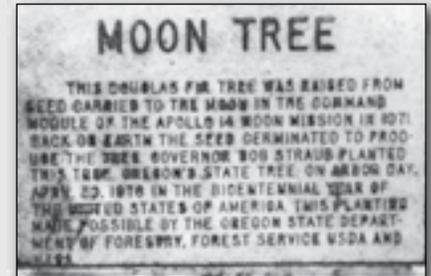
Ken Hoffine said that OSBEELS will be cutting fee costs by \$30. Joel Smith approves of this fee reduction. OSBEELS is attempting to better define the hours that may be counted for PDHs from meetings.

Randy asked the chapter if there should be a January meeting in addition to the conference. All were in favor of postponing to February 2011.

With no further business, the meeting was adjourned at 8 pm. ◉

Oregon's Moon Tree

■ Oregon Travel Information Council



You can see a photo of Oregon's Moon Tree on the Back Cover

The Moon Tree (*Pseudotsuga menziesii*) is a Rocky Mountain Douglas Fir raised from a seed carried to the moon by *Apollo 14* astronaut Stuart Roosa in 1971.

Although Roosa was a native of Oklahoma, he was no stranger to Oregon. While in college, he worked summers here as a smoke jumper and as a surveyor. Roosa trained to be an astronaut in Eastern Oregon and later returned to hunt elk and duck. After his historic flight, Roosa expressed his strong ties with Oregon by choosing to have his official homecoming parade in Coos Bay.

Stuart Roosa took more than 400 seeds to orbit the moon with him in his personal property kit. Most of the seeds successfully germinated and, after some nursery time, were distributed to many states, and several foreign countries, to celebrate the America's bicentennial.

This Moon Tree was planted by Governor Bob Straub, on Arbor Day, April 30, 1976. The tree's original seed came from Corvallis. The Moon Tree is located in Salem, near Court Street, in Willson Park to the west of the Capitol building. It is 63' tall with a 19" circumference.

The Use of Machine Guidance Systems on Construction Projects and the Legally Mandated Activities Related to Professional Land Surveys and Professional Engineers

■ *Thomas Taylor, PLS*

Submitted by William R. Hofferber Jr., PLS, CLSA chair, provided along with his comments in response to our question asking about CLSA's current stance on MGS as it relates to professional licensure.



Issue

The emergence and proliferation of the Machine Guidance Systems (MGS) technology has enabled construction contractors to perform their grading operations more quickly, efficiently, and less costly. Additionally, by using MGS the contractors have greatly reduced their need for grade stakes and stringlines. As a result many contractors using MGS have eliminated utilizing the professional services provided by licensed professional land surveyors or professional engineers.

This is an unfortunate trend since many of the tasks to implement and use MGS are legally mandated to be under the responsible charge of a professional land surveyor or a qualified professional engineer.

Legal Basis

The legislature has established in the Business and Professions (B&P) code the practice of land surveying and civil engineering. The Professional Land Surveyor's Act (LSAct) is contained in B&P Sections 8700 et. seq. while the Professional Engineer's Act (PEAct) is contained in B&P Sections 6700 et. seq. The legislature enacted these acts to protect the people of California from harm by those who are not qualified to be providing the defined services. Many of the activities associated with MGS are tasks that are specifically defined in the LSAct and the PEAct, which means that they should be performed under the responsible charge of a Land Surveyor or a qualified Engineer.

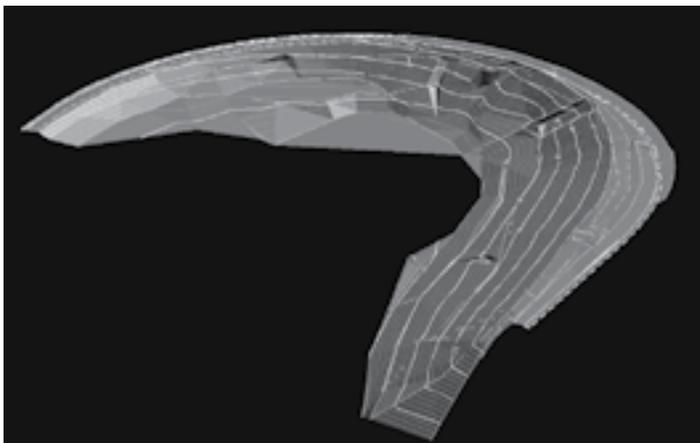
Recommendation

I am recommending that all land surveyors monitor the use of MGS by contractors to determine if they are performing legally defined land surveying tasks without having a land surveyor or qualified engineer in responsible charge. If the unlawful practice is identified then the contractor should be notified as well as the Board for Professional Engineers and Land Surveyors (BPELS). Additionally, I recommend that land surveyors request BPELS to contact the Contractors State License Board and request that they communicate with their licensees the legally defined practices of land surveying and engineering as it relates to MGS. This is a first step to clarify and remove the unlawful practice of the land surveying and engineering professions as it relates to MGS.

Background

Classically, land surveyors and engineers have provided, and still provide, a professional service to the construction industry by establishing, among other things, grade stakes. The stakes allow the contractor to accurately grade the construction site to the specifications provided in the plans for that improvement. This service necessitates an understanding of the job site conditions, an understanding of the geodetic datums (horizontal coordinates and elevations) for the project, an understanding of the measurement systems and their error sources, and an understanding of the realization on the planet of the datums and how they relate to the design and subsequent building of the improvement.

Typically, a job site area will have topographic surveys performed to create a model of the area for use in designing the improvement. This model is called a digital terrain model (DTM) and is based on geodetic datums specific to the project. The picture below is an example of a DTM representing the topography of a future roadway construction project.



The design professional will then use the DTM as a base to design the improvement according to the pertinent professional requirements, specifications, and laws. The use of topographic mapping in the form of a DTM is prevalent on public works projects, building site projects, and subdivision of land projects.

A design produced from a DTM of the existing conditions is created in a Computer Aided Design (CAD) program and have been/are ultimately depicted on paper. These paper plans are signed and sealed by a professional engineer and are the basis for the bidding and building of the project by a contractor.

Once the contract is awarded, the contractor begins to clear the site so that the improvement can be constructed. The contractor will then have a land surveyor come to the job site to “layout” the project on the ground. This consists of the land surveyor establishing or reestablishing monuments on the project’s datums to control the job site, calibration of their high precision equipment, reading and interpreting the plans, and finally surveying in the marks on the ground that the contractor will use to build the improvement. The picture below shows a crew surveying in a mark to very precise standards.



Emerging Technology

The workflow described above is still prevalent on many projects. However, MGS is an emerging technology that allows for job sites to be graded without the need for grade stakes.

How does it work? Typically, the construction equipment is outfitted with GPS antennas and receivers and a sophisticated computer. (Note: the equipment may also be installed with an optical reflector and communication devices to receive measurement data from total stations.) The pictures at the top of the next page are examples of the equipment.

Continues on page 26



After the equipment is outfitted, the DTM of the existing site conditions as well as a DTM of the designed improvements are then loaded onto the computer. The equipment is then utilizing the high precision surveying equipment (GPS and total stations) to get measurement data to the computer. The computer then displays grading information to the heavy equipment operator who uses that information instead of grade stakes and stringlines to grade the job site.

Since MGS is an emerging technology it has the typical growing pains that all emerging technologies have: namely, how to effectively implement it, how to ensure the quality of the results, and clarifying the confusion on the roles and responsibilities for its implementation and use.

Issue

The main issue of this white paper is to clarify the confusion on the roles and responsibilities for the implementation and use of MGSs. The areas of confusion are around the following services: establishing the geodetic control that will be used to position the MGSs properly, manipulation of the electronic data that will ultimately end up in the MGS' computer, calibration of the measuring equipment (GPS and/or total station), quality control of the finished graded site, and statements of accuracy for the finished graded site.

All of these services require specialized training, experience, and education. The following is a list identifying the specialized knowledge for each area of confusion:

1. The establishing of geodetic control requires the understanding of geodesy, an understanding of measurement theory, and an understanding of error analysis.
2. The manipulation of the electronic data requires an understanding of quality control and quality assurance.
3. The calibration of the measuring equipment requires an understanding of the limitations of the equipment and understanding calibration techniques.
4. The quality control of the finished graded site requires an understanding of national, state, and local standards to accurately determine if the site meets the required specifications as well as an understanding of the appropriate techniques to determine the quality of the graded site.
5. The making of a statement of accuracy for the finished graded site requires an understanding of error theory, statistics, the appropriate standards, and the appropriate specifications.

It is difficult for land surveyors and engineers to understand why there is confusion over who should be providing the above listed services, as these services are the same as those that have been provided in the past on projects that did not use MGSs.

As a matter of fact, these services are legally mandated to be performed by a land surveyor or an engineer. Additionally, it is perplexing to understand why a contractor would want to take on the liability that a land surveyor takes on when providing the legally protected service.

Legal Basis

What is the legal basis? It is the defined practices of land surveying and engineering in the Business and Professions Code under The Professional Land Surveyor's Act (LSAct) Sections 8700 et. seq. and the Professional Engineer's Act Sections 6700 et. seq.: specifically, 8726 of the LSAct and 6731 and 6731.1 of the PEAct, the language of which is below.

*Note: the sections that contain the language that directly addresses the areas of confusion stated above are shown in ***Bold/Italic***.*

8726. Land surveying defined

A person, including any person employed by the state or by a city, county, or city and county within the state, practices land surveying within the meaning of this chapter who, either in onista public or private capacity, does or offers to do any one or more of the following:

- (a) ***Locates, relocates, establishes, reestablishes, or retraces the alignment or elevation for any of the fixed works embraced within the practice of civil engineering, as described in Section 6731.***
- (b) ***Determines the configuration or contour of the earth's surface, or the position of fixed objects above, on, or below the surface of the earth by applying the principles of mathematics or photogrammetry.***
- (c) Locates, relocates, establishes, reestablishes, or retraces any property line or boundary of any parcel of land, right-of-way, easement, or alignment of those lines or boundaries.
- (d) Makes any survey for the subdivision or resubdivision of any tract of land. For the purposes of this subdivision, the term "subdivision" or "resubdivision" shall be defined to include, but not limited to, the definition in the Subdivision Map Act (Division 2 (commencing with Section 66410) of

Title 7 of the Government Code) or the Subdivided Lands Law (Chapter 1 (commencing with Section 11000) of Part 2 of Division 4 of this Code).

(e) By the use of the principles of land surveying determines the position for any monument or reference point which marks a property line, boundary, or corner, or sets, resets, or replaces any such monument or reference point.

(f) Geodetic or cadastral surveying. As used in this chapter, geodetic surveying means performing surveys, in which account is taken of the figure and size of the earth to determine or predetermine the horizontal or vertical positions of fixed objects thereon or related thereto, geodetic control points, monuments, or stations for use in the practice of land surveying or for stating the position of fixed objects, geodetic control points, monuments, or stations by California Coordinate System coordinates.

(g) Determines the information shown or to be shown on any map or document prepared or furnished in connection with any one or more of the functions described in subdivisions (a), (b), (c), (d), (e), and (f).

(h) Indicates, in any capacity or in any manner, by the use of the title "land surveyor" or by any other title or by any other representation that he or she practices or offers to practice land surveying in any of its branches.

(i) Procures or offers to procure land surveying work for himself, herself, or others.

(j) Manages, or conducts as manager, proprietor, or agent, any place of business from which land surveying work is solicited, performed or practiced.

(k) Coordinates the work of professional, technical, or special consultants in connection with the activities authorized by this chapter.

(l) Determines the information shown or to be shown within the description of any deed, trust deed, or other title document prepared for the purpose of describing the limit of real property in connection with any one or more of the functions described in subdivisions (a) to (f), inclusive.

(m) Creates, prepares, or modifies electronic or computerized data in the performance of the activities described in subdivisions (a), (b), (c), (d), (e), (f), (k) and (l).

(n) Renders a statement regarding the accuracy of maps or measured survey data.

6731. Civil engineering defined

Civil engineering embraces the following studies or activities in connection with fixed works for irrigation, drainage, waterpower, water supply, flood control, inland waterways, harbors, municipal improvements, railroads, highways, tunnels, airports and airways, purification of water, sewerage, refuse disposal, foundations, grading, framed and homogeneous structures, buildings, or bridges:

(a) The economics of, the use and design of, materials of construction and the determination of their physical qualities.

(b) The supervision of the construction of engineering structures.

(c) The investigation of the laws, phenomena and forces of nature.

(d) Appraisals or valuations.

(e) The preparation or submission of designs, plans and specifications and engineering reports.

(f) Coordination of the work of professional, technical, or special consultants.

(g) Creation, preparation, or modification of electronic or computerized data in the performance of the activities described in subdivisions (a) through (f).

Civil engineering also includes city and regional planning insofar as any of the above features are concerned therein.

Civil engineers registered prior to January 1, 1982, shall be authorized to practice all land surveying as defined in Chapter 15 (commencing with Section 8700) of Division 3. [NOTE: The last registration number issued to a civil engineer registered before January 1, 1982 was 33,965.]

6731.1. Civil engineering; additional authority

Civil engineering also includes the practice or offer to practice, either in a public or private capacity, all of the following:

(a) Locates, relocates, establishes, reestablishes, or retraces the alignment or elevation for any of the fixed works embraced within the practice of civil engineering, as described in Section 6731.

(b) Determines the configuration or contour of the earth's surface or the position of fixed objects above, on, or below the surface of earth by applying the principles of trigonometry or photogrammetry.

(c) Creates, prepares, or modifies electronic or computerized data in the performance of the activities described in subdivisions (a) and (b).

(d) Renders a statement regarding the accuracy of maps or measured survey data pursuant to subdivisions (a), (b), and (c).

Recommended Solution

As stated above, I am recommending that all land surveyors monitor the use of MGS by contractors to determine if they are performing legally defined land surveying tasks without having a land surveyor or qualified Engineer in responsible charge. If the unlawful practice is identified then the contractor should be notified as well as the Board for Professional Engineers and Land Surveyors (BPELS). Additionally, I recommend that land surveyors request BPELS to contact the Contractors State License Board and request that they communicate with their licensees the legally defined practices of land surveying and engineering as it relates to MGS. This is a first step to clarify and remove the unlawful practice of the land surveying and engineering professions as it relates to MGS. ◉

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Oregon's "Moon Tree"
is the Rocky Mountain
Douglas Fir in the
center of this photo.

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it is planted?

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LONG 123° 01' 50" W

