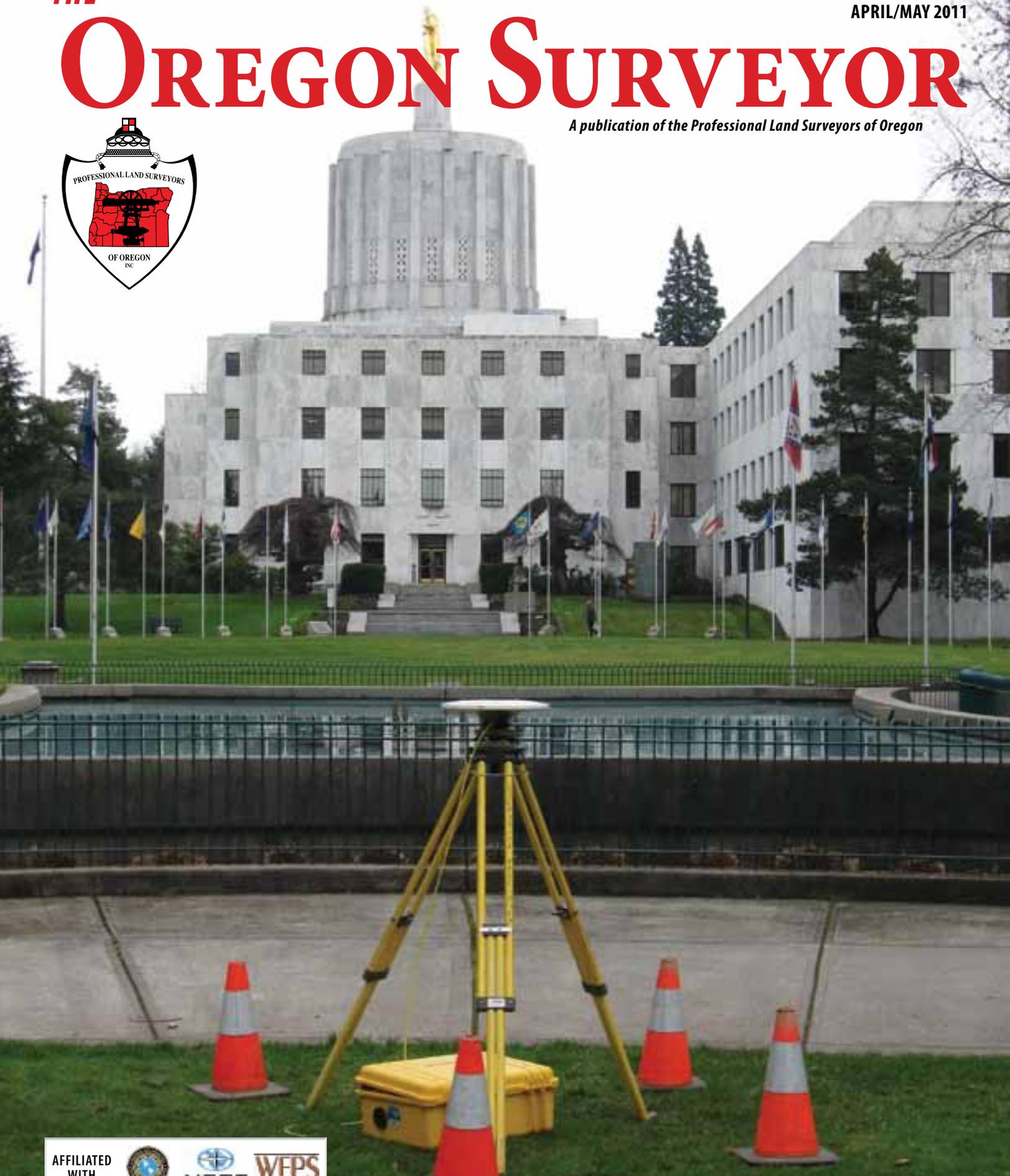


THE

VOL 34 NO 2  
APRIL/MAY 2011

# OREGON SURVEYOR

*A publication of the Professional Land Surveyors of Oregon*



AFFILIATED  
WITH



WFPS

# 2011 PLSO OFFICERS

## CHAIR **GARY ANDERSON**

503-684-0652 | ganderson@westlakeconsultants.com

## CHAIR-ELECT **MASON MARKER**

541-273-2191 | mason.marker@oit.edu

## PAST CHAIR **TIM FASSBENDER**

541-682-2704 | tim.h.fassbender@ci.eugene.or.us

## EXECUTIVE SECRETARY

### **MARY VANNATTA, CAE**

PO Box 2646  
Salem, OR 97308-2646  
503-585-4551  
execdirector@plso.org

<b>Central 1</b>	PRESIDENT	Parneli Perkins	pperkins@verticalsurveying.com
	PRESIDENT-ELECT	Andrew Huston	ahuston@whpacific.com
	SECRETARY/TREASURER	David Williams	davew@hwa-inc.org
<b>Midwest 2</b>	PRESIDENT	Jeremy Sherer	jeremy.sherer@co.lane.or.us
	PRESIDENT-ELECT	Ron Rice	ronrice@geomax.us
	SECRETARY/TREASURER	Guy Dent	gdent@ci.springfield.or.us
<b>Pioneer 3</b>	PRESIDENT	Lee Spurgeon	lee@lovelandsurveys.com
	PRESIDENT-ELECT	John Thatcher	jthatch1@ch2m.com
	SECRETARY/TREASURER	Jered McGrath	jmcgrath@mackaysposito.com
<b>Rogue River 4</b>	PRESIDENT	Stephan (Pat) Barott	sbarott@charter.net
	PRESIDENT-ELECT	Daren Cone	dcone4stengr@embarqmail.com
	SECRETARY/TREASURER	Joseph A. Bova	bojova@aol.com
<b>South Central 5</b>	PRESIDENT	Allen Hart	allen.j.hart@odot.state.or.us
	PRESIDENT-ELECT	Tom Del-Santo	tom@ci.klamath-falls.or.us
	SECRETARY/TREASURER	Sarah Burgi	sarah.burgi@oit.edu
<b>Southwest 6</b>	PRESIDENT	Russ Dodge	rdodge@hgel.com
	PRESIDENT-ELECT	Mike Erickson	merickson@dyerpart.com
	SECRETARY/TREASURER	Corey Woodruff	coreywoodruff@stuntzner.com
<b>Umpqua 7</b>	PRESIDENT	Ron Quimby	surveyor@ieengineering.com
	PRESIDENT-ELECT	Carl Sweden	cslandsurveying@douglasfast.net
	SECRETARY/TREASURER	Brent Knapp	brent.knapp@umpqua.com
<b>Willamette 8</b>	PRESIDENT	Lee MacDonald	lee@macdonaldsurveying.com
	PRESIDENT-ELECT	Jamey Montoya	insanity4free@yahoo.com
	SECRETARY/TREASURER	Nathan Magness	magness@wbcable.net
<b>Blue Mountain 9</b>	PRESIDENT	Michael Posada	mposada@andersonperry.com
	PRESIDENT-ELECT	Rod Lewis	lewis.survey@eotnet.net
	SECRETARY/TREASURER	Steve Haddock	wisnesstree@eoni.net

## COMMITTEE CHAIRS

### ACSM/NSPS

Bob Neathamer  
Scott Freshwaters

### ARCHIVES

Roger Galles

### AWARDS

Logan Miles

### BUDGET

Gary Johnston

### BY-LAWS/CONSTITUTION

Brent Bacon

### CONFERENCE

Tim Kent

### EDUCATIONAL

### GOALS & ACTIONS

Joe Ferguson  
Gary Anderson

### GEOCACHE

Ryan Godsey  
Dan Linscheid

### GPS USERS GROUP

John Minor

### HISTORIAN

Bert Mason, Jr.

### INTERNET/WEBPAGE

Tyler Parsons

### LEGISLATION

Scott Freshwaters  
Dan Linscheid

### THE OREGON SURVEYOR

Oran Abbott, Editor  
Chuck Wiley

### OACES LIAISON

Pat Gaylord  
Scott Freshwaters

### OSBEELS LIAISON

Mark Mayer

### PPI FUND

Gary Anderson

### PROFESSIONAL PRACTICES

Bob Neathamer

### SCHOLARSHIP

Steve Haddock

### STRATEGIC PLAN

Gary Johnston

### TRIGSTAR

Joe Ferguson

### WESTFED

Greg Crites

## Publications Committee

Oran Abbott, Editor • oranabbott@gmail.com • 503-475-5534

Greg Crites • gac@deainc.com • 503-223-6663

Bert Mason, Jr. • 503-479-1445

Chuck Wiley • charleswiley@gmail.com • 503-970-3981



# THE OREGON SURVEYOR

Volume 34, No. 2  
April/May 2011

## Professional Land Surveyors of Oregon

### Executive Director

Mary VanNatta, CAE  
PO Box 2646

Salem, OR 97308-2646

503-585-4551 • Fax: 503-585-8547

execdirector@plso.org

www.plso.org

### Editor

Oran Abbott, PLS

### Published by

## LLM Publications, Inc.

8201 SE 17th Ave  
Portland, OR 97202

503-445-2220 • 800-647-1511

www.AssociationPublications.com

### President

Linda L. Pope

### Ad Sales

Karl Doreza

### Design

Lisa J. Switalla

**LLM**  
PUBLICATIONS  
*Where Publishing Comes To Life*

# CONTENTS

From Your Chair	3
Editor's Note	4
View from the PLSO Office	6
<b>Reports</b>	
PLSO Board Meeting Minutes—January 2011	8
PLSO Board Meeting Minutes—March 2011	10
PLSO Scholarship Committee Report	16
Legislative Update	18
News from the Chapters	28
Central Chapter Celebrates George Cook's 50 Years of Licensure	28
<b>Features</b>	
2011 PLSO Conference Wrap-up and Statistics	14
NSPS Oregon Governor 2011 Election	17
Paddle to the Pacific: 2011 David Thompson Columbia Brigade	25
<b>Articles</b>	
GPS vs. LightSquared: Ongoing debate	20
Prevent GPS from Disappearing	20
A Letter from Oregon Senator Jeff Merkely	21
LightSquared Saga, and Recent Solar Activity	22
Letter to Editor: I Didn't Like That	24
Boundary by Agreement	26
Surveyors on the Move!	27

**On the cover:** This picture was taken by Eric D. Lynch just west of the Capital on January 20, 2011, during our conference in Salem. I have two other pictures with people in them, took notes and then with an attack of senility I lost the notes. Can you tell me what company owns the GPS unit? Please email it to me at oranabbott@gmail.com.



## TRIMBLE TSC3

We've added a lot more capability.  
Without taking anything away from its simplicity.



### THE NEW AND IMPROVED TRIMBLE TSC3 CONTROLLER

The problem with new and improved is that too often it means unfamiliar and different. That's not the case with the new Trimble TSC3 controller.

Optimized for Trimble Access, this new field solution delivers more capable data collection, computing and connectivity than ever before, without sacrificing the familiar functions that have made our surveying systems famous.

### COLLECT SHARE AND DELIVER:

A larger, full-color screen means more function from the map screen and more direct access to the features you need to complete the job. And keep the data flowing with integrated Bluetooth, Wifi and cellular modem.

Trimble Access field software allows you to bring data from the internal GPS, compass and camera into your workflow. In a single step you can automatically add images as attribute information to any point you are measuring.

Easier and more effective? Yes. More complicated? Not at all. The new Trimble TSC3 controller. It does amazingly complex things—all designed to make doing your job easier.



To learn more about the new  
Trimble TSC3, visit: [trimble.com/TSC3](http://trimble.com/TSC3)



COLLECT



SHARE



DELIVER

SUCCESS FOUND HERE



© 2011, Trimble Navigation Limited. All rights reserved. Trimble and the Slide & Thrust logo is a trademark of Trimble Navigation Limited, registered in the United States and in other countries. Trimble Access is a trademark of Trimble Navigation Limited. All other trademarks are the property of their respective owners. 528-110

**FOR MORE  
INFORMATION CALL YOUR  
TRIMBLE DEALER**

**GeoLine Positioning Systems**  
Portland, OR  
800-523-6408

**Pacific Survey Supply**  
Medford, OR  
800-866-9130

# From Your Chair

■ Gary Anderson, PLS



## Are we visualizing ourselves headed for Chaos or Community?

Why, I ask myself, would I have raised such a question? As I did in my first article as your 2011 Board Chair. Today, as I write this letter, we are both a community...and we are somewhat in chaos. However, I believe the strength of our community is rising above any confusion.

Particularly lifting my spirits are the number of thoughtful and pointed expressions of concern, and of understanding, as PLSO and others work toward making legislative changes which will affect Surveyors. This exchange of ideas has given rise to a level of dialogue which is very much needed. What may seem confrontational at first is often actually educational. I know my own "learning curve" has certainly risen exponentially in the past few months. My hope for each of you is that your opportunities for learning and personal involvement are also on the upswing. Developing relationships within your community provides the basic infrastructure for a richer life experience, both personally and professionally.

At the end of March, Joe Ferguson (PLSO 2010 Surveyor of the Year) and I attended the American Society of Photogrammetry and Remote Sensing (ASPRS) and Urban and Regional Information Systems Association's (URISA) combined Annual Conference, on behalf of PLSO. The conference, held at Portland State University, featured the theme "GIS in Action".

The event turned out to be a valuable outreach experience. We handed out many flyers and brochures about PLSO Geocaches, Geomatics educational options, PLSO Membership and the David Thompson Columbia Brigade. During the two day conference, we spoke with over 30 people interested in surveying. Some wanted to know how surveyors do what we do. Many asked about job opportunities and shared their expertise in geography and data analysis. We directed these folks to PLSO's website where three job offerings were then posted in the "classifieds". Some people inquired about possibilities for an internship in surveying (watch for a poll coming out soon to solicit news of such programs this summer), and one person stopped by to share how, in his experience over the past few decades (as a cartographer for a County Assessor),

every surveyor he had encountered had been very knowledgeable, helpful, a clear communicator and honest. Hearing such a perception makes one feel proud and humble. The surveying profession does have a long and rich history of creating community leaders, statesmen and shapers of cultural standards. Surveyors today have the opportunity to follow in some very large and prominent footsteps.

One final note from attending the "GIS in Action" conference: the keynote speaker, former Wyoming Governor, Jim Geringer, shared some simple, yet inspiring wisdom which echoes in my mind. "Be open to sharing" (data) and whenever we are speaking "think about other's" (perspective).

Speaking of learning, an increasing amount of worthwhile educational materials concerning surveying are becoming available to the general public. Surveying and related Geospatial Sciences are widely in the news these days. Two college programs I recently read about offer encouragement for the future of our profession. At Michigan Technological University (MTU), a "New Geospatial Educational Paradigm" includes the recognition of the need to be in close communication with the professional surveying community. Quoting from a paper I read about MTU in *SaLIS*, (Vol. 70, No. 4, pp. 211-216) the *NSPS Journal*: "... surveying, with its long and successful history of merging field work, theory, accuracy and completeness, legal aspects and data representation, is of the utmost relevance."

Also, available from Penn State Public Broadcasting are four new videos, described as: "Compelling stories for everyone. Through vivid descriptions and engaging storytelling, the Geospatial Revolution Project explores how people use layers of satellite information and location-based technologies to solve problems and change lives. This project shares the real impact of geospatial technology and points out that it takes engineers, surveyors, analysts, and technicians, as well as public participation, to make it all possible..." The website ([www.geospatialrevolution.psu.edu](http://www.geospatialrevolution.psu.edu)) includes a link to teaching materials for K-12 instructors.

If radio is your preferred media for learning, you can listen to Curt Sumner's conversations about surveying,

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.

**ADDRESS CHANGES & BUSINESS**

All notifications for changes of address, membership inquiries and general PLSO society business correspondence should be directed to:

Mary VanNatta, CAE  
VanNatta Public Relations and  
Association Management  
503-585-4551  
Fax: 503-585-8547  
execdirector@plso.org

Editorial matters should be directed to:

Oran Abbott, Editor  
503-475-5523  
oranabbott@gmail.com

**CONTRIBUTIONS OF MATERIAL**

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.

**EDITORIAL DEADLINE**

For an editorial calendar, please contact Lisa Switalla at lisa@llm.com

**ADVERTISING POLICY**

Advertising content and materials are subject to approval of the PLSO Board and LLM Publications, Inc. The publisher reserves the right to reject any advertising that simulates copy; material must be clearly marked as "Advertisement."

For advertising information and rates, contact:

Karl Doreza  
503-445-2241 / 800-647-1511 x2241  
karl@llm.com

Send display ads or artwork in digital format to ads@llm.com. For submission guidelines, contact ads@llm.com.

© 2011 LLM Publications, Inc.

# Editor's Note

■ Oran Abbott, PLS, oranabbott@gmail.com



For those who follow the weather, we had only one good day in March and two good days in April. If you were properly dressed for the cold and rain, then they were all good days. I was thinking of some of the worst and best weather that I have surveyed in over the years. In the past, when working on three man crews, and with the equipment we were using, it was a bit more difficult than the circumstances we have now.

One of my first surveying tasks was holding a 25 foot rod for shooting topo—the sky was clear with no rain or snow, the high temperature was 25 degrees, and the wind was blowing from the east at 40 to 60 mph. I was dressed well enough to take the weather conditions, but the person taking notes and the instrumentman gave up after an hour. On another day, the east wind lifted my rear chainman off his feet and slid him to the curb—the wind gusting to 70 mph caught the chain once it was raised above the curb.

Not all of the winds at the west end of the Columbia Gorge come from the east. One morning, as my crew pulled into a parking lot during a winter storm, I realized that a ruler we needed was in another truck at the other end of the job. Rather than getting out of the truck, we drove back to get the ruler. Upon returning to the parking lot we dodged several large branches that were blown off the trees. When we entered the parking lot, a tall fir tree was swaying back and forth right above where we were originally parked. We stopped at the parking lot entrance and watched the tree as it broke and fell right across our previous parking spot. It would have completely crushed the truck. That same storm developed a tornado that wiped out several houses in Vancouver.

Do you notice that often you remember the bad weather days, but not the good ones? Once I was rowing a raft down the Deschutes River and thought the weather was great. I checked the temperature afterwards and realized it was 110 degrees. I never even felt it!

Another day I was atop ten feet of snow, the temperature was 28 degrees and I thought the weather was great. I was inside the caldera on Mt. St. Helens, over 9,000 feet elevation, before it blew. The sun rays bounced off the snow and collected on anything that was not colored white. There were 20-some climbers in the area wearing boots, goggles, shorts and t-shirts, playing Frisbee in the snow.

I wonder what we will remember in 25 years when we will most likely not have to be outside as often. Maybe we will gaze at pictures since we all have phones. Take notes and pictures for future writers and editors. ◊

## The Lost Surveyor

From the back cover

**LAT 45° 35' 49" N LONG 122° 53' 54" W**

**Question:** Can you tell me where this trestle is located or the name of the street that runs under it?

**Answer:** This trestle is going across Dick Road just north of NW Phillips Road and west of Cornelius Pass in Washington County. Its one of the older and higher trestles left in the low lands that is still in use.

each Monday (or whenever you like from the archives) on America's Web Radio at [www.radiosandsprings.com/showpages/ACSM.php](http://www.radiosandsprings.com/showpages/ACSM.php).

Finally, for those who like to settle in with a good book, I strongly recommend "Maps: Finding Our Place in the World" edited by James R. Akerman and Robert W. Karrow, Jr. One review from the publisher's website describes the book this way:

*"This is a fine work that belongs on the shelf of every serious student, not just of the history of cartography but also of maps as sociocultural artifacts... [It] admirably captures and lucidly explains the study of cartography and its history over the last several decades. If I were to select a single work to teach a course on maps to a class whose familiarity with the subject ranged from knowledgeable to nil, I might well choose this one...It contains such a wealth of information that advanced students would still learn a great deal, and it is written with sufficient clarity that beginners could understand it. Few books can make such a claim."*

—Hubert O. Johnson, *The Portolan*

Don't forget, this is the bicentennial year for the David Thompson Columbia Brigade ([www.2011brigade.org](http://www.2011brigade.org)). PLSO is supporting the Brigade's reenactment of Thompson's canoe trip down the entire length of the Columbia River, beginning at its source in Invermere, BC. Several PLSO members, along with surveyors from several Canadian provinces and other state societies will be paddling down the river, June 1–July 15. As they travel, they will be creating opportunities for partnering with PLSO chapters along the way, providing public outreach and goodwill. At each landfall, there will be opportunities to meet and network with fellow professionals from throughout North America.

You can usually find me at: North 45° 24 minutes 37.75 seconds & West 122° 44 minutes 54.25 seconds, or easier yet, you can call or email me with your input. ◉



## Your deadlines are our deadlines



Custom orders your way ... when you need them.

When your name is on it, our name is behind it.

**Berntsen delivers.**

The professional's choice in survey products • [www.berntsen.com](http://www.berntsen.com) • 877.686.8561

# View from the PLSO Office

■ *Mary Louise VanNatta, CAE; PLSO Executive Secretary*

## Ask the PLSO Executive Secretary

### **What is your job, as Executive Secretary?**

PLSO is an extremely stable organization and there have been very few executive secretaries in its 50+ year history. Today the model is a little different, in that PLSO now works with an association management company (AMC), which provides a great depth of knowledge from more staff people. We bring financial management, event planning and executive management skills to the table along with regular business hours. Just like surveying, association management is a career and industry all its own. We train in budgeting, strategic planning, board leadership and management and technology. Our job is to make sure PLSO runs legally and efficiently and the members and money are carefully accounted for at every level.

### **What is the most common call you get at the office?**

We staff the phones full time for PLSO. Our calls come in two groups: members and the public. Members or PLSO volunteer leaders call with issues you might expect. They include updating records, finding out about events or ordering supplies. Those are generally longer conversations. The most common public call is someone asking us to help them find a surveyor in their area or someone who has an issue with a survey or surveyor. We also receive calls from the public requesting information regarding exams for those desiring to receive their licensing as a surveyor.

### **What do you do with those types of calls from the public?**

We generally direct people who are looking for a surveyor to the PLSO website, where they can access a directory of members who can help them. If they do not have access to the internet, we mail them the list or read the names of everyone listed in their area. Many people are confused about the difference between OSBEELS and PLSO, so many calls are referred to OSBEELS. If someone is inquiring about a career in surveying, we provide them with information and, if they want, we give them the names of a few members who would be



willing to talk with them. If someone is interested in study materials and resources for taking the exam to receive their license, we also refer them to OSBEELS.

### **You have been working in the association management business for many years, what do you find the most interesting or surprising?**

I have been working in the association management business since the late 1980s. A lot has changed, especially in technology. There is a definite difference in generations. Many younger people forget that the internet has not been around forever and that there is a reason organizations do business like they do. It has been difficult for some people in associations to give up "the way things always have been." One thing that hasn't changed is the character of the amazing people who dedicate themselves to volunteer leadership.

### **What about PLSO? What's interesting or surprising?**

Well, there's no doubt that everyone, especially in the private sector, is experiencing a difficult time in business, because of the economy. Even with that going on, PLSO has not stopped its efforts to advance the professional development of its members and to encourage, mentor and educate young people. Surveyors are very smart and detail oriented. I think, because of their profession, they are more willing to embrace new ideas and technologies than other groups. Association work is based on engaging people and bringing them together for a common purpose.

Surveyors tend to be a little more "independent," but I think they do a pretty good job bonding together when needed.

**What do you see in the future for PLSO?**

PLSO has a great strategic plan and it is constantly monitored and updated. This is a rare quality in an organization and all members should take their time to read the strategic initiatives that are included. It gives me encouragement that the organization has vision. I'm looking forward to a change the organization is making in centralizing its website and contact data. I believe the group will need to think about the best ways to reach the next generation of surveyors so we can recruit the best and brightest to the career. There will be challenges in the profession and as technology becomes more advanced, PLSO needs to keep its members updated and competitive. There will be a continuing need to explain to the public the value of a professional surveyor, especially one who is also a member of PLSO.

**What will be your biggest challenge in the coming year?**

When I started with PLSO, I was surprised that a large number of registered surveyors were not a member of PLSO. I would like to turn that around. There are always financial challenges, balancing the organizational needs and wants with the available resources. Providing member services, especially, quality professional development opportunities will be something I will be watching. ◦

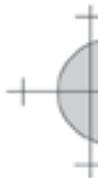
# VanNatta Public Relations, the operating office for PLSO, achieves EarthWISE Certification

EarthWISE Certification recognizes businesses in Marion County, Oregon, that have made a commitment to environmentally friendly practices. To earn the EarthWISE Certification, businesses must immediately, or over time, meet pre-established criteria in the EarthWISE focus areas.

"I'm proud to bring these environmentally friendly practices to my work with PLSO," said Mary Louise VanNatta, PLSO Executive Secretary.

*Congratulations!*





**pacific survey supply**

The Northwest's Authorized Trimble & Survey Pro Distributer!

908 N. Riverside  
Medford  
10150 Commerce circle  
Wilsonville  
800-866-9130

**SPRING IS HERE!**  
Come in and check out our Specials!

TSC3



NOMAD



S3  
S6  
S8  
VX



R8  
O  
V  
E  
R



ALL SURVEY- PRO PRODUCTS  
ARE ON SALE NOW! 

**Spring is a great time to get your instrument ready for the season! Mention this ad and receive 10% off all parts!**

If you are looking for new or used gear look no further, we will work with you on trade-ins simply help you sell your used gear and turn it into cash!

**LATH, HUBS, PAINT AND FLAGGING**  
Call 800-866-9130  
for all your Supply needs!

We stock the best brand names for all your needs.  
**TRIMBLE, SOKKIA, SECO, NIKON, SPECTRA PRECISION, LTI, BRUNTON AND MORE!**

[www.pacificsurvey.com](http://www.pacificsurvey.com)

# PLSO Board of Directors Meeting Minutes

## January 21, 2011—Salem Conference Center, Salem

### Attendees

#### Officers

CHAIR Gary Anderson | CHAIR-ELECT Mason Marker | EXEC. SECRETARY Mary Louise VanNatta, CAE

#### Board Members

CENTRAL (1) Scott Freshwaters, President | Andrew Huston, President-Elect  
MIDWEST (2) Jeremy Sherer, President | Ron Rice, President-Elect | Guy Dent, Sec/Treasurer  
PIONEER (3) Lee Spurgeon, President | John V. Thatcher, President-Elect  
ROGUE RIVER (4) Stephan Barott, President | Daren Cone, President-Elect  
SOUTH CENTRAL (5) Alan Hart, President  
SOUTHWEST (6) John Minor (Alternate for Edith Forkner)  
UMPQUA (7) Ron Quimby, President  
WILLAMETTE (8) Lee MacDonald, President | Jamey Montoya, President-Elect  
BLUE MOUNTAIN (9) Mike Posada, President | Rod Lewis, President-Elect

#### Committee Chairs

ARCHIVES Roger Galles | FINANCE Gary Johnston | LEGISLATIVE/OACES LIAISON Scott Freshwaters  
SCHOLARSHIP Steve Haddock | WEBMASTER Tyler Parsons | WFPS Greg Crites

#### Guest

ISPLS Chair, Ron Hodge (guest from Idaho Board)

**Strategic Planning** (Gary Johnston)—Johnston provided a summary of the Strategic Plan. He encouraged leadership and volunteers agreed to assist in the following areas:

- Inspire Members (Spurgeon, Cone)
- Conduct Outreach (Marker)
- Foster Excellence (Barott, Hart)
- Advance Legislation (Quimby, Freshwaters)

*(This list is incomplete. There were at least four hands raised for each strategic direction)*

Anderson requested that the officers poll membership as to their interest on any of the specific initiative items.

**2011 Budget approval** (Gary Johnston)—Johnston passed out an overview. We have been operating at a slight loss over the past few years. For 2011, our calendar year budget will show a projected loss of over \$100,000. Spurgeon asked for confirmation that part of the reason for the loss is because income for the 2012 conference will be in 2012, not at the end of 2011. Johnston said this is true, but we still need to be fiscally conservative over the year.

Sherer asked about the proposed change in dues collection. He suggested that when we go to mid-year collection, we consider gaining money through offering 1½ year collection for dues.

#### *Out of agenda order*

**2011 Conference** (Tim Kent)—Kent provided a short conference report. The cost of the conference was lower because of a board request to offer a break-even rate (based upon 400 attendees), but with walk-ins and cost cutting measures the conference will make a profit.

Discussion about the lack of handouts and overcrowding was held. Many positive comments were expressed to the committee.

### Call to Order

The meeting was called to order at 1:08 pm by Chair Gary Anderson. Welcome and self-introductions were made.

### Review and Approve Agenda

MOTION: Cone moved that the agenda be approved as submitted. MacDonald seconded. Motion passed.

### Approval of Minutes

The minutes of the December 11, 2010 Board Meeting were reviewed.

MOTION: Quimby moved the minutes be approved as presented. Spurgeon seconded. Motion passed.

### Report FROM THE Chair

Anderson said that he hoped everyone heard his presentation at the Annual Meeting. He is looking forward to a good year and wants the group to be mindful stewards of the group's funds and remember they represent the membership. Our past board minutes are on PLSO website. Last year's

membership survey will be forwarded. Anderson later noted five articles of possible interest in Volunteer Leadership.

### Report FROM THE Executive Secretary

VanNatta reported that the group had \$169,241.82 in the bank, but reminded the group that conference and membership income continues to come in, as well as that conference expenses will be paid soon. They are working with the various committees and engaging in social media. There are 602 members as of January 13.

**Board Orientation** (Mary Louise VanNatta)—VanNatta went over the organization of the board. She discussed conflict of interest, ethics and expectations. She showed a presentation of Board Orientation 101.

### Old Business

*NOTE: Just a suggestion, but in the future, Strategic Plan, Finance and Legislative presentations seem more appropriately assigned to Committee Reports.*

### **Return to budget discussions**

Johnston reported that there are some changes in the budget that should be noted: *The Oregon Surveyor* was proposed to move to four issues a year to save nearly \$8,000. It was confirmed that this was against board recommendations to stay at six issues a year. Perkins asked if staff listed under Professional Service have been asked to also take part in reductions. It was reported that the VPR contract currently runs through October 2011. The lobbyist agreement runs through December 2011, but the board could address the question of negotiating a change to the agreement in the future. Quimby said we need to decide if we want to approve a budget or not. Anderson reminded the group that we are spending our money effectively.

MOTION: Quimby moved, Spurgeon seconded that the budget be accepted as presented. Motion passed. Sherer and Perkins voting no.

**By-Law Changes** (Brent Bacon)—Bacon was not in attendance, but reported that chapters need to go back to their members to get approval for currently proposed changes to the bylaws. Anderson reminded the board a deadline extension to February 28 was provided for membership input.

**Legislative** (Scott Freshwaters)—A number of members attending the conference went on a tour of the statehouse. Fred VanNatta provided the tour and they met with Rep. Whitsett from Klamath Falls. Whitsett was presented with our PLSO position paper. Because the legislature is in adjournment, there were not too many people there, but our delegation visited with staff. He suggested that people take the time to visit or contact their legislator. Anderson asked that the position paper and “Legislative Session Quick card” be put on the website.

**501(c)3 Charity and 501(c)6 Trade Association** (John Minor)—Anderson reported at the last board meeting that the group

decided to move forward with the development of a 501(c)3 charitable organization. The idea came about because there had been changes, effecting PLSO, to government policy on volunteering with/for trade organizations, also such that donations from members could become tax deductible and as an opportunity to get grants if we formed a 501(c)3.

Fassbender reported in writing that he has drafted a preliminary set of documents (Articles of Incorporation, Bylaws and 501(c)3 IRS form) which are currently being reviewed by an attorney. Prior to the next PLSO Board Meeting, he will supply these documents for review and discussion before submitting the documents to form the Foundation. He noted PLSO needs to create a corporation within the State of Oregon which requires the submission of the necessary paperwork. After we have a corporation name, we submit the necessary paper work with the IRS to obtain the 501(c)3 status.

Sherer asked how that fits into our Strategic Plan. Anderson said that it could be a means of encouraging public outreach, making PLSO eligible to obtain grants to promote projects, and qualify scholarship donations as tax deductible donations, not just as deductible business expenses.

Anderson will check with Fassbender on how he is proceeding with the project. Minor and VanNatta noted that there had not been any meetings of the group to date.

### **Chemeketa CC Survey Program**

(Lee MacDonald)—MacDonald has contacted Cheryl Roberts (Chemeketa CC President) and hopes she can come to the next chapter meeting. People are interested in the program and he hopes he can get folks from David Evans & Assoc. and other firms to attest to the number of employees they have found through this program and their feelings regarding the adequacy of training.

## **New Business**

---

**Standing Committee Chairs**—Anderson said we need to add more chairs and vice-chairs to the organization. No suggested names were given. Anderson will work on filling those roles. He suggested that chapter president-elects work with Mason Marker on increasing our membership.

**NSPS**—Bob Neathamer, Pat Gaylord and Scott Freshwaters have asked to be considered for NSPS Oregon Governor. Article 13, 3(a) said that candidates should make their interest known and backgrounds should be discussed. Anderson would like to defer this decision to the next board meeting. Having each candidate prepare a presentation was suggested.

**2011 BoD Meeting Dates**—Meeting dates were to be confirmed. March 12, April 16, June 4, Sept. 10, October 22 and Dec. 3 were suggested. VanNatta will send out a survey to see when people can attend. It is possible that one of those six meetings will be eliminated.

## **Good of the Order**

---

Anderson reported that there was a request from SOLV to get volunteers and support.

Haddock provided operations manual updates for the scholarship committee. He would like to make those changes to the operations manual. It includes a confidentiality policy for the committee.

Parsons reported on the status of the board email lists.

Johnston reported that he felt great about the board’s orientation and discussions at this first meeting of 2011. He mentioned that Cone’s wife had an accident during the conference which required surgery.

Being no further business, the meeting was adjourned at 4:42 pm. ◉

# PLSO Board of Directors Meeting Minutes

## March 12, 2011—Mookies, Springfield

### Attendees

#### Officers

CHAIR Gary Anderson | CHAIR-ELECT Mason Marker  
EXEC. SECRETARY Mary Louise VanNatta, CAE | PAST-CHAIR Tim Fassbender

#### Board Members

CENTRAL (1) Parneli Perkins, President  
MIDWEST (2) Jeremy Sherer, President | Ron Rice, President-Elect  
PIONEER (3) Lee Spurgeon, President | John V. Thatcher, President-Elect  
ROGUE RIVER (4) Stephan "Pat" Barott, President | Daren Cone, President-Elect  
SOUTH CENTRAL (5) Alan Hart, President  
SOUTHWEST (6) Edith Forkner, President | Mike Erickson, President-Elect  
UMPQUA (7) Ron Quimby, President | Carl Sweeden, President-Elect  
WILLAMETTE (8) Lee MacDonald, President | Jamey Montoya, President-Elect  
BLUE MOUNTAIN (9) Mike Posada, President | Rod Lewis, President-Elect

#### Committee Chairs

ARCHIVES Roger Galles | BYLAWS Brent Bacon | EGAC/TRIGSTAR Joe Ferguson |  
FINANCE Gary Johnston | GPS USERS GROUP John Minor |  
LEGISLATIVE/OACES LIAISON Scott Freshwaters | PROFESSIONAL PRACTICES Bob Neathamer |  
SCHOLARSHIP Steve Haddock | WEBMASTER Tyler Parsons | WESTFED Greg Crites

### Call to Order

The meeting was called to order at 10:00 am by Chair Gary Anderson. Welcome and self-introductions were made.

### Review and Approve Agenda

Agenda was reviewed. Item "i" (non-profit process) was moved to beginning of Old Business.

MOTION: Quimby moved, MacDonald seconded the agenda be accepted with the change.

### Approval of Minutes

Minutes from January meeting were reviewed.

MOTION: Thatcher moved, Quimby seconded that the minutes be accepted.

### Report FROM THE Executive Secretary

VanNatta reported that PLSO membership stands at 639. Renewals are going well and there have been very few issues. Membership letters and cards have been printed and mailed to members. The online

membership application closed at the beginning of March and there is now a fillable PDF available on the website. We are in the process of coming up with new brochures for PLSO.

The PLSO accounts stand (02/28/2011)

Checking	\$ 88,254.22
Money Fund	\$ 64,974.39
Total Assets	\$ 153,228.61

This year's annual PLSO conference went well. The office had two people staffing the PLSO table. A number of casebooks were sold as well as plenty of other supplies and merchandise. The speakers loved getting to pick out their own gift from the PLSO table. Evaluations of the conference were sent out to all attendees. The PLSO office also helped assemble the awards and collected the money from the silent auction. The office continues to monitor financials in coordination with the Treasurer and the budget has been approved. The signature card has been changed at the bank. The new treasurers were given kits and attended a workshop at the conference.

Another episode of check fraud has been discovered. Someone tried to pass a PLSO check from our closed account at a Portland post office; this makes it a federal case. The office linked federal authorities with other cases that have occurred over the years. There is no risk to PLSO finances. The office will change accountants for the coming year and received good consulting from John Hawkins at Grove, Mueller Swank. In 2008 the IRS began implementing regulations regarding the filing of non-profit 990 tax return forms. The requirements were phased in based on an organization's level of gross receipts for the year. Because PLSO's gross revenues are greater than \$200,000, but less than \$500,000, they have been able to forgo the new regulations until this year.

Because we are no longer able to file the EZ form and this is the first year to file the new and expanded 990 form, there are a number of questions about governance and policies. While the IRS does not require that an organization adopt these policies, they are considering the best practice for the group to have and have said that organizations that have these policies are less likely to be audited. These include a conflict of interest policy, record retention policies, etc. The office will coordinate with Brent Bacon to provide the Board the proper policies to approve at the next board meeting.

The Survey Merit Badge was offered to Boy Scouts in Salem. Lee MacDonald was registered as a Merit Badge Counselor. The Design Professionals Day at the Capitol went well. The office brought materials for the general public to view about PLSO, as well as the orientation meeting at the beginning of the day, and answered questions

from the public about the organization. The office wrote articles for the *Oregon Surveyor*. Twitter and Facebook continue to be updated. They have also been actively using the online calendar and monitoring conversations of potential website changes. The office continues to answer many questions via email and phone for members and nonmembers alike, whether it concerns membership, career fair information or looking for a surveyor, etc. The office has updated the yearly board meetings calendar and is working on getting meeting locations verified for them. The office created a Google document with PLSO frequently used numbers and posted it on the webmaster Google account. They also updated the corporate commission administration website and prepared a procedure process for career fairs and trade shows as well as a document with steps for planning a meeting.

### **Report FROM THE Chair**

Anderson believes the board should spend time reviewing items that have come up through the committees. Committee leadership should submit their reports well ahead of board meetings for officers' review. Both should work together for ideas to get more members involved.

Anderson shared contacts made with PLSO:

- An attorney specializing in water boundary law who is interested in providing educational programs
- Two retired surveyors who feel there may be interest for PLSO to take up educational issues on seismic activity (i.e. rerun precise levels across the state)
- "GIS in Action" Annual Conference at PSU on March 29–30, invited PLSO to attend with booth space. Anderson and Ferguson will attend.

Information on URISA membership, at reduced rates, can be found at [www.urisa.org](http://www.urisa.org). A committee will review the executive secretary contract which is up for renewal in November.

### **Old Business**

#### *Change in agenda order*

**PLSO Non-Profit Status** (Tim Fassbender)—Fassbender brought the Foundation Bylaws to the board. The purpose is to give PLSO a way to create a tax deductible way to collect and distribute scholarship money and to apply for grants. Fassbender shared that "religious purposes" were removed from the "standard" bylaws. He showed a web video ([www.stayexempt.irs.gov](http://www.stayexempt.irs.gov)) describing how a group applies for tax exemption. There are a number of steps to set up the organization and filing requirements. Fassbender said this will not replace the scholarship process through OCF. Anderson asked that Fassbender's committee and the Scholarship Committee discuss this with OCF. Haddock asked about donated auction items and how that works. Sherer thanked Fassbender for his work on the Foundation. He would like a report on the cost/benefit analysis on creating a Foundation. Cone said we have a large endowment fund now.

MOTION: Rice moved and Quimby seconded that the Foundation be named Professional Land Surveyors of Oregon Foundation.

*Discussion:* MacDonald asked if we should call it an educational or charitable foundation. Thatcher said if we choose the broad foundation we can't create another foundation. Fassbender said they want to keep it broad.

Motion passed.

#### **NSPS Oregon Governor**

Two candidates, Scott Freshwaters and Bob Neathamer, forwarded their names for NSPS Governor and gave presentations to the Board.

**Proposed Bylaws Changes** (Brent Bacon)—Bacon brought the proposed bylaws changes before the board for a vote.

MOTION: Quimby moved that all bylaws changes be approved. Hart seconded.

Motion passed. Pioneer chapter

voted no, with qualification that they voted on each change individually and could not support the entire package.

#### **Chemeketa CC Surveying Program**

(Lee MacDonald)—Glen Miller from CCC and Bryan Hatzenbihler from Sprague High School came to the Willamette chapter's recent meeting. Miller said the reason for cutting the surveying program at Chemeketa was a numbers game. They have a two-year drafting program that has quite a few surveying credentials. There will be a one-year surveying certificate offered in the fall. They want to know what skills students need to work in our field. Willamette chapter will put together a group to discuss what we can do for them. Willamette chapter sent a letter of support to the school district about the drafting program at Sprague. Rice asked if the one-year certificate counts as time towards sitting for your license. Neathamer said "yes" as long as it meets OSBEELS rules. VanNatta and MacDonald will do a survey on student skills needed for the profession and possible interning opportunities.

#### **Oregon Surveyor Magazine**

(Gary Anderson)—There was a suggestion to poll members on making the *Oregon Surveyor* an e-document. VanNatta will ask the leadership if there are any questions we want to poll in the next month or so.

#### *Out of agenda order*

### **Committee Reports**

**Strategic Planning** (Gary Johnston)—Johnston reported that there were not too many updates to the strategic plan. Time was not available at this meeting for the board to break into subgroups. Team leaders have been selected.

**SD #1 Inspire Members**—Cone reported that he has been trying to get historic OSBEELS numbers, but they have not been available. Membership recruitment should be an actionable item. Spurgeon said he

Continues on page 12

would like to spend more time focusing on Associate members as they will be the future of PLSO. Johnston said we need to reach out to nonmembers by making personal contact. There is a need for fresh membership recruitment ideas.

**SD #2 Conduct Outreach**—The Foundation fits into this category. Marker is the leader. Thatcher reminded the group that TWiST was cancelled and should not be included in this category. MacDonald worked on the Survey Merit Badge. MacDonald and Montoya will help with this objective.

**SD#3 Advance Legislative Agenda**—Johnston asked chapters to generate local support for this strategic direction with member involvement and contact with legislators. More will be discussed with the legislative report from Scott Freshwaters.

**SD#4 Foster Excellence**—Allen Hart and Pat Barott will lead this direction.

## New Business

**Surveyor Connect Proposal**—Harness Technologies (Wendell Harness and David Souza) made a presentation on their services. Our PEAK contract is up for renewal in May. It would take a month to get things updated. Parsons reported that PEAK has been okay.

MOTION: Rice moved we allow an ad-hoc committee to decide on behalf of the association. Quimby seconded.

*Discussion:* Sherer asked for information to bring to his meeting on April 12. Anderson gave him a packet for Harness Technologies. Perkins asked who was on the committee. Parsons, VanNatta, Marker, Linscheid, Ferguson are on the committee.

Motion passed.

## Out of Agenda Order

### Committee Reports

**Webmaster** (Tyler Parsons)—Parsons, has been doing the website since 1997.

He would like to do something different and would like to retire this project. He received a round of applause.

**Conference** (Gary Johnston for Tim Kent)—The 2011 conference earned roughly \$31,500. There are some final expenses to code. The extended payment plan has \$700 coming in. He asked that chapters be mindful about planning workshops.

**Scholarship** (Steve Haddock)—We need changes in the operating policy to add a confidentiality clause, use of principle and a conflict of interest policy.

MOTION: It was moved by Quimby and seconded by MacDonald that the changes recommended by Haddock be added to the operating policy.

*Discussion:* Question about how the charitable foundation impacts the scholarship fund was asked. Bacon clarified that this will include an update to our operating policy.

Motion passed.

**EGAC/TrigStar** (Tim Ferguson)—There seems to be two main parts to this program, the first part deals with all levels of the educational system in Oregon. We seem to be doing okay at the college and high school levels. We are involved in career fairs, Trig-Star and other programs that reach higher level students. We do have flyers that have been distributed to various high school career counselors. We have people that are in contact with the main colleges in Oregon. We are not very involved with elementary and junior high students, except through the Scout Merit Badge program.

The second part is to “conduct a planned publicity campaign...”. Ferguson feels that this part is sorely lacking attention on our part. We know the PLSO office has created a Facebook page that is continuously updated. We also know the PLSO office sends out press releases for the organization. We have also seen a well done piece shown on OPB. However,

none of these things actually help the “average Joe” know why what we do is important. This area needs more attention.

Given that EGAC Committee is charged with doing so much and that participation in this committee is so limited, Ferguson asked the Board, “Where do you want our focus to be in the coming year, in three years and in five years?” Ferguson is looking for information to share about any/all PLSO educational activities.

The Harold Stockoff Golf Tournament is April 30. Quimby has registration information. The Board will sponsor two golf holes.

The upcoming David Thompson Brigade has the potential to be a big event for PLSO. Volunteers are needed to develop a program (related to the arrival in Astoria on July 15–16). There is a legislative bill honoring this event.

**Legislative** (Scott Freshwaters)—There are updates available on the PLSO website from both Freshwaters and F. VanNatta. Recently, the group attended Design Professionals Day and talked to legislators about their bills.

Sherer read a letter from the MidWest chapter regarding HB 2892 and their concerns about the legislation. They like the idea of a boundary line agreement, but are not sure this is the correct vehicle. MacDonald said the Willamette chapter also felt that County Surveyors may be making decisions they are not prepared to make. The Willamette chapter approved a motion *not* to lend support to the bill. Freshwaters gave the history of how the bill got this way. The Blue Mountain chapter agreed with Willamette chapter. The Umpqua Chapter was told that this is the only way OACES will let it go. They are against it, but will not fight the bill. Freshwaters thanked F. VanNatta for all his work and relationships. Pioneer Chapter said they have mixed feelings

about it. Discussion about how to handle this issue ensued.

A straw poll for HB 2892 support was taken. The vote was split and Anderson instructed the committee to continue to follow the bill and report regularly on progress of this legislation.

**OSBEELS** (Bob Neathamer)—OSBEELS proposed a new budget. The budget hearing and possible approval will be at the OSBEELS regular board meeting in May. They are doing a good job with their budget. He is not sure that OSBEELS will adopt the Standards and Practices. They need to keep up on the current administrative rules before adding more. The Oregon Specific Exam Policy was reviewed and amended pursuant to input from an exam-taker. Additionally, the exam policy established a board liaison and an alternate, as well as an exam development team. The liaisons and exam development team are considered subject matter experts for preparing the Oregon Specific 4-hour Land Surveying Examination.

Freshwaters reported that there is a bill affecting OSBEELS that directs the Legislature to form a committee in order to study independent boards. It forms a committee and then gives them six months to come up with recommendations. It has a potential to affect OSBEELS, such as recommending to fold it under the Building Commission. We should look at that.

Neathamer reminded the group that the PLSO committees actually need to have members.

**NSPS**—Anderson thanked Lloyd Tolbert for being an excellent NSPS Governor for Oregon. Anderson put a lot of thought into this new appointment and has received input from numerous past NSPS Governors and Board Chairs. A straw poll was also taken of those officers in attendance.

MOTION: Anderson recommended we appoint Bob Neathamer as

Governor and Freshwaters as alternate. Motion unanimously approved.

Freshwaters said if we are participating in the May 19 event, there are materials we can use from the NSPS website.

**WFPS** (Gary Anderson)—Anderson passed around the written report from Westfed. Greg said he doesn't have board approved minutes from the recent meeting in Spokane. ACSM restructure issue is still going on. He mentioned Curt Sumner's radio program on Mondays at 11:00 am. Railroad surveying will be an upcoming issue.

**OACES** (Scott Freshwaters)—Freshwaters discussed some of the legislation that may affect OACES. A legislative report will be sent out to the board.

**Oregon GPS Users** (John Minor)—Minor reported that there is a GPS issue before Congress. The next Oregon GPS Users meeting is April 15 at Springfield City Hall. Glen Gibbons, founding editor of *GPS World* and *Inside GNSS* magazines, will discuss GLONASS, Galileo and Compass satellite navigation systems.

**Publications**—April 1 is the materials deadline for *the Oregon Surveyor*.

**Archives** (Gary Anderson)—Roger Galles is looking for a place to house our archived documents and hopes that the new website will be a place we can do that.

## Good of the Order

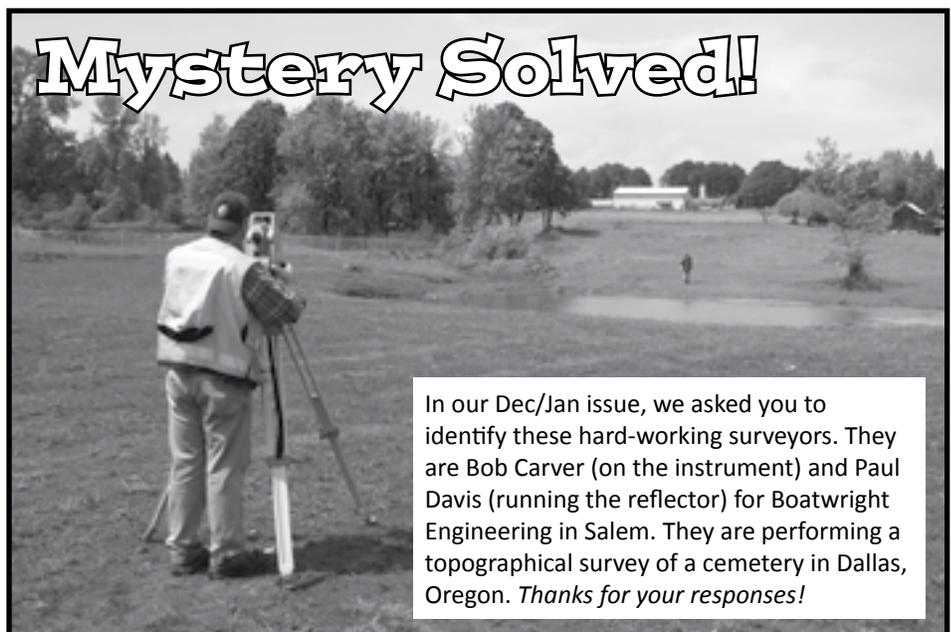
**Central Chapter** (Parneli Perkins)—On March 15, the Central Chapter meeting will recognize George Cook for extended service to PLSO and the survey profession. Mary Hartel from BLM will be the program speaker.

**Blue Mountain Chapter**—Bob English is no longer an instructor at Blue Mountain CC. The college is in limbo about getting survey instructors. They want to move forward, but all will depend upon the instructor.

**Rogue River Chapter** (Pat Barott)—A local title company made a presentation at the last chapter meeting with the subject "Power to Act—Who Can Sign." The presentation outlined who can legally sign official documents and plats. The chapter received a document for future reference.

MOTION: Quimby moved to adjourn. Motion passed.

Meeting adjourned at 3:26 pm. ◉



# PLSO 52nd Annual Conference

## FINAL REPORT

■ *Tim Kent, PLSO Conference Committee Chair*

The PLSO 2011 Annual Conference was held at the Salem Conference Center in Salem, on Wednesday, January 19 through Friday, January 21. The Salem Conference Center and The Grand Hotel were excellent in their support of our conference and come with high recommendations to be our host in the future.

A very strong program was built for this conference, with over 40 separate presentations. While some attendees were not able to attend their first choice of presentations, there was room for everyone. Many positive comments were received on the program content. The most wanted sessions centered on BLM topics and survey law.

Approximately 30 students from survey programs at Chemeketa Community College in Salem, Clark College in Vancouver, WA and Oregon Institute of Technology in Klamath Falls were in attendance. The college students again assisted the conference committee in many areas, mainly with tracking the attendance in the workshop sessions.

The most commented aspect of the conference was not having enough room for certain topics that were presented. Some rooms were overcrowded while others had numerous empty chairs. There were also some comments about having too many presentations to select from. These will be looked at more closely next year.

The high school program designed by John Newberg was a great success. He recruited 30 students from the area and he and his volunteers really showed the students what surveying is all about. This is a program that needs to continue each year.

The *Annual Conference Guideline* book has been updated and is being utilized for planning future conferences. The guidelines are dynamic and are being used by the various committee members as the conference planning unfolds. The Guidelines have been presented to the Board.

The 2012 conference planning is underway with plans for an exciting and informative gathering at the Red Lion Inn on the River in Portland from March 13–16 in conjunction with GIS in Action. ◉

## Registration Count Summary

**Wednesday Banquet** 119

### FULL Conference Registration

Member	284
Non-Member	45
Life Member	15
Student	83
Hardship	29
Extended Pay Option	4
Speaker	43
Exhibitor	40

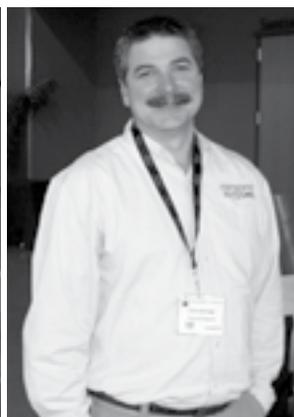
### ONE DAY Conference

Member - Wednesday	26
Non-Member - Wednesday	2
Member - Thursday	8
Non-Member - Thursday	0
Member - Friday	9
Non-Member - Friday	3

**Past President's Breakfast** 23

### Guest Event & Extra Meals

Wednesday Lunch	6
Thursday Lunch	8
Friday Lunch	5
Wednesday Banquet	13
Thursday Auction	28
Alternate Program	10



# Session Attendance Counts

Session Name	Attendance
ALTA / ACSM Standards Update	71
An Inside Look at Donation Land Claims	2 SESSIONS 158, 83
BLM Case Studies and the 2009 Manual	2 SESSIONS 59, 73
Boy Scout Merit Badge	24
BPA Easements	2 SESSIONS 43, 74
Common Elements of Measurement Analysis	35
David Thompson Brigade	52
Differences in Oregon Between Epoch 2002 & 2010	72
Employment Law Overview	28
Equipment Maintenance	2 SESSIONS 10, 41
Extracting Biometrics Data from Airborne LIDAR	38
Federal Water Boundaries	2 SESSIONS 51, 61
Fundamentals Exam Review	32
Get A Leg Up on Competition	2 SESSIONS 20, 21
GNSS Control Networks Using OPUS Projects	47
Google Earth for Surveying	2 SESSIONS 51, 62
How Surveyors Can Successfully Create and Manage Data Collection	2 SESSIONS 14, 25
How to Write A Contract With Your Customer	42
Hydrographic Surveys	2 SESSIONS 15, 25
Land Surveyor Exam Review	28
Land Surveyor Liability, Standard of Care and Ethics	72
LUBA - Decisions and FAQs	23

Session Name	Attendance
Machine Control	30
Mapping Technologies	2 SESSIONS 42, 71
Mentoring in the Workplace	34
Mobile Scanning	21
NGS Digital Mapping Products and Software	8
NSPS Certified Surveyor Technician Program	2 SESSIONS 11, 34
Oregon Coordinate Reference System	2 SESSIONS 20, 37
Oregon GPS Users Group	44
ORGN / OCRS	2 SESSIONS 27, 49
PLSO Board of Directors Meeting	24
PLSO Legislative Committee Panel	17
Professional Liability Insurance	CANCELLED
Property Rights & Wrongs: The Ins & Outs of Property Law	90
Random Error Theory	30
Roads and Fences: The Law of Easements and Boundary Lines	106
Small Business Management Overview	12
Social Networking	21
Surveying with Solar Instruments	44
Survey Math	35
The IRS Is Getting Serious: Are You Ready for Audits?	2 SESSIONS 42, 70
The Oregon Map Project: Past, Present & Future	2 SESSIONS 27, 28
The OSBEELS Report	2 SESSIONS 21, 25
Tree Identification	53



# PLSO Scholarship Committee Report

■ *By Stephen K. Haddock, PLS; PLSO Scholarship Chair*



*Greetings from Eastern Oregon!*

About a month ago I was looking at my woodpile and thinking that I really hadn't used much firewood this winter. After a series of very warm days in February and March, it seemed like spring would be soon upon us. However, I should have known that the cold would drag on since the nearly 400 head of elk wintering in our little valley have not left yet. This is the first year in the 16 years that I have lived in this valley that the elk have been pushed down

this low. Watching their struggle with the weather makes me glad that my own supplies have been enough.

Even though the winter is hanging on, the scholarship season is beginning. I recently received the annual accounting letter from the Oregon Community Foundation which states that the PLSO fund will be able to award \$10,500 for scholarships in the 2011–2012 school year. Together with the Pete Maring Scholarship from the PLSO Board of Directors, the total will be \$11,000. I have also been contacted by the Oregon Student Assistance Commission to perform the annual initial "eligibility" reviews. The scholarship review process should be in full swing from May 15–June 1.

The PLSO has taken in about \$9000 since the scholarships were awarded last year. This is a bit less than the amount we have to disperse this year but it is still a very good showing considering our economic times. Many thanks to those of you who donated and participated in our auction and/or fundraising programs; such as the Pioneer Chapter did last year. Our award amounts are what they are because the endowment fund is a very good idea. It is great to help students whose "supplies" may not be enough.

My woodpile reminds me that preparation is best long before the need arises. I encourage you to think about the 2011 scholarship auction and look for interesting and unusual items that you can pick up. They usually do well at the auction. Also, there are some items that do not do well in the auction. If an item is broken or in general disrepair and is something that most surveyors are likely to have (unless it is a collector's item), it probably does not belong in the auction.

Again, thanks to all of you who so faithfully support our students. I hope that 2011 treats you all very well. ◊

**THE SURVEY SUMMIT**  
THE ACSM ANNUAL CONFERENCE

July 7–12, 2011  
San Diego Convention Center, San Diego, CA

ACSM

esri

# NSPS Oregon Governor 2011 Election

**R**obert “Bob” Neathamer is the newly elected 2011 NSPS Governor. He has been a member of PLSO and NSPS for many years and served as PLSO Chair in 1999. He has stayed involved in the surveying profession and PLSO by being active in his chapter, serving as chair of the Professional Practice Committee and serving on the Legislative Committee.

Bob said, “I have been a member of OSBEELS and currently serve on the Standards of Practice Ad-hoc committee. I am a strong believer in mentoring students and serve as a Chairman of the OIT Geomatics Industrial Advisory Committee. I consider it an honor to be elected as the 2011 NSPS Oregon Governor and am willing to commit the time necessary to represent PLSO at the national level. I have a very capable son for a business partner and a great staff, including two more sons, that provide me more time to be out of the office and getting things done. I understand that a strong commitment is needed and believe that the years at OSBEELS have prepared me to represent PLSO in a similar capacity.”

Scott C. Freshwaters was elected as alternate for the NSPS Oregon Governor. For 30 years, he worked as an engineering associate with the



Robert "Bob" Neathamer



Scott Freshwaters

Deschutes County Road Department and the Deschutes County Surveyor's Office. He has been the owner of Freshwaters Surveying, Inc. for an even greater length of time.

Scott received his license as a Professional Land Surveyor in Oregon in 1987. He has been a member of PLSO since 1984, and has served as the Central Chapter President for two terms. He currently serves as Legislative Committee Chair and Liaison to OACES, has attended several ACSM national conferences, and developed a one-hour continuing education class for real estate brokers that gives an overview of surveying.

Scott has been the President of Vandevent Acres Special Road District for eight years, a Volunteer Fire Fighter with La Pine Rural Fire Protection District for over ten years, is a member of Central Oregon Builder's Association and has been quite active in the children's programs at his church.

PLSO is fortunate to have two fine individuals to represent them this year. PLSO would also like to thank Lloyd Tolbert for his year of service as NSPS Oregon Governor. We appreciate all the hard work and effort you put into this committed position. Thank You! ◊

## Upcoming PLSO Board Meetings

**September 10**

Springfield, Mookies Northwest Grill

**October 22**

Klamath Falls, OIT

**December 3**

Springfield, Mookies Northwest Grill

## To contact the PLSO office

PHONE: 503-585-4551

MAIL: PO Box 2646, Salem, OR 97308

FAX: 503-585-8547

EMAIL: [office@plso.org](mailto:office@plso.org)

WEBSITE: [www.plso.org](http://www.plso.org)

FACEBOOK PAGE: Professional Land Surveyors of Oregon

LINKED IN: Join the PLSO group at [www.linkedin.com](http://www.linkedin.com)

TWITTER: [www.twitter.com/ORLandSurveyors](http://www.twitter.com/ORLandSurveyors)



facebook

LinkedIn

twitter

# Working Together Gains Access and Attention

By Fred VanNatta, PLSO Lobbyist

“Oregon Design Professionals” held a legislative day at the Capitol early in the 2011 legislative session. Never heard of the “Oregon Design Professionals”? It is a title created to describe attendees of the legislative day that included (in alphabetical order): American Council of Engineering Companies of Oregon, American Institute of Architects, American Society of Civil Engineers, American Society of Landscape Architects, Institute of Electrical and Electronic Engineers, Oregon Board of Architect Examiners, Oregon State Board of Examiners for Engineering and Land Surveying, Professional Engineers of Oregon, Professional Land Surveyors of Oregon and the Structural Engineers Association of Oregon.

Top priorities of the organizations were identified, several teams were created, and visits were scheduled with key legislative leaders. After briefings, the teams spent their day visiting legislators and becoming more familiar with the legislative process.

The PLSO legislative agenda, including HB 2351 (expanding the fee options of county government to fund the Public Lands Corner Preservation Fund), HB 2892 (establishing standards and a process for boundary line agreements) and HB 2893 (adding direct mail as a notice option before entry), were included in the documents delivered to legislators by the teams. Teams, on which PLSO members participated, helped develop relationships and an understanding of the Association’s agenda.

The future of this innovative effort remains to be seen as Oregon converts from regular biennial legislative sessions to regular annual sessions. ◉



Fred VanNatta



Rep. Bruce Hanna



Jeanette Pruitt



Scott Freshwaters and Fred VanNatta



Rep. Arnie Roblan

# \*NEW\* LEICA VIVA TS15!!

Leica  
Viva

The Fastest Imaging Total Station



With **Leica Viva TS15** the addition of advance imaging functionality and the Leica SmartWorx Viva easy-to-use onboard software makes the fastest total station even faster!

Leica Viva TS15 adds an advanced image sensor to the already proven sensors. With unique capture-sketch-link functionality, total station images can be captured, enhanced with sketching and linked to any point of interest. With tap-turn-measure any remote point can be measured without returning to the total station.

Every vision on every scale becomes reality with ease.



Turn-On & Measure  
**\$11,990**  
**Leica G308 NetRover**  
RGPS  
WSRN  
ORGN

**SEATTLE**  
6510 - 216TH ST SE # E  
Mountlake Terrace, WA 98043  
800-454-1310

**TACOMA**  
4905 Pacific Hwy E. # 1  
Fife, WA 98424  
888-562-3082

**PORTLAND**  
5409 N.E. Columbia Blvd # A  
Portland, OR 97124  
800-472-7007

- when it has to be right

**Leica**  
Geosystems

# Prevent GPS *from* Disappearing

■ By Joseph Paiva

Reprinted from the ACSM Bulletin, April 2011

*The headline might sound sensationalistic, but the reality is that one of our federal regulatory agencies, in a fit of enthusiasm to extend broadband availability to more people, may be doing GPS in. Read on...*



LightSquared, a wholesale broadband provider to cell network companies, has filed an application with the FCC that essentially repurposes a part of the radio spectrum. LightSquared is planning to build a network of transmitters, as many as 40,000, across this country to enable a much larger set of the population to have access to 4G class service. However, those 40,000 towers don't cover all the rural areas, so LightSquared is integrating the towers with an already authorized use in these areas that implements broadband via communications satellites. The satellite frequencies LightSquared proposes to use would be right next to the block of the band in which GPS operates.

Satellite communications frequencies are at power levels similar to those used by GPS. This in itself is not worrisome. The problem is that when the ground-based transmitters start working, we will have the relatively weak signals from space for broadband access in rural areas in the same frequency band as the powerful transmitters on Earth for more densely populated areas.

Tests have shown that even when GPS and the broadband system have distinctly different communications frequencies, the likelihood of GPS signal reception on Earth being disrupted because of the ground-based towers is high. The tests show that on occasion, the ground based towers may have signal strengths that are one billion times the received strength of GPS signals.

Disparities in signal strength can result in signal jamming similar to what we may experience when our radio picks up the much stronger signal of a different radio station than the one we are tuned in to. This occurs because the intruding station's signal, though on a different frequency, is so strong that it "bleeds" over into our favorite station's frequency.

For reasons not easily discernible, the Federal Communications Commission (FCC) has fast-tracked the LightSquared application and granted them a temporary waiver to begin implementing their plan. However, due to protests from the private sector, notably the U.S. GPS Industry Council (USGIC), the FCC backtracked slightly and asked LightSquared to conduct a study to show that their use of the frequency band adjacent to GPS will not harm GPS users. This was like letting the fox guard the chicken house. More protests ensued. The USGIC (and perhaps others) are now part of the research study team put together by LightSquared.

Considering that the U.S. government designed, implemented and operates GPS, it is rather odd that only recently, assistant secretaries from the Departments of Transportation and Defense (the latter being the GPS operator) have filed statements of concern with the FCC (another federal agency). Private industry is not taking this lying down. A coalition was formed to dissuade the FCC from making their conditional approval of LightSquared's application permanent.

## What can you do?

Write the FCC and tell them how ill advised their action is. Tell them that at least more unbiased research must be done. Tell them how and why GPS is important to you and your economic wellbeing. If you feel it is necessary to state the obvious, tell them how important GPS is to the economy. You can also join the coalition.

To find out more about this group of concerned GPS users, to get facts to put in your letters to the FCC, and to learn about the latest developments on this issue, go to [www.saveourgps.org](http://www.saveourgps.org). Please take action. The economic life you save may be your own! ☉

### References

LightSquared's GPS interference [www.gpsworld.com](http://www.gpsworld.com)  
Coalition launched to Save GPS [www.gpsworld.com](http://www.gpsworld.com)  
More on the LightSquared saga [www.gpsworld.com](http://www.gpsworld.com)

Editor's note: ACSM is a member of the Save our GPS Coalition and has filed comments to the FCC.

## A Letter from Oregon Senator Jeff Merkley

Thank you for contacting me to share your concerns about the possibility of widespread interference with GPS transmitters. I appreciate you raising this issue with me.

Thanks to your letter and the letters of fellow Oregonians, I have asked my staff to take a closer look into this matter. It is very helpful to hear your comments, particularly as I hold conversations with my Senate colleagues on the licensing of technology that could affect GPS.

Again, I have made note of your points and appreciate your input. I hope you will continue to send your observations and thoughts my way.

Sincerely,  
*Jeffrey A. Merkley*  
United States Senator

**Choose Your Path  
Make Your Mark**

Your Career as a Land Surveyor

- On-the-Job Training
- Degree Programs
- Utilize the Latest Technology
- Work Outdoors/Indoors
- Rewarding Career
- Great Pay

[www.plso.org](http://www.plso.org)  
PO Box 2646, Salem, OR 97308 503-585-4551

# LightSquared Saga, and Recent Solar Activity

■ By Eric Gakstatter



Survey Scene, Late February 2011

This article posits on the potential effects of LightSquared's plans. As a user of high-precision GPS receivers (particularly GPS L1 sub-meter, but also dual-frequency), you should be particularly concerned about this issue. I'll tell you why. Also, I have a note on the recent solar activity.

## LightSquared

The reasons you should be concerned about LightSquared's plans are two-fold:

1. Consumer GPS receivers and professional-grade GPS receivers designed for higher performance (mapping, surveying, etc.) aren't necessarily designed the same way. High-performance GPS receivers use a wider bandwidth radio design. For example, the GPS L1 frequency is 1575.42 MHz. Many high-performance GPS receivers use a wide bandwidth radio that scans +/- 20 MHz from 1575.42 MHz. That equates to a range of 1555 MHz to 1595 MHz. LightSquared's frequency spectrum is 1525 MHz to 1559 MHz. Clearly, there's overlap, which is another word for interference. On top of that, LightSquared plans on a broadcast strength of 1,500 watts from a tower located down the street. The GPS broadcast signal strength is about 30 watts from a satellite located some 19,000 kilometers away in outer space. Who's going to win that battle?

I'm not an aerospace engineer or an RF (radio frequency) engineer, but I don't think it takes one to see the potential impact of LightSquared's service on high-performance GPS receivers. At the very least, it warrants an in-depth technical study.

2. Neither the policymakers nor LightSquared know about or understand the user community comprised of hundreds of thousands of high-end GPS receivers. They think the GPS user community is limited to auto navigation and mobile-phone users. They don't understand that we are the infrastructure people and we use GPS in a way that is critical to our infrastructure. It's not their fault, but you can't assume they know, so it's up to us to inform them. You have to speak up.

Here's a perfect example. A report presented by LightSquared in Taipei, Taiwan, at a 3GPP conference was titled, "Final Report on Overload Characteristics of GPS Receivers in Proximity to LightSquared's L-band Terrestrial Base Stations (BTS) and User Equipment (UE)."

The best part about this report is this statement from the Executive Summary:

*"Although results have been provided to date of a limited number of devices (6), LightSquared proposes to close*

*the study at this stage as a more comprehensive study, covering a wider variety of GPS receivers than those involved in cellular applications, has now been initiated under the auspices of the FCC [2]. This study will be conducted by a cross-industry group led by LightSquared and USGPSIC, the reports of the study having complete public visibility."*

Granted, I understand the Taipei conference was focused on the impact of LightSquared's plan on mobile phones using GPS, but if this is the extent of their testing, it's alarming. Furthermore, it's relatively easy to acquire and operate an inexpensive consumer GPS receiver. Can you picture LightSquared attempting to test a sub-meter GPS L1 receiver or a RTK setup? GPS, GLONASS, SBAS, DGPS, real-time, post-processing, and the myriad of receivers on the market need to be tested. Although it's unlikely that all equipment on the market will be tested, it's not prudent to leave anything to chance. If, one year from now, you wake up and discover your \$10,000 RTK receiver doesn't work like it used to, it will be too late to do much about it. It takes very little time to voice your concern now to your elected officials so the appropriate attention is given to high-precision users.

Use these guidelines to take action. It is a call to action from Dr. Joe Paiva, veteran of surveying since the 1980s with whom many of you are familiar.

The good news is that Trimble Navigation is involved, along with the Federal Aviation Administration, with the U.S. GPS Industry Council and will be working closely with LightSquared in a Technical Working Group to better understand the impact that LightSquared's system would have on GPS. Trimble and the FAA aren't the only parties involved in the working group, but they are the parties that understand the needs of the high-precision user.

#### Solar Activity

As you've probably heard, we're entering the next solar cycle, which is due to peak in May 2013.

I want to periodically touch on this subject as the solar activity is going to increase over the next few years, and if the solar activity (geomagnetic storms, not sunspots) is severe enough, it will have an effect on GPS accuracy and tracking. Regardless of what you've heard in the mainstream media in recent months, the last event serious enough to affect GPS operations was in December 2006. That's not to say that things aren't heating up, but the recent activity does highlight the fact that "the Sun has become, somewhat suddenly, more eruptive," according to Joe Kunches, of NOAA's Space Weather Prediction Center. "We've been fortunate so far, in that the

terrestrial effects—and impacts to GPS—have been very minimal. The most obvious sign of this has been the brilliant auroras up north."

"The video shows a large prominence eruption—billions of tons of plasma being strewn off the Sun. Some of it is drawn by gravity and rains back to the surface—the rest of it escapes. It's the blown-away plasma that forms the coronal mass ejections that, when properly pointed, go by the Earth and cause problems for GPS," said Kunches.

#### From NASA

When a rather large-sized (M 3.6 class) flare occurred near the edge of the Sun, it blew out a gorgeous, waving

mass of erupting plasma that swirled and twisted over a 90-minute period (Feb. 24, 2011). This event was captured in extreme ultraviolet light by NASA's Solar Dynamics Observatory spacecraft. Some of the material blew out into space and other portions fell back to the surface. Because SDO images are super-HD, we can zoom in on the action and still see exquisite details. And using a cadence of a frame taken every 24 seconds, the sense of motion is, by all appearances, seamless. Sit back and enjoy the jaw-dropping solar show. ☺

Follow me on Twitter at [http://twitter.com/GPSGIS\\_Eric](http://twitter.com/GPSGIS_Eric)



# GPS is threatened!

■ Joseph V. R. Paiva, PhD, Paiva Consulting, [jvrpaiva@swbell.net](mailto:jvrpaiva@swbell.net)

A wholesale provider of broadband services to cell phone network providers named LightSquared is threatening to broadcast signals as much as one billion times stronger than the received GPS signal, at a frequency band that is adjacent to the one used by GPS. Read about it in our article in the April issue of *ACSM Bulletin* (reprinted for PLSO readers here). There will be more links to other articles on the topic in the *Bulletin* version. What can you do about this serious issue?

1. Go to [www.saveourgps.org](http://www.saveourgps.org) and sign up your organization as a member of the coalition to persuade the FCC to not make the temporary waiver they have already granted permanent.
2. **Write your own letter to the FCC** (see the website or use the information below on where to write).

To write the FCC, send an email: [fccinfo@fcc.gov](mailto:fccinfo@fcc.gov). In the subject line, include: Coalition to Save Our GPS, and FCC File No. SAT-MOD-20101118-00239.

#### URLs of articles published on the issue

[www.gpsworld.com/gnss-system/news/lightsquaredgps-interference-saga-wheels-grinding-11472?utm\\_source=GPS&utm\\_medium=email&utm\\_campaign=Survey-Scene\\_04\\_06\\_2011&utm\\_content=lightsquaredgps-interference-saga-wheels-grinding-11472](http://www.gpsworld.com/gnss-system/news/lightsquaredgps-interference-saga-wheels-grinding-11472?utm_source=GPS&utm_medium=email&utm_campaign=Survey-Scene_04_06_2011&utm_content=lightsquaredgps-interference-saga-wheels-grinding-11472)

[www.gpsworld.com/gnss-system/gps-modernization/news/coalition-save-gps-launched-wake-lightsquareddecision-11209?utm\\_source=GPS&utm\\_medium=email&utm\\_campaign=Survey-Scene\\_03\\_14\\_2011&utm\\_content=coalition-save-gps-launched-wake-lightsquareddecision-11209](http://www.gpsworld.com/gnss-system/gps-modernization/news/coalition-save-gps-launched-wake-lightsquareddecision-11209?utm_source=GPS&utm_medium=email&utm_campaign=Survey-Scene_03_14_2011&utm_content=coalition-save-gps-launched-wake-lightsquareddecision-11209)

[www.gpsworld.com/survey/surveying/lightsquared-saga-and-recent-solar-activity-11155?utm\\_source=GPS&utm\\_medium=email&utm\\_campaign=Survey-Scene\\_03\\_01\\_2011&utm\\_content=lightsquared-saga-and-recent-solar-activity-11155](http://www.gpsworld.com/survey/surveying/lightsquared-saga-and-recent-solar-activity-11155?utm_source=GPS&utm_medium=email&utm_campaign=Survey-Scene_03_01_2011&utm_content=lightsquared-saga-and-recent-solar-activity-11155)

# I Didn't Like That

■ By Michael Hoover, RPLS, CFM

Reprinted from *Professional Surveyor*, February 2011

## Why reprint this letter?

PLSO Chair Gary Anderson explains...

I was stirred by the January 2011 guest editorial in the *Professional Surveyor* magazine titled, "GIS: The one that almost got away". Michael Hoover, RPLS, CFM from Houston, TX was compelled to write to the *Professional Surveyor* magazine to voice his opinions and also granted permission to share his comments with PLSO members. Although many of our members read *PS* and may have seen Hoover's comments; I think it serves our members to reprint it to pique an interest in becoming more of a community of providers. Lastly, our 2012 Annual Conference will be convened along with our local GIS organization (ORURISA).

Regarding "You Won't Like This" (October 2010), the title was certainly appropriate. He was right, I didn't like it. The title intrigued me, and it was the first article I read in the October 2010 issue. (Note: The article is posted at [www.profsurv.com/magazine/article.aspx?i=70814](http://www.profsurv.com/magazine/article.aspx?i=70814).) While I understand the general premise of his commentary, I am loath to let his conclusion(s) go without response. Let me, if I may, take issue with him on several of his points.

There are absolutely boundaries within the geospatial profession. I work with a wide variety of geospatial professionals, few if any who consider themselves land surveyors. Point in fact: many of my closest friends in the GIS community call me for advice and consultations in potential boundary issues. Based upon Mr. Butler's argument, one could extrapolate that a heart surgeon and a podiatrist are indistinguishable. After all, they are both part of the medical profession. How about the pilot of a Lockheed Martin F-22 Raptor and the pilot of a Beech Bonanza? No difference really, they are both pilots, right?

Tired old argument about "public welfare and safety"? "GIS providers and users make many more decisions that affect the public than do surveyors." Poppycock! Every individual or business relies on boundary surveys for their property limits. Boundary lines, title lines, deed lines...

these are important things. Millions of dollars have been spent over the last century and more litigating boundaries, sometimes over very small areas of land. Should land surveyors be licensed and regulated? Indeed they should be. I have seen plenty of mistakes with GPS maps, weather forecasting maps and crime scene maps. I would even wager some of the Predator drones don't always find their mark. That's OK, I don't really rely heavily on any of that information and neither do the courts. Rarely is the case where boundary litigation depends on a shape file, and the last time I checked meteorologists weren't classified as land surveyors.

Pure science and math? I wish that were the case. An informal poll conducted by me of several highly experienced local land surveyors revealed the opinion that the mathematics of land surveying, while important in establishing facts, plays only a limited percentage of the overall boundary resolution of any survey. Far more importance is placed upon deed interpretation, occupation on the ground, determination of original monumentation and legal principles.

It is my observation that a building contractor licensed in Florida has got little or nothing to do with the land surveying profession. The point of this example is dull and askew, not to mention annoying.

"The surveying profession as it was defined 20 years ago is gone." What? That's news to me and would be too many of my clients. You see, my clients don't hire me to simply go measure things. They hire me to determine boundaries. They hire me, and not a GIS professional, because I have specific knowledge about matters such as prescriptive rights, adverse possession (limitation), acquiescence, common reputation, easements appurtenant and gross, estoppel, junior/senior rights, and simultaneous conveyances. They expect me to advise them on littoral/riparian rights and boundary law applicable to their specific project, and, since I'm from Texas, they expect me to be an expert in such matters as the gradient boundary, the relinquishment act, vacancies, and excess acreage/deeds of acquittance....

It is certainly true that almost anyone can measure a line now, even though a line is only one component of a boundary. And even though they can measure such a line with a variety of tools ranging from a yardstick to a handheld GPS, what about the concept of accuracy and precision?

What is the application? As to boundaries, how about the monumentation, is it original, perpetuated or obliterated? How about applicable case and statute law? How about deed interpretation? How about the evidence revealed in historical maps which haven't been uncovered in decades? How about relevant and admissible parole evidence? How about the most basic of land law fundamentals: "Where boundaries are is a matter of fact, what boundaries are is a matter of law"?

I just received the November issue of *Professional Surveyor*. I was surprised to see only one letter to the editor in connection with Mr. Butler's article, and it was a positive one! Insightful was the phrase I believe that writer used. Insightful? I suppose it's all in the point of view. ◉

Dear Surveyors,

The **National Museum of Surveying** loves your support and all that you have done for us.

I would love to form a relationship with your state historians and leading surveying experts. We are trying to become more of a national museum. I write a blog (<http://nationalmuseumofsurveying.blogspot.com>), and would love to have guest columns or stories on it. Also, we have plenty of exhibit space to tell more of the story of surveying. Therefore, with your help, I can start building more of a national story.

Finally, I wrote an article in *Professional Surveyor*, and there will be more to come. Check it out at [www.e-ditionsbyfry.com/Olive/ODE/PRSPProof/](http://www.e-ditionsbyfry.com/Olive/ODE/PRSPProof/)

Thank you,

Matthew Parbs, National Museum of Surveying, Inc.

Address: 521 E. Washington, Springfield, IL 62701

Phone: (217) 523-3130

Email: [matt.parbs@nationalsurveyingmuseum.org](mailto:matt.parbs@nationalsurveyingmuseum.org)

Website: <http://surveyingmuseum.org/>

Blog: <http://nationalmuseumofsurveying.blogspot.com>

## Paddle to the Pacific

200 Years ... Many Nations ... One River Basin

# 2011 David Thompson Columbia Brigade

**The Brigade**—In 1811, the North West Company reached the Pacific Ocean, adding the Columbia as the final leg of the Fur Trade Highway from Montreal. In 2011, we salute the river basin and its history by following the 1811 route with the David Thompson Columbia Brigade.

**The Route**—Beginning high in the Canadian Rockies, at the source of the Columbia, the brigade will begin the

journey by running the exciting Kootenay River to Libby, Montana. An overland portage and some paddling on the Clark Fork River will take the brigade into Pend Oreille country, where David Thompson established trade years before he set out on his final journey to see where the Columbia meets the Pacific. From the Pend Oreille River, the brigade will portage to Kettle Falls on the Columbia.

The adventure begins June 3, 2011, from Invermere, BC and will conclude at Astoria, Oregon, on July 15. The total distance paddled in 45 days will be just over 1665 kilometers (1040 miles).

**The Boats**—The Brigade will travel in large 25' canoes, carrying up to ten paddlers at a time and covering an average of between 35 and 50 kilometers (25 to 45 miles) each day.

Crews are assembling and registrations are coming in with participants from across Canada, the U.S. and First Nations. Go to [www.2011brigade.org](http://www.2011brigade.org) to register your crew!

**The Communities**—Along the route, community events will welcome the brigade and celebrate the river that ties them all together. Invermere and Fort Steele BC; Thompson Falls, MT; Clark Fork, Dover and Newport, D; Oldtown, Kettle Falls, Wenatchee and Tri-Cities, WA and Astoria, OR (Bicentennial Celebration location).



"When Meriwether Lewis and William Clark started up the Missouri River in 1804, they carried a copy of the chart David Thompson had made on his trip to the Mandans seven years earlier."—*Jack Nisbet: Sources of the River*

# Boundary by Agreement

## A seldom used, but viable solution to an age-old problem

■ By Scott C. Freshwaters, PLS

**B**oundary by agreement, sometimes confused with the doctrine of acquiescence and also called “practical location” by the Oregon Courts, is a method of establishing the location of a disputed or uncertain boundary.

It is a very specific method that requires the existence of three elements to be valid:

1. There must be an initial uncertainty or dispute as to the “true” location of the boundary.
2. The uncertainty must be resolved by an agreement, express or implied, to recognize a particular line as the boundary.
3. The parties must evidence their agreement by their subsequent actions.

*Items 1–3 above: Blaisdell v. Nelsen 66 OR. App. 511 (1984)*

- This doctrine does not violate the Statute of Frauds because “...the parties take title, not from the agreement, but from their deeds as interpreted by their agreement.” *Cascadia Lumber Co. v. Oregon State Highway Commission 18 OR App. 524. See also Hammack v. Olds 93 OR App. 161.*

“The reason that an oral agreement that meets these requirements does not violate the statute (statute of frauds) is that it *interprets*, rather than alters, the property deed description and, therefore, does not affect a conveyance or transfer of real property.”

*Hammack v. Olds 93 Or. App. 161 9/14/1988.*

- The fact that the “true” location of the uncertain or disputed boundary could have been located by survey does not frustrate the agreed upon line.  
“The fact that the boundary could be located by survey does not prevent application of the doctrine.”  
*Ross v. Delorenzo 65 OR App. 586*
- My research does not show any requirement to monument the agreed upon line nor any requirement to record an agreement, affidavit or new legal description.

However, as it is our duty to “protect the public safety, health, and welfare”, we should definitely monument the agreed upon line and record some type of document that describes the line.

Is there any time period required for the agreement to ripen into maturity?

Probably not. I base this upon footnote 2 from *Blaisdell v. Nelsen 1/18/1984 (66 OR App. 511)*, which states, “In one

case, this court has required a fourth element—that the acts evidencing the agreement must last the statutory period required for adverse possession.” *Corson v. Williford, supra.*

That appears to be the minority view and has been criticized as a failure to recognize the different bases for adverse possession and boundary by agreement. *See 12AmJur Rd, Boundaries ? 80 (1964).* In this case, the acts evidencing the agreement have existed for a period in excess of 10 years.”

It should be noted, however, that in most, if not all of the cases that I have researched, the boundaries in question were honored for more than 10 years.

### Some Oregon Cases that address Boundary Line Agreements

- *Blaisdell v. Nelsen 66 OR App. 511 (1984)*
- *Brunswick v. Rundell 126 OR App. 582 (1994)*
- *Cascadia Lumber Co. v. Oregon State Highway Commission 18 OR App. 144 (1974)*
- *Corson v. Williford 44 OR App. 145 (1980)*
- *Drury v. Pekar 224 OR 37 (1960)*
- *Gibbons v. Lettow 180 OR App. 37 (2002)*
- *Hammack v. Olds 93 OR App. 161 (1988)*
- *Harris v. Backus 212 OR 695 Supreme Court Dept. 1 (1958)*
- *Montgomery v. Sellers 48 OR App. (1980)*
- *Ross v. Delorenzo 65 OR App. 586 (1983)*
- *Wampler v. Sherwood 281 OR 261 (1978)*
- *Wright v. Wells OR App. (2009)*

*See OJD publications on the internet.*

One other resource that very clearly explains this doctrine and many of the implications and nuances is found in the seven page article—Volume 28 Page 362 of the *Oregon Law Review* dated June 1949.

Now, given that PLSO has HB 2892 before the Oregon Legislature, and that some Chapters have expressed opposition to the bill, I would like to address some of the concerns that have been articulated.

It has been stated that “The law (bill) takes a doctrine and reduces its legislative intent and the exercise of word meanings.” The words in Section 2 of the bill, “...is uncertain or in dispute” have been repeatedly used in the cases cited above. By studying the cases listed above, one can glean a clear meaning of these two words. If the Superior Courts of Oregon have the meaning of these words nailed down, shouldn’t Surveyors be able to determine what these words mean?

Another point of contention about the bill is the one about giving the authority to County Surveyors to approve the agreement. This may cause some minor problems, but if this is not done, then two major problems are bound to occur:

- Planning staff may be called in to approve a BLA 2. This procedure may be unwittingly, ignorantly, or unscrupulously used to circumvent the PLA process.
- Also, all of the County Surveyors who regularly attend the OACES meetings are not opposed to this bill.

The question about how the courts will interpret this law is a non-issue as the bill just codifies what has been established through common law.

One major reason for this legislation is to give landowners the option of agreeing to a boundary rather than resorting to litigation. I have been told that to litigate to the appellate court level can cost upwards of \$40,000.

Surveyors should be able to mediate boundary disputes using facilitated mediation techniques whereby no suggestions as to the final outcome are made, it is semi-formal process by which the parties come to some agreement with the mediator guiding the process. There is a 32 hour long course available and it is money and time well spent.

Some confusion has been voiced about the impact upon title. This is not a title issue; it is purely a boundary issue. Item one from *Blaisdell v. Nelsen* clearly explains this, and the Oregon Law Review article expands upon this thought. Since this is strictly a boundary issue, I like the way that

Jeff Lucas succinctly defines the two questions the Boundary Surveyor must answer:

1. What is the boundary?
2. Where is the boundary?

There are more benefits to this legislation not stated above:

- It places all successors, assigns, etc. on notice that this agreement exists.
- Unlike most of the court decisions, it requires that the agreed upon line be monumented, which can obviate potential problems such as an agreed upon fence falling down and some time later a dispute arises as to where to rebuild it.

Some potential pitfalls to be aware of:

- Who signs the agreement?
- Is it all owners of record?
- Does a mortgagor have any claim to notice of this agreement?
- Will an easement or other encumbrance be affected by this agreement?

My next article will address these pitfalls and also will contain a sample agreement. ☺

#### DISCLAIMER

This paper is solely the opinion of the author and is not intended to be legal advice. Any surveyor contemplating involvement in boundary resolution utilizing the doctrine of "Boundary by Agreement" is strongly encouraged to seek Legal Counsel involvement.

## Surveyors on the Move!

■ *By Renee Clough, PE, PLS, AICP*

Seven intrepid surveyors will be participating in triathlons this spring/summer. Please mark your calendars to come cheer us on.

**Duck Bill Thrill—May 22**, Winberry Park/Fall Creek Reservoir (southeast of Eugene)

Team Get It Surveyed: Renee Clough, Dan Nelson, Russ Dodge

**Hagg Lake Triathlon—July 9**, Henry Hagg Lake

Team Tri Pod: Renee Clough, Steven Carper, Russ Dodge

Team Get It Surveyed: Colter Hessel, Dan Nelson, Kyle Latimer

**Rolf Prima Tri at the Grove—July 24**, Cottage Grove Lake (just south of Eugene)

Team Get It Surveyed: Colter Hessel, John Thatcher, Russ Dodge

We look forward to hearing you cheer us across the finish line!





# News from the Chapters

## Central #1

■ *David Williams, Secretary/Treasurer*

**March 15, 2011**

**Chapter President:** Parneli Perkins

Chapter President, Parneli Perkins opened the March 15 meeting with a short discussion regarding HB 2893, the right of entry Bill and HB 2351, regarding the Public Corner Preservation Fund. Scott Freshwaters encouraged members to view these issues on the PLSO website.

The main purpose of this meeting was to commemorate George Cook's 50 years of licensure and contributions to the professions of land surveying and engineering. This proved to be one of the best attended chapter meetings in recent memory. Several of us in attendance have worked for and with George and have known him for many years. However, some of the younger members of the group had never met him and many were unaware of his many contributions to our profession.

Mike Berry provided an introduction and bio. George was born and raised in Michigan. He graduated from Coopersville High School in 1949. George married his wife, Mina, in 1955. Mina is a 1951 alumni of Coopersville High School. They have four daughters: Faith, Sheryl, Joy and Susan. They also have eight grandchildren.

George is a veteran of the Korean War (June '49–Feb. '53). He served on the aircraft carrier *U.S.S. Antietam*. After his discharge from the Navy, he attended Michigan State University and Oregon State University where he obtained a degree in Logging Engineering in 1958. From 1958–1961, he worked for the U.S. Forest Service in various capacities. In 1962, he founded George Cook Engineering, Inc., which he ran until his retirement in 1981. At that time he retired and began his second career of raising purebred Beefmaster cattle on his ranch east of Bend. He continued to survey part-time for a few more years. George and Mina still reside at the ranch and run cattle.

George ran a very successful surveying business in Bend, which is reflected by the body of work filed at the Deschutes County Surveyor's Office. Between 1961 and 1984, he filed 1,506 surveys (118 of which were subdivisions and 70 partitions). Licensed surveyors working for Cook, including Dave Armstrong, Fred Ast and H. Leon Kennedy, have filed

another 146 surveys. Cook's production accounts for nearly 20% of the all the surveys filed in Deschutes County during this time period.

At the meeting, a plaque was presented to George highlighting many of his accomplishments.

- 
- 1959 PLSO Charter Member
  - 1961 Obtained surveying license, PLS #540
  - 1967 Acquired engineering license, PE #6021
  - 1973 Central Chapter President
  - 1974 PLSO Chairman
  - 1977 Awarded PLSO Surveyor of the Year
  - 1974–84 Served on OSBEELS Board
  - 1977–84 Served on Nat'l Council of Engineering Examiners
  - 1984 Awarded the Distinguished Service Certificate from the National Council of Engineering Examiners
  - 1984 Given Certificate of Appreciation from OSBEELS
  - 1994 Awarded PLSO Life Membership
- 

While the above list is impressive, it should also be noted that George was the first practicing surveyor appointed to the Board of Engineering Examiners. He also started the first Forestry Program at the Central Oregon Community College and taught all of the courses for the first two years. In addition to being a surveyor and engineer, he was also a real estate agent and broker for Sunriver.

After George received his plaque, the meeting was opened to stories and remembrances by those in attendance. Dave Armstrong, Bob Karl and Mike Berry, all former employees, spoke. Each related humorous accounts of their time at George Cook Engineering. At the time, I forgot about one memorable story. Around 1976, I had just started working for George. I was pretty green as this was my first job in this profession. As I recall, George asked me to prepare a Preliminary Plan for a proposed subdivision. Since I had never performed this task before, I asked George for instruction. He told me to go over to the hanging files and pick out one of the previous plans and plagiarize it. George did not believe in re-inventing the wheel for each job. To make a long story short, I prepared a new Preliminary Plan that I thought looked pretty good. Unfortunately (or maybe fortunately), I copied some information to my plan that I did not totally understand but thought made it look good. When George reviewed my drawing, he asked me what this additional information was. I said I wasn't sure. He promptly told me to get that information the (blank) off the

drawing, saying that you are not to put a line or word on a drawing unless you know *exactly* what it means. George was 100% correct and that little lesson has served me well over the course of my career. I have passed that story along to many of my younger employees over the years.

Arguably the most entertaining portion of the evening were the exchanges between Chuck Pearson and George. They served together in a number of capacities for many years. Notably, they participated in a series of seminars they put on around the state titled, "How to Keep Your License". They both share a passion for the profession. We were regaled with stories about surveying, rental cars, bars and I will stop here as we're not sure if the statute of limitations has expired yet.

## George Cook's 50 Years of Licensure Celebration



This evening ended, as all must. However, George did have one request. He presented nomination letters for Danna L. Barnhart (aka. Danna Ingram) and Walter L. (Layne) Casswell for life membership in PLSO. After a short discussion, some members felt that one or both individuals might already have life membership. Even in retirement, our profession is a big part of George's life. Without a doubt, few of us will equal or attain his achievements.

The meeting was adjourned to the lower level Oxford Hotel where Chuck Pearson graciously provided additional cheer and the stories continued. ◊



## Midwest #2

■ *Guy Dent, LSIT, Secretary/Treasurer*

### February 8, 2011

**Chapter President:** Jeremy Sherer

**Called to Order:** 7:15 pm      **Adjourned:** 8:45 pm

**Attendees:** 11 members

**Approval of the minutes** Approved by majority.

**Introductions** Attendance sheet was passed around.

#### Committee Reports

**Geocache:** Guy Dent gave an update as requested by Aaron Doughan in his absence. Aaron requested suggestions for interesting geocache locations and items to include as gifts. Suggestions will be given to Aaron.

**Board Meeting:** Jeremy Sherer gave appreciation for past chapter chairs and spoke on the president report incl. budget, 501c3 status. Tim F. added information. Jeremy also stated the strategic plan is currently being worked on.

#### Subcommittee

- TrigStar—Guy updated chapter with deadline date (state exam date) for local test.
- Seminars (Dave Wellman)—Suggested having a “Baseline Day” or “Google Earth” seminar
- Legislation (Tim Fassbender)—Same three bills still being reviewed and revised. Motion was made and passed by majority to have Jeremy Sherer write a letter to re-emphasize our position on recent boundary line agreement legislation.
- Education (Dan Nelson)—There is a career fair at Lane Community College coming up, Dan Nelson will send out an email to chapter members with information.

**Bylaws:** Motion to accept as revised by Dave Wellman, all in favor.

#### New Business

Jeremy Sherer started a discussion on topics of a help-line/experienced volunteer/survey mentorship. It was suggested that we could have retirees speak as to their experiences and favorite surveys. Also to have survey examples to be shared and their resolution discussed.

#### For Good of the Order

- Dan Nelson received a plaque for his service as Secretary/Treasurer
- Paula Norness will receive a plaque for lifetime membership.
- John Mathews is doing well.
- Dave Wellman reminds us of the dual-baseline NSPS Survey America program. ◉

## Pioneer #3

■ *Jered McGrath, Secretary/Treasurer*

### February 9, 2011

**Chapter President:** Jeremy Sherer

**Social Hour:** McMenamins Greenway Pub, 6:30pm

**Location:** Baja Fresh, Tigard

**Attendees:** 32 members and guests

#### Call for additional agenda Items

Lee Spurgeon thanked Joe Ferguson for his support and contribution in 2010 as Pioneer chapter president, and congratulated him on being the PLSO Surveyor of the Year.

#### Surveyor Beginnings

Jered McGrath shared his story about getting into land surveying.

#### Safety Minute

Revenge of the Cow Pie! Lee Spurgeon shared a story that reminded us to be aware of the dangers of chemicals in our changing environment, even if it's a cow pasture.

#### Presentation of Door Prizes donated by The PPI Group

##### Guest Presentation—

Harness Technology—[www.surveyorconnect.com](http://www.surveyorconnect.com)

Wendell Harness, PLS and David Souza discussed the services they provide and showcased the free online surveyors forum, [surveyorconnect.com](http://surveyorconnect.com). Surveyorconnect is the most active online discussion forum for land surveyors across the globe.

#### Committee Reports

##### PLSO Board—

- Bylaw changes “Student Membership” Article III, Sec.2b, and Article XI, Sec.2d. A motion was made to approve changes. It was seconded and approved.
- Bylaw changes “Duties of the Secretary, Treasurer and General Election” Article XI, Sec.4a, Sec.9a, Sec.10a, Sec.11A, and Sec.13b. A motion was made to approve changes. It was seconded and approved.
- Bylaw changes “Change Date of Dues”, “Corporate Finances” Article III, Sec.5, Article X, Sec.1, Sec.2, Sec.6. A motion was made to approve changes. It was seconded and the chapter voted 28:4 against the changes. Motion failed.
- Create 501(c)3 Corporation. A motion was made to approve changes. It was seconded and approved.
- *The Oregon Surveyor* magazine: Proposal to change from 6 to 4 issues for budget savings.

A motion was made to KEEP 6 issues, it was seconded and approved.

A motion was made to provide an electronic only option, it was seconded and approved.

#### Legislation—

Chuck Pearson provided a synopsis of upcoming legislative actions including Boundary/Line Agreements, Public Land Corner recording fee back to \$5, Right of Entry change to include mailings for notice. ☺

## Rogue River #4

■ *Joseph Bova, Secretary/Treasurer*

### February 22, 2011

**Chapter President:** Pat Barott

**Location:** First American Title, Medford

**Called to Order:** 6:40 pm      **Adjourned:** 8:20 pm

**Attendees:** 13 members and 2 guests

#### Program

Donna O’Grady, Senior Title Officer for First American Title, provided us with a presentation, “Power to Act—Who Can Sign?”, which provided guidelines on the signature authority of various legal entities. The program was scheduled prior to the business meeting while we enjoyed a dinner catered by Sunrise Cafe in Medford.

**Approval/amendments to agenda** No amendments.

#### Old Business

- Craig Claassen was honored at the Annual Meeting for his service as chapter president last year.
- Pat Barott presented a plaque of appreciation to Otto Ribanszky for his service as Chapter Secretary/Treasurer.
- There were contributions made in honor of Mark Boyden to the PLSO General Scholarship Fund. A discussion followed on origins and management of the Fund.

#### New Business

##### PLSO Board—

- The registration fee for the Annual Meeting was reduced this year to boost attendance. The conference realized a slight profit with 530 members attending.
- Craig Claassen heard from Doug Smith of David Smith and Associates, that the joint PLSO/GIS conference will dedicate Wednesday for all GIS topics, with Thursday and Friday slated for surveying.
- Word from the BoD is that the new Board Chair wants the membership to know that the board works for us; members decide what the board does.

- Roger Roberts, who was not in attendance, will have a presentation for Dick Bath formalizing Dick’s status as a Life Member. We discussed the importance of the long term tracking of our life members.
- Bylaws changes. Pat reviewed the deletions and additions to the PLSO bylaws. Dick Bath made a motion to accept the changes, Scott Fein seconded. The motion passed.

#### Committee Reports

**TrigStar Committee**—Jim Hibbs has this year’s material for those that would like to promote the program. Also, the OIT student chapter gave a TrigStar presentation at North Medford High School.

**Legislative Committee**—Scott Freshwaters is the PLSO legislative committee representative and reported to the board the latest evolutions of the bills. Right of Entry to include a 7-day mailed notice as an option. BLA is undergoing changes partly due to questions posed by 1000 Friends of Oregon. Corner restoration fund increase is hovering around \$15 total per recorded document.

**Strategic Planning**—Pat highlighted Herb Farber’s work on the Strategic Plan.

#### State Board Reports

**BOD Report** (Daren Cone)—The Board has had three candidates volunteer to serve as representative to the NSPS Board of Governors. The Board will conduct interviews to help in the determination of one appointee. The chairman will make the selection with the help of the board.

#### Local Jurisdictional/Government Reports

**Jackson County** (Scott Fein reporting for Kerry Bradshaw)—

- Work continues to find funding strategies for survey records on-line.
- New job descriptions have been written for employees of the Surveyor’s Office, making them distinct from the Road Department.
- Discussion on local land owner’s complaint about a survey conducted on his property. Land owner believes incorrect survey procedure has resulted in him losing acreage. Discussion involved the following:
  - ▶ Who monitors survey procedures?
  - ▶ Should we have a standard of practice?
  - ▶ Who has the responsibility to “review and determine if property rights have been protected?”
  - ▶ How does the general public, PLSO, County Surveyor, and OSBEELS resolve issues?
- One basic issue that needs to be reviewed is, “What is the responsibility of the County and/or City Surveyor?”

**Josephine County** (Peter Allen)—

- Filings and Recordings for 2010 were the lowest in 10 years.
- The department is scanning and indexing old field books.

Continues on page 32

- They are entering the budget process for FY 11–12 and things are looking tight.
- City of Grants Pass** (Craig Claassen)—
- Craig has issued an RFP for 50 square miles of 0.5 foot pixel aerial photography. Flight to be in March with delivery in June.
  - The Engineering Department is being audited as part of a study to determine its feasibility as a City department.

**BLM/USFS** (Pat Barott)—The Forest Service currently does not have local licensed land surveyors. Licensed surveyors are with the zone office in Springfield.

#### Other New Business

**National Surveyor's Week** (Pat Barott)—March 19 from 10am–2pm is scheduled for nationwide observation of existing and new points for OPUS network adjustment and publication. Shawn Kampmann noted that observation of higher elevation points is encouraged. Contact Pat for coordination in order to avoid duplication of effort, or refer to PLSO/NGS website spreadsheet.

**Fall Workshop**—We discussed fall workshop topics. Suggestions were made to have a FEMA representative

present a review of the new flood study maps and flood certificate procedures. This could be a half day, with a supplemental topic for the other half of the day.

**Discussion of 2011 chapter meeting themes, locations, and schedule** (Pat Barott)—Some chapters are having only four or five meetings a year. Our meeting has historically been the 3rd Monday of every month. A discussion ensued on alternative meeting schedules...the first Monday after the BOD meeting; less meetings during the year with one summer barbecue. Pat will send out some suggested meeting schedules and the members can decide.

**Survey Projects or Concerns**—Herb Farber announced that he has prepared a PowerPoint presentation on “The History of Surveying in Oregon”. He intends to present it to interested groups, and it will also be a contribution to the Outreach element of the Strategic Plan. A suggestion was made for him to present it at our next Chapter meeting.

**PDH**—Herb Farber moved that we allocate 1 PDH for this meeting. Craig Claassen seconded. Motion passed. ◊

## PROFESSIONAL LISTINGS

**DAVID C. SMITH & ASSOCIATES, INC.**  
PROFESSIONAL PHOTOGRAMMETRISTS & DIGITAL MAPPING SPECIALISTS



Aerial Topographic Mapping  
Digital Terrain Model Data (DTM)  
LIDAR Data  
Digital Orthophotography  
Low Altitude Survey Accuracy Helicopter Mapping

Scott Smith, C.P., R.P.P.    Doug Smith, C.P., P.E., R.P.P.  
www.davidsmithmapping.com • 1734 SE Tacoma, Portland, OR 97202 • (503) 232-5265



**HOFLAND SURVEY MONUMENTS**

Pipe Monuments • Concrete Markers • Custom  
Stainless • Aluminum • Brass • Iron • Copper

RICHARD HOFLAND    P.O. BOX 515  
503.320.2685    145 W. MAIN STREET  
hoflandsurvey@earthlink.net    YAMHILL, OR 97148

**“Want To Get Started Using GPS for Surveying?”**

- Dual Frequency Systems start at less than \$10,000.00 Oregon/Washington Real Time Network Ready. Oregon is free!
- Single Frequency Systems (Base and Rover) less than \$8,000.00 Easy Post Processing. Software included.
- Ashtech. 20+ years of quality you can depend on.
- Includes training and one year of support.

**Resource Supply, LLC**  
11607 SW Winter Lake Drive  
Tigard, OR 97223  
Call Jon at 503-521-0888 today  
www.resourcesupplyllc.com  
Email: jon@resourcesupplyllc.com



Resource | Supply

*Wow!*

**3D Laser Scanning and Industrial Measurement Services**

Offering Comprehensive Survey Services for Project Development and Construction

Proudly Supporting PLSO For 30 Years!



BEGIN WITH THE END IN MIND.  
503.684.0652  
westlakeconsultants.com



## The Pacific Northwest Technology Leaders in:

- GPS
- Optical Surveying
- 3D Spatial Imagery
- GIS/Mapping
- Construction



### Be More Productive with Your Investment.

Our goal is to make you productive with your investment in Trimble Systems. For your convenience, Geoline offers two Trimble Certified Service Centers, a variety of scheduled training opportunities and full support for your surveying and mapping needs. Including:

- Authorized sales and service
- Certified repair, support and training
- Rental equipment and more!

Visit us at one of our locations or on the web at: [www.geoline.com](http://www.geoline.com)

**GEOLINE HEADQUARTERS**  
1331 119th Ave. SE, #400  
Bellevue, WA 98005  
800.523.6408

**ADDITIONAL OFFICES**  
Tigard, OR  
Spokane, WA  
Boise, ID



Trimble is proud to work with its regional partners and invites you to contact them.



# THE LOST SURVEYOR

Can you tell me where this trestle is located or name the street that runs under it?



Latitude 45° 35' 49" N Longitude 122° 53' 54" W

More on page 4