

THE
OREGON SURVEYOR

VOL 34 NO 3
JUNE/JULY 2011

A publication of the Professional Land Surveyors of Oregon



AFFILIATED
WITH



WFPS



Inside: **2011 David Thompson
Columbia Brigade**

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 FASSBENBER**

541-682-2704 | htimfass@aol.com

EXECUTIVE SECRETARY

MARY VANNATTA, CAE

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

Central 1	PRESIDENT	Parneli Perkins	pperkins@verticalsurveying.com
	PRESIDENT-ELECT	Andrew Huston	ahuston@whpacific.com
	SECRETARY/TREASURER	David Williams	davew@hwa-inc.org
Midwest 2	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
Pioneer 3	PRESIDENT	Lee Spurgeon	lee@lovelandsurveys.com
	PRESIDENT-ELECT	John Thatcher	jthatch1@ch2m.com
	SECRETARY/TREASURER	Jered McGrath	mcgrathjered@hotmail.com
Rogue River 4	PRESIDENT	Stephan (Pat) Barott	sbarott@charter.net
	PRESIDENT-ELECT	Daren Cone	dcone4stengr@embarqmail.com
	SECRETARY/TREASURER	Joseph A. Bova	bojova@aol.com
South Central 5	PRESIDENT	Allen Hart	allen.j.hart@odot.state.or.us
	PRESIDENT-ELECT	Tom Del-Santo	tom@ci.klamath-falls.or.us
	SECRETARY/TREASURER	Ernest Lundeen	ernest.lundeen@oit.edu
Southwest 6	PRESIDENT	Edith Forkner	edith_forkner@or.blm.gov
	PRESIDENT-ELECT	Mike Erickson	merickson@dyerpart.com
	SECRETARY/TREASURER	Corey Woodruff	coreywoodruff@stuntzner.com
Umpqua 7	PRESIDENT	Ron Quimby	surveyor@ieengineering.com
	PRESIDENT-ELECT	Carl Sweden	cslandsurveying@douglasfast.net
	SECRETARY/TREASURER	Brent Knapp	brent.knapp@umpqua.com
Willamette 8	PRESIDENT	Lee MacDonald	lee@macdonaldsurveying.com
	PRESIDENT-ELECT	Jamey Montoya	insanity4free@yahoo.com
	SECRETARY/TREASURER	Nathan Magness	magness@wbcable.net
Blue Mountain 9	PRESIDENT	Michael Posada	mposada@andersonperry.com
	PRESIDENT-ELECT	Rod Lewis	survey@bartonlaser.com
	SECRETARY/TREASURER	Steve Haddock	witnesstree@eoni.net

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

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



THE OREGON SURVEYOR

Volume 34, No. 3
June/July 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
Reports	
PLSO Board Meeting Minutes—May 2011	8
Legislative update	14
News from the Chapters	28
Rogue River Chapter community outreach	31
2011 Trig-Star update	32
Features	
PLSO membership dues schedule to change	7
PLSO office is EarthWISE Certified!	7
Professional Land Surveyors of Oregon Foundation—What is it?	11
Revised Oregon Administrative Rule (OAR) 820-010-0635 Continuing Professional Development	12
PLSO to launch updated website	15
Paddle to the Pacific: 2011 David Thompson Columbia Brigade	17
LightSquared vs. GPS fight continues	18
GPS interference alters LightSquared's mobile plans	19
Duck Bill Thrill triathlon results	20
Rhode Island surveyors oppose "Engineering Surveys" Bill	21
Engineers performing land surveys—A White Paper Summary	22
Oregon adds twenty new Low Distortion Map Projection Zones to the Oregon Coordinate System	26

On the cover: Rich Thomas (with the notebook) and Doug Marsh (on the instrument which is a T-1201) with ODOT. They are shooting the centerline without reflectors, except for the back sights. Their only concern is that they mark the last location of each set-up so they can start on the next one correctly. Sure beats getting run over.



Tighter Tracking
FACTS: Faster Speed
Stronger EDM

NEW
X Series SRX

Improved auto-tracking virtually eliminates frustrating interference from traffic, trees, and other tough environments. New drive system improves auto-pointing accuracy by 20 percent and rotation speed by over 30 percent. New RED-tech® 800 EDM boosts accuracy by 25 percent and extends prismless operation to 800m.

Get all of the new SRX facts.

Contact your Sokkia dealer today.

SOKKIA

www.sokkia.com

Please visit your local dealer:

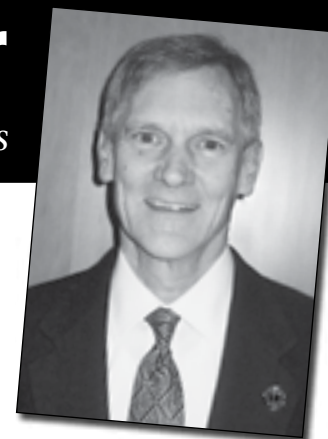
Pacific Survey Supply • 908 N Riverside • Medford, OR 97501 • 541.772.3825

Pacific Survey Supply • 10159 SW Commerce Cir., Ste. C • Wilsonville, OR 97070 • 503.570.3233

The PPI Group • 6015 NE 80th Ave., Ste. 400 • Portland, OR 97218 • 800.247.1927

From your Chair

■ Gary Anderson, PLS



I often find that the questions which people ask are quite telling of their attitude and initiative.

Although, upon questioning, we sometimes do not get the responses we want or expect. However asking even a “dumb question” is usually a positive experience, which at the very least results in useful learning. Recently a few of my own questions had both positive and unexpected results. And, a simple question which was posed to me at our Conference in Salem this year caused me to learn some things historically interesting.

While preparing for a property survey along Geranium Lane (name changed for confidentiality) I went about contacting all of the various neighboring land owners asking for permission to pass through their land to locate and survey boundary monuments. One such owner obligingly said yes and suggested “that we could park our truck at a wide spot in the road by the water tanks”. When I called the next owner to ask for permission; I mentioned the suggested parking spot on Geranium Lane, as the road serves as her private driveway. She told me that it was “okay for us to be there, just to watch out for the barb wire fence”. Well, a few days later upon my crew’s arrival, she was not a happy camper at all and did not know why in the world we were there! The crew chief called me on his cell phone, politely letting me know that I was on speaker phone with the land owner standing by. After some verbal dancing, it became apparent that in our original conversation, she had heard me to say water line (not tanks) and had therefore pictured us surveying at the opposite side of her property, where she imagined some work was about to be started (by others). The good news is that she did eventually, again, agree that it was okay for us to work through her property. And there was no barbed wire to contend with! We found the needed monuments and successfully completed our work in the area the same day. The only unexpected, or potentially bad, news was that later on I learned this owner had made a point of showing our crew that she had a pistol on her and was going to keep record of everything we did.

On another project in a different area, we again had asked for and received permission from a dozen or so land owners to survey through, and past their properties. Our client in this particularly case, having done his own research of county records, had asked that we set monuments at a jog along a line where there was no record

of any being placed. Our field crew recovered and tied into some old subdivision control, ran and closed a traverse around the area (clearing much brush and blackberries) and eventually found iron rod monuments existed where none were expected. I then doubled checked with the county surveyor’s office, asking to see if we had missed anything in our research. Finding nothing else of record, I looked up the license number (a couple of the rods had caps that were still legibly marked) from OSBEELS records. I was fortunate to find the surveyor—alive, still in business, and interested in what we had found. After searching his records, he called me back and related the circumstances of the time when that survey took place (early 1990s) and agreed to file a survey with the county. I spoke with our client and gladly shared the current research we had for deeded ownerships and other surveys in the area. This occurred quite recently and so we are now just waiting to see the results of a roughly 7,300 days past due record of survey, county review and filing.

Is it best to ask permission or seek forgiveness? You will want to make the decision for yourself. Each case may vary due to your client’s needs, neighbor’s attitude, the terrain and project specifics. I much prefer to be able to tell a field crew that we have permission. And, in these lean economic days, it is not too hard to keep track of when we set monuments.

Enough about w-o-r-k! This past winter at our conference I was asked why, when asking those of you at lunch for donations to support student’s attendance at the Awards Banquet, did I call a ten dollar bill a “sawbuck”? As I recall, my immediate reply was that my father used the term but that perhaps he had been referring to a five dollar bill and grumbling about my diminishing memory, I forgot about the question. Then, this week while preparing this article about ‘no dumb questions,’ it came back to my mind. The following excerpts are as taken from various Internet sources (and, I believe everything that I read on the web, don’t you?).

“One reason why the ten dollar bill received the nickname sawbuck was because the Roman numeral for ten (‘X’, depicted on earlier versions) resembles the carpentry tool of the same name.”

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



I received a few comments regarding the cover of the April/May Oregon Surveyor. The photo featured an Oregon State Parks instrument set up in front of our state Capitol building. Here is another photo (*shown below*) of the scenario with Dean Timmerman and Bill Baierski from the Oregon State Parks Department (*Yes, I found my notes!*). They were getting GPS coordinates for a new state park in Oregon called 'Willson Park Capitol Park Mall'.

You would think I could remember Dean since we have the same grandma. When I was between ages 7-15, 'Grandma Tim' would watch us kids when our parents were gone. I learned later that 'Grandma Tim' was not really related to my family (unless you go back to Noah), but the name just stuck. A couple of years ago I met Dean and discovered his Grandma was also 'Grandma Tim', but they were actually related. Sometimes this world is smaller than we think it is.



The 2011 David Thompson Columbia Brigade started in Canada on June 3. If you are in Oregon this summer, you can meet the paddlers at their first Oregon campsite on July 6 in Irrigon. Their progress down the Columbia River will place them in Arlington on July 7, Maryhill on July 8, The Dalles on July 9, Hood River on July 10, North Bonneville on July 11, Vancouver on July 12, Kalama on July 13, Cathlamet on July 14 and finally arriving in Astoria on Friday, July 15. PLSO will be honoring the Brigade in Astoria. I suggest you be there for this celebration because the next one in 2111 might not fit in your schedule. If you make that schedule, the whole world will know who you are.

May you and your family have a good summer. ☺

“The United States ten-dollar bill (\$10) is a denomination of United States currency. The first U.S. Secretary of the Treasury, Alexander Hamilton, is currently featured on the obverse of the bill, while the U.S. Treasury is featured on the reverse. (Hamilton is one of two non-presidents featured on currently issued U.S. bills. The other is Benjamin Franklin, on the \$100 bill. In addition to this, Hamilton is one of only two persons featured on U.S. currency who was not born in the continental United States, as he was from the West Indies. The other, Kamehameha I, appears on the 2008 Hawaii state quarter.)” I will diverge to follow this Hawaiian thread for a paragraph because, it too, is some curiously interesting history.

“Kamehameha is remembered for the Kanawai Mamalahoe, the Law of the Splintered Paddle, which protects human rights of non-combatants in times of battle. The Law of the Splintered Paddle is a precept in Hawaiian law, originating with King Kamehameha I in 1797. The law, ‘Let every elderly person, woman and child lie by the roadside in safety,’ is enshrined in the state’s constitution. It was created when Kamehameha was fighting in Puna. While chasing two fishermen (presumably with the intention to kill them), his leg was caught in the reef, and one of the fishermen hit him mightily on the head with a paddle in defense, which broke into pieces. Luckily, Kamehameha was able to escape. Years later, the same fisherman was brought before Kamehameha. Instead of ordering for him to be killed, he ruled that the fisherman had only been protecting his land and family, and so the Law of the Splintered Paddle was formed.”



An older version of the ten dollar bill depicted the renowned Surveyors Lewis and Clark!

Finally, for those of you looking forward to my next recommended reading, get your hands on *The Collector*. This tale of David Douglas is another finely crafted book by Jack Nisbet who also wrote *Mapmakers Eye* and *Sources of the River* which contains tales of the explorer and surveyor, David Thompson. Like Thompson, Douglas too was a surveyor studying Cascadia 200 years ago. In his review, Knute Berger, author of *Pugetopolis* wrote, “Jack Nisbet’s brisk, thrilling account allows us to walk, ride and paddle along with David Douglas, the tireless 19th-century Scotsman whose name is attached to Cascadia’s iconic fir. Nisbet takes us on the ultimate naturalist’s tour of a largely untamed, unnamed, and unknown Northwest, land of giant salmon, circling condors, and 14-inch pine cones. What nature-lover doesn’t wish they could see the region as it was when explorers first arrived? Well, here you go.”

For a more personal feel of that era, join the Pioneer Chapter and others in Astoria on July 15 for the bicentennial reenactment of David Thompson’s Columbia Brigade. This will be great opportunity to meet with the brigade paddlers, the public, various politicians and to network with fellow surveying professionals from throughout North America.

You can usually find me at: North 45 degrees 24 minutes 37.75 seconds & West 122 degrees 44 minutes 54.25 seconds, or easier yet, you can call or email me with your input at 503-684-0652, ganderson@westlakeconsultants.com. ◉



The Lost Surveyor From the back cover

LAT 45° 06' 25.5" N LONG 122° 51' 15.7" W

Question: Can you tell me what church this is and where it is located?

Answer: It is the Church of the Holy Ascension of Our Lord, a Russian Orthodox Old Believer Church in Gervais, Oregon. The Gervais area is home to the largest group of Old Believers in the US. The church is located on Bethlehem Dr NE in Gervais (southeast of Woodburn).

■ *Mary Louise VanNatta, CAE*
PLSO Executive Secretary

Changing it up... keeping up with the times

I have never been known to be particularly patient. It is a bad characteristic, I know, but can help propel ideas forward on occasion. PLSO will see a few changes as the year goes on. I'm sure many of them will mark a significant improvement in the organization. I'll list a few here:

Website/Social media

PLSO members work hard to keep up on industry technology. That's also the case for those of us at the association's office. PLSO is embarking on a new website upgrade that is designed to streamline communications and make engaging with members of the profession easier. We are also not giving up on bringing our members along with social media skills. Here is what I am anticipating will be available to members are part of the upgrade.

Self-managed data. You will have your own password to your membership profile that you can update whenever you want. You can see what you've purchased through PLSO (classes, membership) and make this information available to others.

PLSO Store. We will be integrating a PLSO store, which will have all our books, logo merchandise, classes (even those that are free), membership dues and eventually conference registration all in one place. With the ease of using a credit card (or of course a check!), you can purchase everything you need from PLSO in one place.

Groups. You can join chapter or special interest groups and communicate with those groups.

Continuation some of the same great features. Research, surveyor directory, calendar, career and youth information will be easier to find.

We will be entering Phase 1 in the fall. Your patience will be much appreciated, even if I can't promise you mine (all the time)!

Facebook/Twitter/Linked In, etc.

If you haven't ventured into social media, now is the time. It *is* the present and the future will have more, better and faster versions of the same. If you don't get in at this stage, you will be very far behind in five years. Sign up and "like" the PLSO Facebook page. It's time.

Green practices

Everyone is talking about "green" everything, but not only is "green" the right thing to do for the environment, it also saves PLSO money and gives your membership more value. One way we did this at the office was to becoming EarthWISE Certified through Marion County. This rigorous process (probably available in your county) caused us to look at how we did everything. As a result we are dramatically reducing the use of paper and purchasing recycled paper. The paper is more expensive, but we are using less and reusing as much as we can. We will continue these practices throughout PLSO by providing less printed materials at our meetings and conferences and having more materials available on the website. The Conference Committee will be especially focused on ways to limit waste at every level.



Thinking ahead to meet the needs of the next generation

If you want to be in business in 5–10 years, then you must consider adapting your business practices. This is also true for PLSO. Your leadership is cognizant of who will be guiding the organization in the future. Young adults and teens will be our PLSO members in the near future. We must understand how they grew up. They always had the internet, cell phones and the ability to get instant information from search engines like Google. They will (and most currently do) search YouTube to learn to do almost everything. They communicate through the 140-character Twitter. They want fast access to everything, including leadership positions.

PLSO is working to reach students where they are—in Boy Scouts, career fairs and the internet. Participation in "Choose your Path, Make your Mark" has given us a branded, contemporary video to show on the internet and during presentations. TrigStar, scholarships and our student chapters, continue to engage and inspire future surveyors. They are also working to attract new members and leadership.

You can be a part of this change by advising when you can, assisting if you might and participating by being part of the change we need! ☉

PLSO membership dues schedule to change

At a recent board meeting, Brent Bacon, Bylaws Chair brought member-reviewed bylaws changes to the PLSO board for final approval. Accepted changes included an alteration in the dues collection schedule from the end of the year (Nov-Dec) to the middle of the year (June).

How will the new schedule work? **New members** who join PLSO will join for a year starting July 1, 2011–June 30, 2012. **Renewing members** will begin receiving notices to pay their dues in early Fall 2011. By then PLSO hopes to have its membership renewal system up on the website. It is expected there will be an option for a six-month or 18-month renewal. Although not fully determined, PLSO hopes to incentivize members to renew for 18 months to get them on the

summer renewal schedule and to limit the number of times members will need to be contacted.

There has been discussion about considering a dues increase (PLSO bylaws only allow a 5% increase by board action) for 2012 and beyond. The PLSO Board last increased dues in March 2007, and costs continuously increased since then. Research of other states shows that over half the land surveyor organizations in the nation have higher corporate dues than Oregon. But again, this is still in the discussion phase.

There also may be a way for sponsors to join at a new level that could include a number of benefits such as advertising and website sponsorship.

Watch for information about your dues renewal this fall. ◉

PLSO office is EarthWISE Certified!

Your Executive Secretary, Mary Louise VanNatta, is pleased to announce that her office, in which PLSO is housed, has been named EarthWISE Certified by Marion County.

What does it mean to be EarthWISE Certified? It means that the office plays a significant role in the protection of the environment of Marion County.

The application process was long and rigorous, but it is finally complete!

Congratulations!



New Aerial LiDAR System !

- UP TO 400 KHZ LASER PULSE RATE
- FULL WAVEFORM DIGITIZATION
- UP TO 60 DEGREES FIELD OF VIEW
- ROLL COMPENSATION SYSTEM
- INTEGRATED DIGITAL CAMERA
- OREGON MOBILIZATION SITE

3Di WEST

AERIAL MAPPING

LiDAR

ORTHOPHOTO

GIS

www.3Diwest.com

(541) 343-8877

bhazell@3Diwest.com

PLSO Board of Directors Meeting Minutes

May 14, 2011 • Chemeketa Center for Building and Industry, Salem

DRAFT

Attendees

Officers

CHAIR Gary Anderson | EXEC. SECRETARY Mary Louise VanNatta, CAE | PAST CHAIR Tim Fassbender

Board Members

CENTRAL (1) Parneli Perkins, President | Andrew Huston, President-Elect
MIDWEST (2) Renee Clough (Alt. for Jeremy Sherer, President)
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) Carl Sweeden, President-Elect
WILLAMETTE (8) Lee MacDonald, President
BLUE MOUNTAIN (9) Rod Lewis, President-Elect

Committee Chairs

EGAC/TRIGSTAR Joe Ferguson | LEGISLATIVE Dan Linscheid
SCHOLARSHIP Steve Haddock (Alt for Mike Posada) | TECHNOLOGY CONSULTANT Tyler Parsons

Guest

David Souza (Harness Tech.), James Steele (Chemeketa Student), Pat Gaylord (Pioneer Chapter), Harvey Gail (Spire Management), Jim Luke, Herb Farber

Editor's Note

These minutes are currently at 'draft' status and will be approved by the PLSO Board at their next board meeting in September 2011.

Call to Order

The meeting was called to order at 10:02 am by Chair Gary Anderson. Welcome and self-introductions were made.

Out of Agenda Order

Chair Anderson introduced Dave Souza to talk about the PLSO website. He provided a review of the beta site and asked for input. The site address is <http://surveyorconnect.org/associations/PLSO/cms>.

James Steele was introduced. He is ready to graduate from CCC and came to discuss the Chemeketa Community College Geomatics Program. Chemeketa has suspended their two year program. Steele is one of five who will graduate this year. He reviewed the areas of study and what was offered in the one-year study.

Review and Approve Agenda

The agenda was reviewed and approved.

Approval of Minutes

The minutes of the March 12, 2011 Board Meeting were reviewed.

MOTION: Cone moved and MacDonald seconded that the minutes be accepted as presented.

Motion passed.

Report FROM THE Executive Secretary

VanNatta reported current balance of the account is \$130,962.47 and there are 722 members, with 623 being dues paying members. The office has reorganized the membership database and are in the process of beginning a recruitment strategy for non-members. After comparing the OSBEELS list with the PLSO members list, there are about 780 prospective members. When the new website is active, members will be able to register or sign up online and it will be available year-round through the online PLSO store.

PLSO is drafting new brochures by combining the "Membership" and "Career" brochures.

The office is working to obtain a 2nd class postage permit, which will save PLSO \$100 per issue, which is about \$600 per year.

The office finished some articles for *the Oregon Surveyor* as well as provided an update for the ACSM (American Congress of Survey and Mapping) newsletter.

The office met with Wendell at Harness Technology and they started getting the new PLSO website up and running.

She highlighted that from the PLSO insurance policy: Employment Practices Liability Insurance-standard. Section 2E:

"Employee means an individual whose labor or service is engaged by and directed by the Name insured, or any covered entity. This includes volunteers, part time, seasonal and temporary Employees as well as any individual employed in a supervisory, managerial or confidential position. Independent contractors and sub contractors are not Employees unless they are dedicated agents or representatives of an Insured. Employees who are leased to another employer are not Employees."

Report FROM THE Chair

Anderson thanked Tyler Parson for his service for PLSO as Webmaster. Anderson gave him a copy of *Lasting Impressions*.

Chapter Presidents were given copies of *Building Futures* with an article that was written by Anderson.

The Oregon Building Congress has asked PLSO to join their Board of Directors. Anderson will meet with them to discuss.

Parsons provided an update on Bert Mason. He lives on River Road in Milwaukie and would welcome a visit. His email address is bmjr@plso.org.

Old Business

Strategic Planning—Mason Marker was absent so Anderson passed out the strategic directions and asked for input.

VanNatta provided the board with an update on the communications survey that was recently offered to members between April 11 and May 10, 2011. The survey contained 15 questions and a link was sent to Surveyor-L and through Facebook, using the web-based Survey Monkey program. Questions included demographic information, PLSO communication tools, education and the possible formation of a 501(c)(3) charitable organization.

- Results: A total of 95 members answered the survey. 78% of respondents have been members for more than six years and 76% are corporate members. The majority of respondents were over 45 years old.
- Regarding *The Oregon Surveyor* magazine, 61% thought the magazine was somewhat interesting, while 38% found it very interesting. The featured stories section was the most popular at 66%, followed by chapter minutes, board minutes and “From your Chair.” Participants enjoy the idea of a hard-copy publication, but also like the idea of having the magazine available electronically.
- Participants frequently used the PLSO website for meeting information and research. They look towards new features to include chapter

mini-sites, classified ads and being able to purchase memberships year-round and education credit tracking as a benefit. They also thought marketing and personal website development would be the most beneficial feature to help grow their business or advance their career. The most popular feature may be a media (photo/video) gallery.

- With the proposal of creating a 501(c)3, it was noted that many members were not aware that PLSO scholarship fund is currently not eligible for a charitable deduction. The majority of respondents said they would donate the same amount of money or more if it became so.
- Members were also asked about skills that would be important to include in a survey educational program. Writing, survey and mapping and trigonometry were highly rated.
- In regard to job shadows and internships, 44% of participants would be able to offer a 1-day job shadow and only 30% would be able to offer a short-term internship. They also listed activities that interns most likely could do to learn more about the profession.

Discussion: Ferguson said we need to focus on outreach and there was a brief discussion about PLSO needing a public awareness campaign. Farber, who served as strategic planning chair, said we need to take each piece a little at a time. PLSO needs to be ready when the opportunities present themselves. Clough used her triathlon to keep surveying in front of the public. Clough has the geocache containers and each chapter is encouraged to have at least one placed. MacDonald asked about the paid outreach position. Anderson said that it was brought up, but there was an issue about funding this position. LSAW had to lay off their paid outreach person. Ferguson said we

need to keep track of our volunteer hours and the activities that we do so we can show the community what is going on in the surveying community. VanNatta added that a video will be one of the more important communication tools in the future. Farber encouraged break-out sessions to create energy around the plan.

Gaylord suggested we focus on our strategic partners (realtors, homebuilders, etc.). We should look at enhancing the “Special” class membership and the benefits we have to offer them. Barott said they have built a good relationship with the title company and have been invited to the Title Company’s meetings and receive PDHs. We need to develop a membership category for them and incentives for them to participate. Farber added that he will be speaking to 150 realtors in the MLS service. Fassbender encouraged members to join service clubs like Rotary.

New Business

Scholarship Contributions for 2011—

Haddock passed out a report that included issues for discussion. They included reaffirming the purpose of the PLSO Scholarship Program, funding source for the Pete Maring Scholarship and Harold Stockhoff Golf Tournament. Should some of these expenses be chapter related?

Questions included what is appropriate for the scholarship funds to cover. Gaylord said he understood the purpose of the scholarship fund is to provide scholarship funds to land surveying students. The Board has never put expenses on the back of the scholarship fund. He remembers that PLSO opened up the scholarships to other schools other than OIT and OSU. PLSO opened it up to students who would transfer to a 4-year school and eventually take the LSIT. He said he agreed with Haddock that the Board put \$500 in the fund.

Continues on page 10

The Pete Maring Scholarship is offered as a member benefit and is for a dependent of a PLSO member and they must not be going into the surveying field. Their essays include why they don't want to go into surveying. If they do, they are encouraged to apply for the PLSO scholarship fund.

Gaylord said that the Harold Stockoff Golf Tournament donation shouldn't come from the scholarship fund, but he encourages the PLSO to support it.

Break for Lunch

A one-hour class on Giving Professional Presentations and Media Training was conducted by Mary VanNatta and Harvey Gail of VanNatta Public Relations and Herb Farber of Farber Surveying. One PDH was awarded to those in attendance for the presentation.

Scholarship (cont)—Fassbender provided a report on the 501(c)3. He believes the foundation will answer a lot of questions about the scholarship issue. Fassbender said he sent the bylaws out for the chapters to review but has not heard back. He discussed how the foundation would be formed.

MOTION: Perkins moved that the scholarship fund be used to fund the PLSO scholarship and the Pete Maring Scholarships only. Hart seconded.

Motion passed.

Gaylord reminded the board that the conference committee minutes mentioned that the conference budget included expenses for the scholarship auction (saved by not printing the conference programs).

MOTION: Perkins moved that \$10,000 be moved to the OCF fund. MacDonald seconded.

Motion passed.

Haddock said he needs a budget if they are going to pay for items to earn money. Discussion resumed about the

501(c)3). Most chapters thought the rules were okay. Haddock said he had some issues with how the board is organized. The makeup of the board will be important. It is difficult for chapters to be required to have representatives on committees. This is in the bylaws.

Membership Dues Drive—Lee Spurgeon, Daren Cone, Gary Anderson agreed to be on a task force and VanNatta would put together a conference call. National research had been done and Gaylord said we have the lowest dues. The bylaws only allow the board to have a 6% dues increase. Johnston reported in writing that there hasn't been a dues increase in over 10 years.

Committee Reports

Conference Committee—Anderson and Hart were at the conference committee. They are looking for “theme” suggestions. There are also looking for presentation suggestions, especially major speakers.

Scholarship—Haddock spoke previously.

EGAC/TrigStar—Ferguson said Trigstar is over for the year. Simon Ewing from Springfield was the winner. Guy Dent was the proctor.

Legislative—Linscheid gave a report from F. VanNatta. HB 2893, the notice (right of entry) bill, with oral testimony from Dan Linscheid, was approved by the Senate Business Committee and is on its way to the Senate floor. Measure HCR 17 regarding the David Thompson Brigade Celebration was introduced at the request of the PLSO. It has been passed both houses. The boundary line agreement bill (HB 2892) awaits scheduling in the senate and the Corner Preservation fund, (HB 2351) is dead. Gaylord asked that we introduce the concept of studying cemeteries. Cemetery law is treated like a subdivision. This becomes a problem with paying lot fees. We should get together with the cemetery people to talk about this.

PLSO/OSBEELS—There are updates to the rules that when you submit your renewal, you will need to submit your CPD/PDHs at the same time. Linscheid will be leaving the law enforcement committee as he will be President. Perkins asked a question regarding Board Service.

Webmaster—Another thank you to Tyler Parsons. He said the transition process went very smoothly.

NSPS—Bob Neathamer was not in attendance.

WFPS—Greg Crites was not in attendance.

PLSO Liaison to OACES—Scott Freshwaters was not in attendance.

Oregon GPS Users Group—John Minor was not in attendance.

Publications—June 3 is the deadline for *the Oregon Surveyor*.

Awards—Logan Miles reported in writing. They will soon be looking for nominations for upcoming leadership.

Good of the Order

David Thompson Brigade Arrival in Astoria is July 15. Anderson would like PLSO to do an event. Jim Luke attended to talk about the project and the event. There are tents, a mapping kiosks and a lot of needs, including money.

MOTION: Clough moved that Luke be allowed to ask PLSO members, via Surveyor-L, to make a donation to the event on July 15 in Astoria. The board will make up the rest up to \$1000. Fassbender seconded.

Motion passed.

The next board meeting is September 10 in Springfield.

Adjourn—Being no further business, the meeting was adjourned at 3:35 pm.

Motion: Fassbender moved that the meeting adjourned. Barott seconded.

Motion passed. ☺

Professional Land Surveyors of Oregon Foundation—What is it?

■ *Tim Fassbender, PLS*

In Fall 2010, the PLSO Board of Directors discussed the benefits of creating a Professional Land Surveyors of Oregon Foundation (PLSO Foundation). The reason for this discussion is that PLSO is an IRS 501(c)(6) corporation which is not a charitable corporation and thus does not have some of the tax benefits that makes donations possible. Creating a 'Foundation' carries a charitable 501(c)(3) status. Section 501(c)(3) is the portion of the US Internal Revenue Code that allows for federal tax exemption of nonprofit organizations, specifically those that are considered public charities, private foundations or private operating foundations. It is regulated and administered by the US Dept. of Treasury through the Internal Revenue Service. There are other 501(c) organizations, indicated by categories 501(c)(1) – 501(c)(28). This discussion will focus on 501(c)(3).

The PLSO Foundation, will not replace the Oregon Community Foundation Fund that PLSO currently has administrating our scholarship fund. The PLSO Foundation would serve as a means for charitable contributions made to fund the PLSO Scholarship and other scholarships, grants and revenue. This would allow those making the contributions to submit on their tax returns a charitable tax contribution when before they could not. The PLSO Foundation will not replace the PLSO Scholarship Committee and their efforts. The PLSO Foundation would aide in fundraising activities but have no input in their decisions on awarding scholarships.

Entities that can seek 501(c)(3) determination from the IRS include corporations, trusts, community chests, LLCs, and unincorporated associations. The overwhelming majority of 501(c)(3) organizations are nonprofit corporations.

In order to qualify for 501(c)(3) status, an entity must be organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, or educational purposes.

One of the most distinct provisions unique to Section 501(c)(3) organizations as compared with other tax exempt entities is the tax deductibility of donations. 26 U.S.C. § 170, provides a deduction, for federal income tax purposes, for some donors who make charitable contributions to most types of 501(c)(3) organizations.

Obtaining 501(c)(3) Status

In order for a corporation or other qualifying entity to receive 501(c)(3) it must apply to the IRS for recognition by filing Form 1023, Application for Recognition of Tax Exemption. The application is a thorough examination of the organization's structure, governance and programs.

Having 501(c)(3) status comes with compliance requirements, the most obvious of which is operating the organization within the IRS regulations. In addition, most organizations must file some version of Form 990 with the IRS each year. Additional compliance requirements exist at the state level.

Step 1. Establish a Nonprofit Corporation

This is a state-level process that establishes a nonprofit, corporate entity by the filing of Articles of Incorporation. The vast majority of nonprofits organize as corporations for a variety of reasons, including liability protection for the officers, directors and other key individuals.

Step 2. Obtain 501(c)(3) Status

This next step is much more complex than incorporating. To obtain 501(c)(3) status, a nonprofit corporation must apply to the Internal Revenue Service for recognition of tax exemption by filing IRS Form 1023. Relatively speaking, forming the corporation is fairly straightforward (assuming that one completely understands the process). Applying for 501(c)(3) status, on the other hand, is quite subjective. Form 1023 itself is up to 28 pages long. With the required attachments, schedules and other materials that may be necessary, it is not uncommon for these submissions to the IRS to be more than 50 pages. Think of Form 1023 as an IRS examination. Instead of an audit of a tax return, the 501(c)(3) application process is more like an audit of proposed (and/or previous) activity. It is a thorough examination of the organization's governing structure, purpose and planned programs. The IRS is looking to make sure that the organization is formed for exclusively 501(c)(3) purposes and that its programs are designed to fulfill these stated purposes. In addition, the IRS is looking closely for conflicts-of-interest and the potential for benefit to insiders—both possible grounds for denial.

PLSO Foundation operations

The PLSO Foundation will have a separate Board of Directors with separate Bylaws and Articles of Incorporation. The PLSO Foundation will report to the PLSO Board of Directors, not unlike any other current PLSO committee. The PLSO Foundation goals are to provide means for people to contribute charitable contributions to PLSO scholarship and grant activities. ◉

In the next *Oregon Surveyor*, the composition of the PLSO Foundation Board of Directors, Foundation By-Laws and policy-procedures will be discussed.

Revised Oregon Administrative Rule (OAR) 820-010-0635

Continuing Professional Development

Revised Oregon Administrative Rule (OAR) 820-010-0635

Board Approved May 10, 2011

Effective with the June 30, 2011 renewals

Continuing Professional Development

The purpose of professional development requirements is to demonstrate a continuing level of competency of professional engineers, land surveyors, and photogrammetrists.

(1) Requirements

- (a) Every registrant is required to obtain 30 professional development hour (PDH) units during the registrant's current biennial renewal period in order to renew for the next biennial renewal period.
- (b) Every registrant will report their PDH units on the Continuing Professional Development (CPD) Organizational form and submit to the Board office with the renewal form and fee. The CPD Organizational form must be completed in its entirety.
- (c) Supporting documentation to verify the PDH units recorded on the CPD Organizational form must be submitted to the Board office when requested to participate in an audit. Supporting documentation may include, but are not limited to:
 - (A) Completion certificate(s);
 - (B) Paid receipt(s);
 - (C) Attendance log;
 - (D) Other documents supporting evidence of attendance.
- (d) The CPD Organizational form and supporting documentation must be submitted to the Board in English or translated to English.
- (e) Records must be retained for five (5) years.

(2) PDH units must be obtained in qualifying activities related to the individual's registration.

A qualifying activity is any course or activity with a clear purpose and objective which improves, or expands the skills and knowledge relevant to the registrant's field of practice or practices.

(3) Non-qualifying activities may include, but are not limited to:

- (a) Regular employment;
- (b) Real estate licensing courses;
- (c) Personal, estate, or financial planning;
- (d) Personal self improvement;
- (e) Service club meetings or activities;
- (f) Equipment demonstrations or trade show displays;
- (g) Topics not relevant to engineering, land surveying, or photogrammetry professions;
- (h) Enrollment without attendance at courses, seminars, etc.
- (i) Repetitive attendance at the same course;
- (j) Repetitive teaching of the same course;
- (k) Attending committee meetings or general business meetings of any organization;
- (l) Taking professional or required examinations.

(4) Units—The conversion of other units of credit to PDH units is as follows:

- (a) 1 College Semester hour equals 45 PDH;
- (b) 1 College Quarter hour equals 30 PDH;
- (c) 1 Continuing Education unit equals 10 PDH.

Effective with the June 30, 2011 renewals, registrants are required to submit the CPD Organizational form along with their renewal for active status to certify completion of the required professional development hours. Failure to submit the CPD Organizational form may result in delinquent status or a delay in renewal processing.

- (5) Sources of PDH units—One (1) PDH unit may be obtained for each contact hour of instruction or presentation. Unless otherwise noted, there is no maximum amount of PDH units a registrant may earn per biennial renewal period. Sources of PDH units include, but are not limited to the following:
 - (a) Successful completion of college courses;
 - (b) Successful completion of short courses, tutorials, correspondence, web based courses, televised and videotaped courses;
 - (c) Active participation in seminars, in-house courses, workshops, and professional conventions;
 - (d) Teaching or instructing a course, seminar, or workshop one time only.
(This does not apply to full-time faculty teaching college courses);
 - (e) Authoring or co-authoring published papers, articles or books. Maximum of 10 PDH units per biennial renewal period;
 - (f) Active participation in professional or technical society, committee, or board. Maximum of 8 PDH units per biennial renewal period;
 - (g) Self study. Maximum of 6 PDH units per biennial renewal period;
 - (h) Mentoring of engineering, land surveying, or photogrammetry topics to a nonregistered individual not under your supervision. Each 10 hours spent mentoring equals 1 PDH unit. Maximum of 4 PDH units per biennial renewal period;
 - (i) Non-technical educational activities related to the registrant's employment;
 - (j) Developing, writing, or scoring an engineering, land surveying, or photogrammetric mapping examination for licensure or certification. Maximum of 15 PDH units per biennial renewal period.
- (6) Determination of Credit—The Board has final authority with respect to approval of courses, credit, PDH units for courses and other methods of earning credit.
 - (a) The Board will approve without listing courses which are sponsored by nationally recognized technical societies and those technical societies listed in 820-001-0000(4)(b)(A) through (E) and (4)(c)(A) through (H).
 - (b) The Board will approve PDH units obtained by a registrant from the list provided by NCEES Registered Continuing Education Providers Program.
 - (c) Credit determination for activities is the responsibility of the registrant and is subject to review by the Board.
- (7) If a registrant exceeds the requirement in any renewal period, a maximum of 15 PDH units in courses/ activities may be carried forward into the next renewal period.
- (8) Delinquent, retired or inactive registrants must complete PDH requirements as outlined in OAR 820-010-0520 in order to attain active status.
- (9) In the event a registrant holds a license in another state that has a lesser PDH requirement than Oregon or no PDH requirement, the registrant will need to satisfy Oregon's 30 PDH requirement to renew the Oregon license.
- (10) Multiple Registrants. The number of PDH units required shall remain a total of 30 PDH per renewal period for persons who hold registration as an engineer, land surveyor, and/or photogrammetrist.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.375

Editor's Note:

Page 3 of the OSBEELS Spring 2011 newsletter has a good write up.

You can view it online at:

www.oregon.gov/OSBEELS/docs/Newsletters/OregonExaminer041211.pdf

Legislative updates

Please feel free to contact Scott Freshwaters, Fred VanNatta, or any Legislative Committee member if you have comments or questions.

June 2, 2011

We're in the final weeks of session. Policy committees have finished up their work, most committees closed May 31. The only major committees still open are Rules, Revenue, and Ways and Means. Budgets are passing and business is getting completed. Maybe the session will be over at the end of June.

HB 2892 Our last remaining issue in the legislative halls was scheduled for a hearing/work session June 1 in the Senate Judiciary Committee.

Sometime May 31, it was pulled from the agenda. Our condolences to Chair Scott Freshwaters who traveled yesterday to this side of the Hill so he could be present at 8:30 AM for the hearing. Freshwaters, at the Capitol before 8:00 AM cancelled other legislative appointments he had made and headed back to work. Chuck Pearson, who discovered the change yesterday evening as he prepared for his schedule today came to Capitol anyway. We met briefly with Senate Judiciary Committee Chair Senator Floyd Prozanski from Eugene. He said his friend, a real estate attorney, said the bill would "further confuse things."

HB 2893 The notice bill has been approved by the legislature (both houses, 25-2 by the Senate) and awaits signature by the Governor.

HCR 17 The resolution honoring the achievements by David Thompson passed both chambers and was filed with the Secretary of State May 16.

HB 2351 Corner preservation fund never made it past House Revenue Committee.



May 19, 2011

HB 2351 The Corner Preservation Fee Increase has been held up in the House Revenue Committee since the April 13 hearing and has little chance of further progress. The Revenue Committee is not bound by the deadlines that bind most other House Committees. There is not much hope for this Bill, but if enough calls, letters and emails were directed to Revenue Co-Chair Rep. Vicki Berger and Co-Chair Phil Barnhart, the Bill could get acted upon, it really needs a work session to amend the bill to cap the amount at \$15 and possibly exempt the miner's "proof of labor" affidavit.

HB 3386 The OACES Bill amending ORS 92 was referred to the Senate Environment and Natural Resources Committee on April 12, with no hearing scheduled at this time.

SB 877 The ODOT OCRS Bill was given a "Do Pass" recommendation by the Senate Transportation and Development Committee on May 6 and printed B-engrossed. It was approved in the House 57-1 on May 16.

Wrong place at the wrong time— Three times running

Robert Todd Lincoln, Abraham Lincoln's eldest son, is the only person to have been at the scene of three presidential assassinations.

On April 14, 1865, the day his father was shot, Robert Todd rushed to Ford's Theatre to be with his fatally injured father.

In 1881, he was in the room with President James Garfield the day Garfield was assassinated.

Twenty years later, he was to join President William McKinley at the Pan American Exposition, arriving shortly after McKinley was assassinated.

There are many a mysterious and bizarre happenstance about Abraham Lincoln's life and death, and so too with Robert Todd. You see, the son of the president would never have witnessed any of these assassinations had he not narrowly escaped death at a young age. While standing on a crowded railroad platform, he stumbled and nearly fell onto the tracks. He was grabbed by the shirt and pulled to safety in the nick of time. The person who saved his life was Edwin Booth—the brother of John Wilkes Booth.

Yeah, I got chill bumps, too.

Correction

In the April/May 2011 issue there was an erroneous statement in the article, "2010 Surveyor of the Year—Scott Freshwaters." Scott noted the error: On page 17, 2nd column, first paragraph it states, "He has been the owner of Freshwaters Surveying, Inc. for even a greater length of time." This is totally wrong since I received my license in 1987. The sentence should read, "He has been owner of Freshwaters Surveying, Inc. since 1987."

PLSO to launch updated website

■ Wendell Harness, PLS, Harness Technology

Harness Technology was selected to design and build a new website for PLSO and take on the role of webmaster. I'm a Land Surveyor of over 25 years and a web developer for nearly as long. My business partner, David Souza, has 25 years of business and marketing experience. Together we can provide a new, modern website for PLSO while also including other marketing and social services to help PLSO increase membership and conference attendance with the intention of increasing revenue.

Here are some of the features we plan to implement:

1. Drive traffic to the main PLSO site using social networking and a fully-moderated, branded forum powered by SurveyorConnect. You can see it in action at <http://plsoforum.com>. SurveyorConnect's traffic and membership, in a sense, become your traffic and surveyor community.
2. We have marketing plans to increase PLSO membership and conference attendance using incentives, referral programs and an active SurveyorConnect audience via webinars, workshops and SurveyorConnect events.
3. Our goal is to also increase your scholarship funds while providing services/products that surveyors need and use; for example, we can build websites for Oregon surveyors and funnel 10% of that revenue to the PLSO scholarship fund and/or PLSO organization.

4. The new website will include content management features so certain officers, chapter members and others with appropriate permissions to update various areas of the site assigned to them.

5. Other features of the new website will include: event management and calendar (including chapter-specific events), online membership and renewal, member blogging, PDH/CEU tracking, document sharing, mailing lists and more.

"It's exciting to be able to take advantage of new technologies. I am looking forward to the benefits it will provide the members, especially those in private business who can use the platform to create their own marketing services," says Mary Louise VanNatta, PLSO.

We are excited to work with PLSO and look forward to implementing the services outlined above now and into the future. My hat goes off to Tyler Parsons who has served PLSO so well over the years and continues now to help us through the transition. ◉

To contact the PLSO office

PHONE 503-585-4551

MAIL PO Box 2646, Salem, OR 97308

FAX 503-585-8547

EMAIL office@plso.org

WEBSITE www.plso.org

facebook

Join the group: Professional Land Surveyors of Oregon

LinkedIn

Join the PLSO group at www.linkedin.com

twitter

www.twitter.com/ORLandSurveyors



The PLSO Board of Directors thanks Tyler Parsons for his great service over the years as PLSO Webmaster.



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
G808
NetRover**
RGPS
WSRN
ORGN

SEATTLE
6510 - 216TH ST SE #1
Mountlake Terrace, WA 98043
800-454-1310

TACOMA
4903 Pacific Hwy E. #1
Tacoma, 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

2011 David Thompson Columbia Brigade

All land surveyors and their families are invited to join us at the David Thompson Columbia Brigade Arrival on July 15!

When July 15, 2011, 1:00 – 5:00 pm
1:00 – 4:00 pm Family-oriented activities
4:00 – 5:00 pm Grand Arrival of the Brigade into Astoria, Oregon

Where Catty-corner to the Maritime Museum (Also known as People's Place Park) at the corner of 16th Street & Marine Drive in Astoria.

What PLSO is honoring the group of canoes whose crews are traveling the same route as legendary surveyor, David Thompson. Thompson, a fur trader and explorer, first made his journey down the Columbia River from Calgary to Astoria in 1811. To commemorate the 200th Anniversary of the legendary journey PLSO is hosting a Grand Arrival Celebration. This is the final stop of the historical reenactment of the David Thompson Brigade, which occurred 200 years ago, coinciding with the City of Astoria's Bicentennial celebration.



Why To celebrate the past accomplishment of David Thompson with fellow surveyors as well as community members. This event provides the unique opportunity for both learning and fun—because the date also marks the bicentennial of Astoria, there will be plenty of historical information on Astoria, fur-traders, explorers as well as music and art displays.

You can help!

As surveyors, we can be proud of the surveying and mapping that David Thompson accomplished 200 years ago. We can also take great pride in our involvement in the 2011 Brigade. Additionally, there are things we can do to make this a great historical event. You don't have to be a registered Land Surveyor or a PLSO member to participate. Check out these links and see if you can help:

<http://2011brigade.com>

http://voyageurbrigade.org/thompson/2011_Thompson_Columbia_Brigade/Route_and_Schedule_2.html

www.thefurtrapper.com/david_thompson.htm

You can also help by donating \$10 or \$20 to help with expenses. Ask other surveying and mapping personnel at your office to donate. Or even ask your company to send in a donation of \$50 or \$100.

By helping out just a little, the big job will get done!

Send your checks to:

PLSO, PO Box 2646, Salem, OR 97308
with a note: "Brigade."

Thanks for your help!

—Jim Luke, Event Chair ◊



LightSquared vs. GPS fight continues



ACSM continues to fight for the integrity of nationwide GPS as LightSquared (a private company that recently received a waiver from the FCC to develop its 4G wireless network next to the GPS spectrum) continues to move forward with its planned activities; which could disrupt GPS usage throughout the country.

Curt Sumner, Laurence Socci and David Holland met with staff from the offices of Senator Mark Warner (D-VA) and Senator Jim Webb (D-VA) as well as Representative Eric Cantor (R-VA) to discuss the effect the FCC waiver for LightSquared will have on the surveying community nationwide. It was clear from the meetings with staff of Senators Warner and Webb that they are on LightSquared's side of the issue and went so far as to suggest that GPS users should upgrade their GPS units to make them work alongside LightSquared's proposed network.

The meeting with staff of Majority Leader Eric Cantor went better than the meeting with the Senate staff. Cantor's staffperson understood the issue and was sympathetic to our concerns.

Laurence Socci and Curt Sumner will meet with Marty Dannenfeler, Senior Policy Advisor for the House Committee on Energy and Commerce. The Energy and Commerce Committee has jurisdiction over the LightSquared GPS issue. We are hoping to have a hearing on the issue and to have an ACSM representative testify at that hearing.

A report on the effects of LightSquared's proposed network on nationwide GPS is due to the FCC on June 15. In the meantime, continue to write to your Members of Congress and voice your concern regarding this issue. For more information, go to www.saveourgps.org ◉

Editor's Note

Join our discussion on the PLSO forum at:

<http://plsoforum.com/index.php?mode=thread&id=73621>

6/1/2011 2:16 PM, Gary Anderson wrote:

LightSquared did reply, more "news" expected on June 15...

To: Sue Keith

Subject: MEDIA contact form submission from LightSquared

From: Gary Anderson, ganderson@westlakeconsultants.com

I am the current State Chair for the Professional Land Surveyors of Oregon (PLSO). We have read of a concern for GPS receiver usage within \"range\" of network facilities you are operating. Can we get a statement or better yet a report of your experience and findings of fact. Specifically our members are focused on the ability for existing survey grade GPS receivers to continue their functionality.

Thanks, Gary R. Anderson, PLS

To: Gary Anderson

Subject: MEDIA contact form submission from LightSquared

From: Sue Keith

Thank you for your interest in this issue. LightSquared is working cooperatively with engineers from Trimble, Garmin, and numerous other companies, as well as the FAA, Department of Defense and NASA, to test the extent of any interference and determine what types of receivers might be susceptible. Our final report with full test results is due to the FCC on June 15, 2011, and will include results for precision receivers. It will be a public document, but we will be happy to provide a copy if you like.

Best, Sue

GPS interference alters LightSquared's mobile plans

■ *Sinead Carew and Matthew Goldstein, Reuters*

June 20, 2011, NEW YORK (Reuters)

—LightSquared is dramatically altering its plans for a high-speed wireless network because of interference problems with GPS services, in the latest setback for hedge fund manager Philip Falcone's telecom start-up.

Falcone and his Harbinger Capital Partners' investors have gambled billions of dollars on the success of LightSquared. The company said that it would now use a different block of wireless airwaves for its network than originally planned, after months of testing found interference problems.

Analysts say LightSquared, which still needs billions of dollars more funding to build its network, may face difficulty raising money in light of the interference problem with GPS services, which are used in everything from airline navigation to defense systems.

The new plan will also likely delay LightSquared's wireless launch, which is expected next year, analysts said.

To date, Harbinger has sunk about \$3.1 billion into LightSquared—making the hedge fund the company's largest single equity investor. The telecom venture also has sold over a \$1 billion in short-term debt.

Falcone—one of the hedge fund industry's better-known traders—has previously said he may take LightSquared public to raise funds this year. The venture has become one of the billionaire manager's riskiest and most high-profile bets.

LightSquared said it paid satellite provider Inmarsat Plc an additional \$40 million to prepare the alternative spectrum for use by early next year on top of its earlier agreement to pay Inmarsat \$337.5 million. LightSquared is leasing some spectrum from Inmarsat for its network.

Delays ahead?

Under the revised plan, LightSquared's CEO Sanjiv Ahuja told Reuters that customers would be able to test its service in early 2012 and launch commercial services around mid 2012.

BTIG analyst Walter Piecyk said LightSquared could ill-afford any delays, given competitive pressure from rivals such as Verizon Wireless and AT&T Inc., which already offer high-speed wireless services.

"It's questionable whether the new spectrum will be ready in time to meet that new timeline," said Piecyk.

LightSquared said the new spectrum band it plans to use would be "largely free" of interference from more than 99 percent of GPS devices. It expects to find a way to resolve interference with remaining devices, Ahuja said.

In the meantime, Ahuja said he would also try to remedy the larger GPS interference problems in the original spectrum in time to use that spectrum in "a couple of years."

GPS service providers including Deere & Co., General Motors and Trimble Navigation had said they were concerned that LightSquared's network as it was originally planned would cause serious interference.

The GPS camp was still unhappy with LightSquared's plans. The alternative spectrum would still interfere with "many critical GPS receivers," said Trimble general counsel Jim Kirkland who represents the Coalition to Save Our GPS. "This latest gambit by LightSquared borders on the bizarre," he said.

Under the new plan, LightSquared said it had agreed to use more than 50% less power to transmit wireless signals in its network to provide

additional protection to GPS.

Executives for the company said this would not impair its mobile service.

Investment risk

LightSquared had to ask U.S. regulators for an extension to its June 15 deadline to file a report about interference issues until July 1. It was granted the extension.

LightSquared has been in talks with Sprint Nextel about a network-sharing agreement aimed at reducing network construction costs for LightSquared.

Falcone sent Harbinger investors a letter last week saying LightSquared had signed the Sprint deal but did not provide financial details.

Ahuja declined comment on whether a deal had been finalized or how much it might be worth. Reuters had previously reported that the deal would involve LightSquared paying Sprint about \$2 billion a year for 8 years.

Harbinger investors have said they are worried about Falcone's plan to set up a new wireless operator and say he may have bet too much of their money on its success. The LightSquared investment represents a little over half of Harbinger's assets under management.

Falcone is giving some investors who have asked to get their money out of his fund some non-tradable LightSquared shares instead of cash. ◉

(Additional reporting Svea Herbst-Bayliss in Boston; editing by Gary Hill, Bernard Orr)

Further reading

Check out the articles written by the Coalition to Save our GPS at:

www.saveourgps.org/related-articles.aspx

Surveyors on the Move!

Duck Bill Thrill triathlon results

■ *Renee Clough, PE, PLS, AICP*

A great time was had by the Get It Surveyed team and their cheerleaders at the Duck Bill Thrill Triathlon on May 22. The official times were:

Renee Clough	Swim, 1500 meters: 41 minutes, 52 seconds
Dan Nelson	Bike, 40km: 1 hour, 32 minutes, 10 seconds
Russ Dodge	Run, 10km: 50 minutes, 58 seconds



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

Coming Soon

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



▲ Well, here goes!
(Renee Clough)

◀ I did it! I did it!
But I am NOT carrying
the field equipment
tomorrow!

(Dan Nelson)

▶ I'm crossing
the finish line!
We're done!

(Russ Dodge)



Rhode Island surveyors oppose “Engineering Surveys” Bill

■ Edward J. O’Brien, PLS, RISPLS President

Concurrent bills H5470 and S0519 were introduced to the Rhode Island House and Senate earlier this year in an attempt to modify the Statute that defines Engineering by adding a section to include “Engineering Surveys.” The House bill was sent to the House Commerce Committee for a hearing, and both sides were there prepared to testify. The bill for the moment is tabled in committee for further study, but as I write this I am informed that the climate has gotten very political and that there is some concern of the bill moving forward again.

Rhode Island has two separate boards of registration. From the surveyors’ perspective, Surveying services are regulated in the State of Rhode Island under the State’s inherent “police power” to promote public safety, health, morals, public convenience, and general prosperity.” The problem with “Engineering Surveys” as defined by the Rhode Island bill (based on the NCEES Model Law) is that the activities described are already defined and regulated under the Surveying Statute. “Engineering Surveys” does not provide for any regulation of the four “E’s—Education, Experience, Examination, and Enforcement”.

The Rhode Island Society of Professional Land Surveyors (RISPLS) voted at the Last General Membership Meeting to write the NCEES to petition them to remove the term “Engineering Surveys” from the

Model Law. The American Society of Civil Engineering (ASCE) has expressed concerns in a list of issues in its “Policy Statement 333—Engineering Surveying Definition.” In 2005, New Mexico removed the very same language from their state statutes. Whether the term “Engineering Surveys” is used in a state statute or not is indicative of a gray area of professional practice that is being played out in many states.

The days of transit and tape are gone; surveying is no longer being taught to engineers as a core curriculum requirement. Surveying has become specialized. The states’ education requirements to become a Registered Professional Land Surveyor, as well as the Continuing Education Requirements (CEUs), reflect this fact. The term “surveying” is no longer limited to property boundary surveys. ◊

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

pacific survey supply
The Northwest's Authorized Trimble & Survey Pro Distributer!

TSC3

SUMMER IS HERE!
Come in and check out our Specials!

NOMAD

S3
S6
S8
VX

R8
O
V
E
R

ALL SURVEY-PRO PRODUCTS
ARE ON SALE NOW!

Summer 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

Engineers performing land surveys

A White Paper Summary

■ *Cindy Halcumb, PLS*

There are several documents that have been presented in the state of Washington that are attempting to give licensed engineers the legal right to perform surveys. This paper will discuss the published policies of the Board of Registration for Professional Engineers and Land Surveyors regarding “Incidental Surveying” and the draft legislation by the Washington State Association of Counties to amend RCW 18.43.020. In addition, this paper will address the statements made in the White Paper Summary titled “Survey Duties of the County Road Engineer” that appears to address the intent of the draft amendment. This paper was authored by Walt Olsen, PE and Deputy Director of the County Road Administration Board and Al King, PE.

The Board of Registration for Professional Engineers and Land Surveyors has formalized their standard policies for Incidental Surveying. The text can be found in the fall 2007 issue of the *Journal* in an article titled “The Board Finalizes Position on Incidental Surveying Practice.” There are four conditions outlined where the Board will allow engineers to perform a land surveyor’s duties, as follows:

1. That the work performed is limited to the making of field measurements and mapping for the illustration of topographic features.
2. That the work performed by the professional engineer is developed for his or her own use toward the development of an engineering design.
3. That the work performed by the professional engineer is performed in a manner that is consistent with the topography’s intended purpose.
4. That the professional engineer is competent and conversant in the techniques to correctly develop and map topographic information.

The conditions of the Board are not very explicit, and have resulted in various subsequent interpretations. The work is to be limited to measurements to illustrate topography. A map with just topography is essentially useless. It cannot be tied to the real world by any physical

monuments or boundaries. It is inevitable that the engineer will add some type of boundary or right of way line to make the topography valuable.

According to the Board, the survey work is to be for the engineer’s own use, but common practice has been for County and City Engineers to collect and use their own data to aid in the design of public improvement projects. All work that is performed by these engineers is publicly funded, and the improvements that result from this work are for public use. Therefore, these topographic surveys do not meet the criteria of the board. They must be accomplished by a licensed land surveyor to protect the best interest of the public.

The policy states that the Surveys are to be performed in a manner that is consistent with their intended purpose. The meaning of this statement is not clear. It could be referring to the level of accuracy that the survey requires, or the type of instrumentation. An assessment of accuracy requires an understanding of the technology that is constantly evolving in the land surveying industry. Modern electronic data collection may seem to be a simple process. It is this very assumption that causes many errors to occur. Land surveyors have strict rules that must be followed for a correct survey. The understanding of how to calibrate the instruments, achieve appropriate closures, perform redundant measurements, and correctly reduce the topographic data requires the training and experience of a land surveyor.

It seems that pursuant to the Board’s policy, no education or work experience documentation is required for an engineer to perform topographic surveys. The engineer is required to make their own personal assessment that they are competent and conversant in the survey techniques. They are not required to document training or obtain professional development hours in land surveying. There are no assurances that they are truly qualified or that their continuing education is met.

According to the Washington Department of Licensure, you must meet all of the following requirements to obtain a license to perform surveying in this state:

- Pass the Land Surveyor in Training Exam
- Pass the Principles and Practices of Land Surveying Exam
- Pass the Washington 2-hour Land Surveyor's Exam
- Have 8 years of professional-level experience under the direct supervision of a licensed land surveyor.

Pursuant to the Washington Administrative Code, WAC 196-16-007, you must have eight years of experience in land surveying work of a character satisfactory to the board to be eligible for the professional land surveyor examination. The code continues by stating that supporting documents such as college transcripts and experience verification forms must be received by the board three months prior to the date of the examination. Therefore, for an individual to be awarded the right to take the professional Land Surveying Exam, the Board must review and approve their documented experience and education.

The engineer can self certify their ability to be able to perform surveys, while the land surveyor must provide proof of their experience and education to be granted the right to take the exam. The land surveyor must complete 15 professional development hours of education each year to maintain their licensed status. It seems we have different requirements for different individuals to perform the same work in the State of Washington. Those engineers who are truly competent and conversant in the proper survey techniques should be willing to submit the required documentation to the Board of Licensure and pass the required land surveying examinations.

The Board's reasoning for their four conditions is reported to be that many professional engineers have had formal instruction in surveying techniques within their academic curriculum for an engineering degree. While some engineers may have past survey training, my research indicates that a sufficient amount of this training is not a requirement for a civil engineering degree.

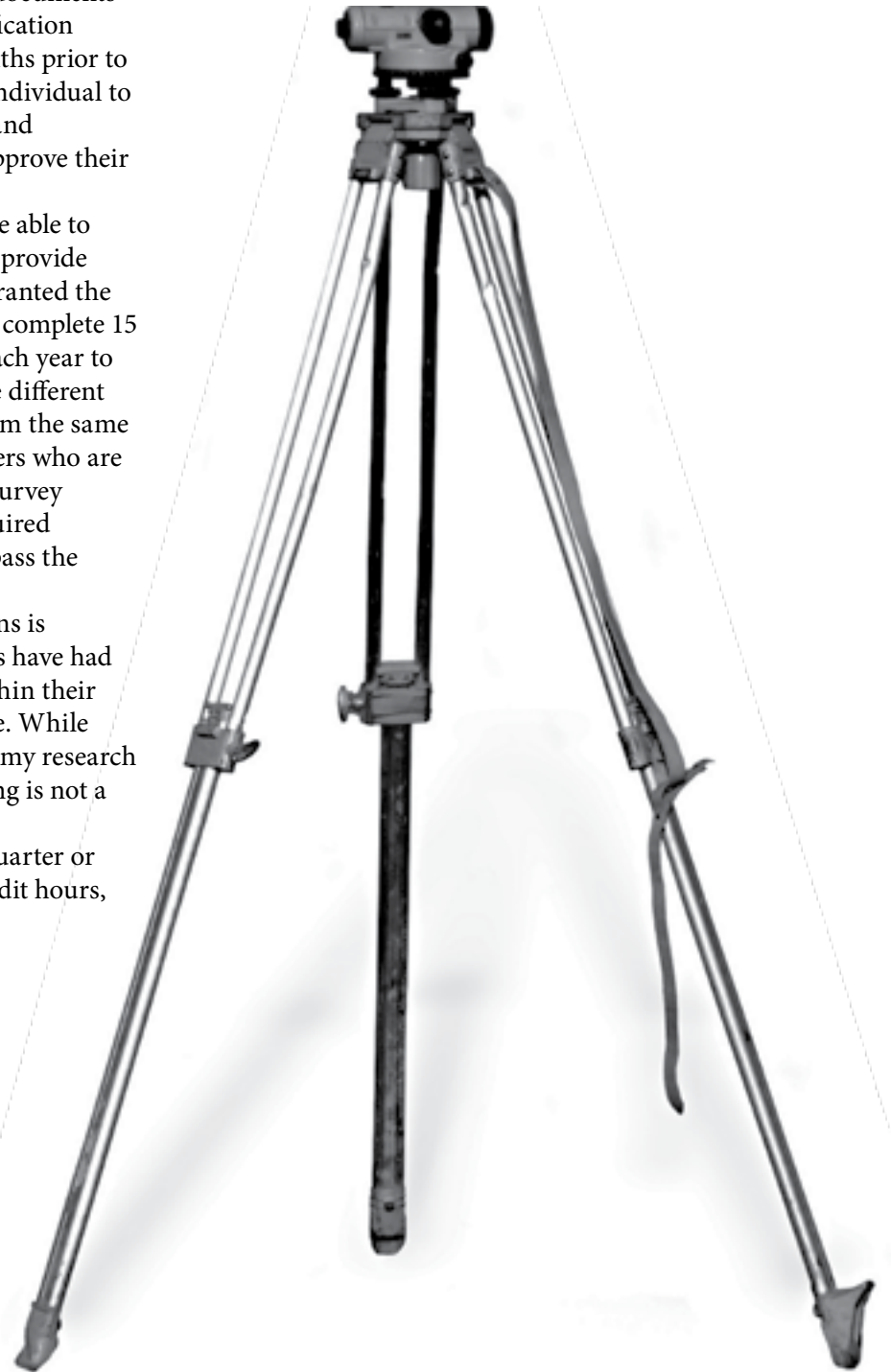
The following institutions require only one quarter or semester of a surveying course, being 3 to 4 credit hours, for a civil engineering degree:

- University of Washington
- Washington State University
- Eastern Washington University
- University of Idaho
- Boise State University
- Oregon Institute of Technology
- Oregon State University
- California State University, Chico
- California State University, Fresno

One course in entry level land surveying does not qualify an individual to perform incidental surveys, based upon the definition of the profession alone. The current permitted scope of practice for engineers and land surveyors as defined by the RCW is shown below:

RCW 18.43.020.5a "practice of engineering" means any professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and

Continues on page 24



engineering sciences to such professional services or creative work as consultation, investigation, evaluation, planning, design, and supervision of construction for the purpose of assuring compliance with specifications and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects.

RCW 18.43.020.9 “practice of land surveying” means assuming responsible charge of the surveying of land for the establishment of corners, lines, boundaries, and monuments, the laying out and subdivision of land, the defining and locating of corners, lines, boundaries, and monuments of land after they have been established, the survey of land areas for the purpose of determining the topography thereof, the making of topographical delineations and the preparing of maps and accurate records thereof, when the proper performance of such services requires technical knowledge and skill.

RCW 18.43.040 makes the specific distinctions between Engineers, Structural Engineers and Land Surveyors. Holding one of these licenses does not allow you to perform the duties of the others.

The current law defines a very clear line between what surveyors and engineers are supposed to do. Each field requires very specific knowledge and training, which is why the definitions can be so detailed. Ethically, strict adherence to this law should be practiced by both professions. The published policy by the Board is not consistent with the definitions that we are licensed to work under.

The intent of the term “engineering surveys” can be found in the Olsen/King White Paper Summary “Survey Duties of the County Road Engineer.” According to this paper, “simple reconstructions and right-of-way elements are routinely dealt with by the engineers, including topographic surveys.” This paper further states that since 1947, the Board of Registration for Professional Engineers and Land Surveyors has instructed professional engineers that it is acceptable for them to perform a limited amount of surveying.

Pursuant to the WSACE County Engineers Code of Ethics, “the County Engineer shall manage and administer the County Road Department and other assigned departments lawfully under the County Engineer’s jurisdiction in accordance with the spirit and intent of the appropriate statute and in a professional manner suggested by professional training, continual professional improvement, and professional guidance from State and national groups and professional organizations.” They are required to manage and administer based upon the appropriate statute.

The intent of the current law is to create a comprehensible environment for land surveyors and engineers to work together. The responsibilities of the County Engineer as outlined by the White Paper and the RCW are clearly intended to be in the capacity of a supervisor where land surveying duties are shown. RCW 36.75.050 defines that “establishing, examining, surveying, constructing, altering, repairing, improving and maintaining county roads shall be exercised under the supervision and direction of the

...a Licensed Land Surveyor must be retained to correctly locate these boundaries to protect the public. Furthermore, public improvements, which are publicly funded, must be properly constructed with the proper professionals working together in their respective fields.

The Washington State Association of Counties has interpreted the Board’s policy in such a broad manner that they have created a draft amendment to RCW 18.43.020, the definition section of the Engineering and Land Surveying code. The draft legislation intends to include provisions that allow for engineers to perform “engineering surveys.” The definition for “engineering surveys” does not exist anywhere in the code which defines these professions. The proposed legislation text is the first time this type of a survey has been named. If this legislation is adopted, the exact meaning of this term will need to be defined and added to the RCW.

County Road Engineer.” The engineer is not to operate the machinery required to improve the road. He is required to hire a trained operator. The engineer is not to determine the boundary that is the division between the public and private lands. He is he required to hire a professional land surveyor. The intent of the code is unmistakable. The engineer must ensure that all operations under his supervision are performed by the appropriate licensed professional.

The White Paper reports that surveying makes up a considerable part of the responsibilities of the County

Engineer, noting that ‘surveying’ is required to properly lay out, engineer and construct roads in particular. Surveying is required for these endeavors. Road right-of-ways are the boundaries between the public and private lands. Therefore a licensed land surveyor must be retained to correctly locate these boundaries to protect the public. Furthermore, public improvements, which are publicly funded, must be properly constructed with the proper professionals working together in their respective fields.

There are government municipalities in this state that have a licensed engineer on staff who performs land surveying without the benefit of a licensed land surveyor. The cost to employ or sub-contract to a land surveyor is typically less than the salary of an engineer. If the engineers are surveying, their professional liability insurance should be extended to include land surveying. This would mean an

Engineer still keeps copies of records such as right-of-way maps, but the official location for all public documents is the auditor’s office.

The Assessor’s Office is responsible for updating the Assessor’s Tax Maps based upon the most current data. When a private land surveyor submits a Record of Survey for recordation, the Assessor’s Office utilizes this information to update the boundaries on their maps. These maps are also utilized in most counties by the GIS department to overlay onto the aerial photography which is again, utilized by the public. Without a land surveyor to oversee and assist with these endeavors, the Counties are not protecting the best interest of the public.

The authors of the White Paper state that engineers are qualified to do land surveying work because “Civil engineering training in every college or university includes

In sports we often say, “Let the coaches coach, let the officials officiate and let the players play.”

It is evident that we need to let the Land Surveyors survey and the Engineers engineer.

increase in cost, and for the County Road Engineer, these are publicly funded policies. These agencies are spending more public dollars to have untrained individuals perform a land surveyor’s duties. They have interpreted the published policy of the Board to justify this practice.

Pursuant to the Olsen/King White Paper Summary, the proposed legislation is for engineers to determine right-of-ways. Right-of-ways are boundaries, and the location of these boundaries must be correctly monumented to provide the public proper notice of their location. At some point a land surveyor’s services would need to be retained for this endeavor, unless the intent is for the engineer to set the monuments. The dividing line between the land surveyor’s job and engineer’s job could be lost completely, regressing the State of Washington to before 1947 when the professions were not separately defined in the code. At that time there was sufficient documentation presented to change the statute to define land surveying. This evidence is still apparent and obvious today.

The White Paper attests that the Office of the County Engineer is one of the few “offices of record” responsible for keeping survey records in perpetuity. In 1991 the Supreme Court ruled in *Ellingsen vs. Franklin County* that the County Auditor is the person required to keep these records because they must be available to the public to give constructive notice. It is understood that the County

courses in surveying, notably cadastral and aerial surveying.” The current curriculum at our local Universities includes only one required course in basic land surveying.

CONCLUSIONS

The current practice of many engineers as reported is reaching outside the limits of the criteria set forth by the board and the current statute. Incidental topography by an engineer to make field verifications of a survey performed by a land surveyor may be acceptable for private use only. Topography requires boundaries to be useful. The establishment of right of ways is the same as the establishment of boundaries. The engineers must not continue to survey topography or boundaries.

Out of respect for both professions and the ethical responsibilities we are to maintain, the draft proposal to amend RCW Chapter 18.43 to allow engineers to perform land surveying duties should be abandoned immediately. The liability issues alone should prevent the suggestion of such practice. It is far more cost effective and beneficial to the public to employ or subcontract to a Licensed Land Surveyor.

Based upon the facts outlined herein, it is apparent that the published policy of the Board of Registration needs to be reevaluated. ◉

Oregon adds twenty new Low Distortion Map Projection Zones to the Oregon Coordinate System

■ Mark L. Armstrong, PLS; Ken Bays, PLS and Ron Singh, PLS

On June 2, 2011 Oregon Governor John Kitzhaber signed Senate Bill 877 into state law which effectively adds 20 new low distortion map projections to the Oregon Coordinate System. These 20 new zones commonly referred to as the Oregon Coordinate Reference System (OCRS) now hold equal weight with the Oregon State Plane Coordinate System which was adopted for Oregon law in 1945. The OCRS zone parameter definitions will be recorded within an Oregon Administrative Rule (OAR). The purpose of the rule is to hold all Oregon Coordinate System zone map projection parameters and coordinate system definitions.

Background

For years the Oregon Department of Transportation had been looking for a better way to deal with map distortion other than the currently used Local Datum Plane Coordinate system (LDPC), which is a system that scales State Plane Coordinates to ground using a project combined factor which results in coordinates that are easily confused with State Plane Coordinates.

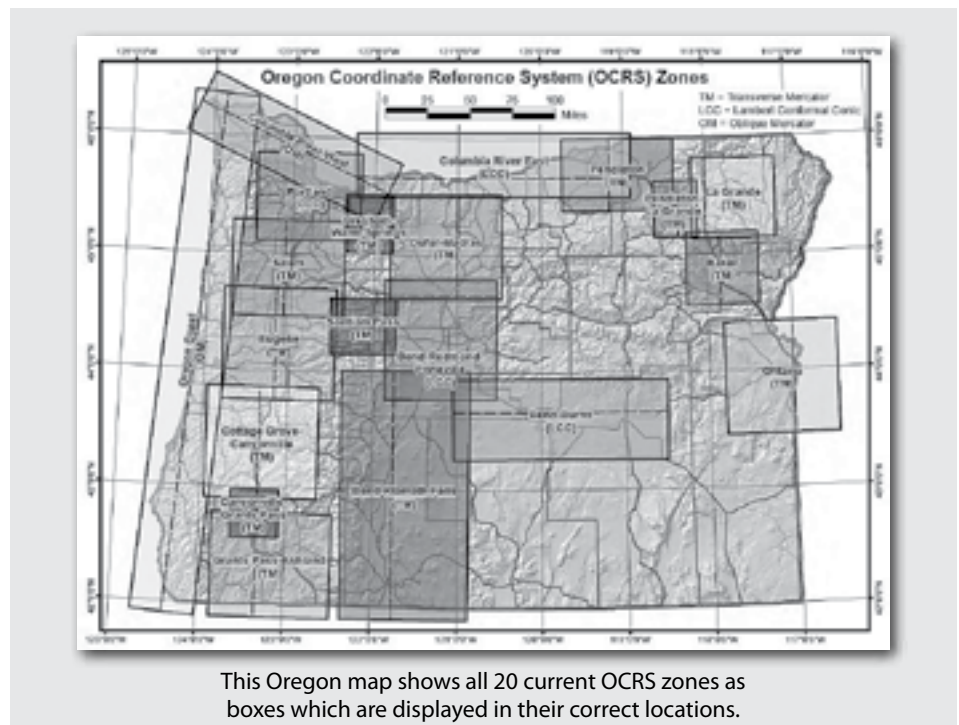
Ron Singh, (ODOT Chief of Surveys) decided to investigate the use of 'low distortion' projections after attending an ACSM conference session put on by Michael Dennis (Geodetic Analysis, LLC) in 2007. Subsequently, Ron made presentations at the March 2008 ODOT Surveyors Conference and the June 2008 Oregon GPS Users Group (OGUG) meeting to introduce the concept, which was enthusiastically received. In November 2008, ODOT and OGUG jointly sponsored a statewide workshop

entitled "Charting the Future of Low Distortion Projections in Oregon," with speakers from the National Geodetic Survey, academia, and private geodetic consultant, Michael Dennis. Then in April of 2009, the surveying and GIS communities were queried to see if there was interest to develop the system as a collaborative effort. The decision followed to move forward with developing test projections which led to the creation of a technical development team made up of interested stakeholders including land surveyors, GIS professionals, and academia. The term Oregon Coordinate Reference System (OCRS) was chosen by the group as the name for a new series of coordinate systems for Oregon. OCRS best practice goals were developed by the team to standardize methodology

and to satisfy long standing State Plane Coordinate system development criteria established by National Geodetic Survey policy. The technical development team worked with Michael Dennis from Geodetic Analysis, LLC of Pima, AZ to develop each zone using specialized software to highly optimize zone parameters.

Low distortion map projections

Low distortion map projections (like those within the OCRS coordinate system) are based on true conformal projections designed to cover specific portions of urban and rural areas of the state that have elevated topography. For conformal projections (e.g., Transverse Mercator, Lambert Conformal Conic, and Oblique Mercator (RSO), linear



This Oregon map shows all 20 current OCRS zones as boxes which are displayed in their correct locations.

distortion is the same in every direction from a point. That is, the scale at any particular point is the same in any direction and figures on the surface of the Earth tend to retain their original form on the map. In addition, angles on the Earth are the same as on the map. The term 'low distortion' refers to a method of minimizing the lineal horizontal distortion from two affects:

1. Representing a curved surface on a plane, and
2. departure of the elevated topography from the projection surface due to variation in the regional height of the area covered.

The advantages of a low distortion projection include:

- Grid coordinate zone distances which very closely match the same distance measured on the ground.
- The allowance for larger areas (than individual Local Datum Plane Coordinates) to be covered with less distortion.
- Reduced convergence angle (if the central meridian is centered within the zone).
- Quantitative distortion levels can be determined from topographic heights.
- Clean zone parameter definitions compatible with common surveying, engineering, and GIS software.
- Easy to transform between other coordinate systems.
- Maintains a relationship to the National Spatial Reference System (NSRS) by allowing direct use of published NSRS control coordinates (i.e., latitude, longitude, and ellipsoid height).
- Can cover entire cities and counties making them useful for regional mapping and GIS.

Using the OCRS in software programs

Several survey and GIS software companies have already included the OCRS Zone parameters in their Zone Definition Catalogs or Coordinate System Managers. Most survey

software allows users to manually input zones and name new coordinate systems. For the purposes of entering these low distortion projection parameters into particular vendor software, define the datum as NAD 83 (which uses the GRS-80 reference ellipsoid) for the OCRS. Particular datum realizations such as NAD 83 (CORSS 96) Epoch 2002 may then be selected or seeded into a project by the user.

Nearly all GIS operations require accurate locations of geographic features. Accurate locations allow GIS users to integrate and/or combine information from various sources. Critical to the accurate locations of features is a record of the coordinate system and associated projection parameters. GIS managers often incorporate surveyed data into geographic databases. Conversion of coordinate information into a different map projection system from which it was collected is usually necessary. Critical to this process is a well defined set of existing and desired map projection parameters.

The OCRS Zones offer mapping professionals high quality map projection coordinate systems that may be actively used to collect field data. By having detailed descriptions of properties of the map projection, GIS software can re-project and transform the geographic locations of dataset elements into any appropriate coordinate system. This allows the integration of multiple GIS layers, a fundamental GIS capability.

A GIS or mapping project based on one of the OCRS low distortion coordinate systems has significant advantages. The design of the coordinate system allows field based measurements (data collection) to be directly utilized in the GIS without translation, saving time and reducing error. The size, position and orientation of features in the system can match ground conditions, increasing confidence and reducing the need for repetitive observation.

Summary

The utilization of electronic survey data by surveyors and GIS professionals is bringing awareness of the need to better deal with measurements on the earth and their representation in databases and on paper. Modern GIS and surveying software now brings the opportunity to create low distortion map projections and coordinate systems that can relate closely to measured distances on the ground. The function of low distortion projections is to minimize the distortions of angles, azimuths, distances, and areas. These distortions are ever present as we live on a spheroid and it is impossible to represent a curved surface on a plane. We must account for that distortion by creating a mathematical model map projection that will allow us to work in a coordinate grid where calculated positions and distances are represented closely by the same positions and distances we measure on the ground. For GIS professionals, low distortion projections may now demonstrate that 'rubber-sheeting' data sets to make things fit is no longer necessary. Both survey and GIS data can co-exist without either dataset being degraded. ◉

The ODOT Geometronics Unit held two workshops in 2010 and is planning additional workshops. Interested persons may download the *Oregon Coordinate Reference System Handbook and User Guide V. 2.0* and the official *OCRS Zone Map Series* from the OCRS Webpage: www.oregon.gov/ODOT/HWY/GEOMETRONICS/ocrs.shtml

ODOT created an OCRS Project Planning Web Tool that is currently available for public beta testing here: <http://50.18.60.197/OCRSII/Default.aspx>

For more information about OCRS, contact:

Chief of Surveys/Geometronics Manager

Ron Singh, PLS | 503-986-3033

Lead Geodetic Surveyor

Ken Bays, PLS | 503-986-3543

NGS Oregon Advisor

Mark L. Armstrong, PLS | 503-986-3775



News from the Chapters

Central #1

■ *David Williams, Secretary/Treasurer*

April 20, 2011

Chapter President: Parneli Perkins
Location: McMenamins Old St. Francis School
Called to Order: 5:45 pm **Adjourned:** 8:10 pm
Attendees: 17 members, 8 guests

New Business

- Scott discussed the pending legislation informed the chapter that updates are posted on the PLSO Website.
- Mike Berry discussed the new procedure regarding PDH confirmation when license renewal is requested.

Presentation

Mary Hartel, Chief Cadastral Surveyor for the Oregon & Washington BLM gave a presentation detailing an appeal of a BLM survey by Rudy Hillstrom on April 30, 2010 (IBLA 2010-152). The appeal centered on a 2000 Dependant Resurvey, accepted September 5, 2000. Hillstrom questioned whether the survey correctly reestablished the position of a W-1/16 section corner between his property and the boundary of and Indian Trust Allotment. The case was decided in March of this year. Ultimately Hillstrom's claim was denied but it is instructional to understand the detail, reasoning and process behind the decision. ◉

Midwest #2

■ *Guy Dent, LSIT, Secretary/Treasurer*

April 12, 2011

Chapter President: Jeremy Sherer
Called to Order: 7:15 pm **Adjourned:** 8:52 pm
Attendees: 10 members

Approval of the Minutes Approved by majority.

New Business Discussion on marking a property line— Ron Rice submitted a question to the group on delineating a property line without setting a permanent monument and without filing a survey. This led to a lively discussion touching on many issues. One question centered on when the ORS requires (and doesn't require) a filed survey.

Committee Reports

Board Meeting

- PLSO has \$153,000 in the bank account.
- The Executive Committee is drafting bylaws for a change in our non-profit status for receiving scholarship funds.
- There is possibly an upcoming change to Surveyor-L, including to be administered by an outside company.
- The 2011 Annual Conference earned a profit of \$31,500.
- 50% of chapters are not in favor of HB 2893, which led to a discussion.
- Jeremy shared a chart of filed surveys which had a shrinking trend since 2004. Also dropping drastically were plats and subdivisions between 1992 and 2005.
- Tom Drechsler is retiring as Deputy Surveyor of Lane County. A discussion followed on filling the vacancy, and extending a formal invitation to the new Deputy Surveyor to attend our chapter meeting.

Ad-Hoc—Jeremy Sherer instigated an Ad-Hoc committee to amend a code to change the Lane County Code regarding property line adjustments.

Subcommittee Reports

TrigStar—Harvey Christensen and Guy Dent nominated Don Rowe for Local TrigStar Coordinator. Guy Dent mentioned that Springfield High School had 70 students involved this year.

Seminars—The chapter discussion hosting a water boundary seminar in September. ODOT is hosting a slope-staking seminar in October.

Old Business Jeremy submitted a letter re-emphasizing our chapter's opposition to HB 2893 to PLSO Chair Gary Anderson. ◉

Increase Your Opportunities



Become a Certified Survey Technician

For more information, contact Bob Banzhoff
240-632-9716 ext. 113
bob.banzhoff@acsm.net

Visit our website at www.nspsmo.org

Rogue River #4

■ Joseph Bova, Secretary/Treasurer

May 16, 2011

Chapter President: Pat Barott

Location: Applebee's, Medford

Called to Order: 6:15 pm **Adjourned:** 7:58 pm

Attendees: 13 members

Approval/Amendments to Agenda Approved by majority.
Approval/amendments to March minutes. Shawn Kampmann moved for approval. Dick Bath seconded.

New Business

BOD Business (Pat Barott)

- The Board requests more members submit articles for publication in *Oregon Surveyor*.
- The 2011 Annual Conference generated \$10,000 for the scholarship fund.
- PDHs are now required to be itemized on license renewals.
- David Thompson Columbia Brigade requested \$3,000 for the 2011 celebration in Astoria; the board granted \$1,000.
- VanNatta Public Relations is offering PLSO members a presentation on public speaking.
- The Board is forming a PLSO Foundation 501(c)(3) so members can designate donations to the PLSO Scholarship Fund as tax deductible.
- *Board discussion only.* A dues increase of \$6/year has been discussed at the Board level as well as discussions concerning the membership year shifting to July–June. Memberships may be offered in 6 month or 18 month increments. Members could prepay the 18 month increment at the old rate. *This item is for discussion only, and has not been adopted by the board as of this date.*

Committee Reports

TrigStar—Craig Claassen presented a report by Jim Hibbs, and talked about his TrigStar presentation to Grants Pass High School students on April 26.

Legislative (Bob Neathamer)—HB 2893, Right of Entry was approved by the Senate Business Committee and is on its way to the Senate Floor. HB 2892, Boundary Line Agreements is likely to pass. HB 2351, Corner Restoration Fund fee increase is dead in committee. HB 877, ODOT OCRS is likely to pass.

Strategic Planning—Daren and Pat distributed handouts.

State Board Reports

Water Resources—The board will ask that 1/3 of the PDHs for Water Rights Examiners be from water rights.

OSBEELS (Bob Neathamer)

- Linscheid is moving from law enforcement to Board President, with Carl Tappert as Vice President.
- The last licensing exam yielded a 54% pass rate with the

average score being 72%. Five candidates were within 5% of passing. The lowest score was 60%.

- The budget was adopted with no fee increase.
- The Standards and Practices Committee is starting the section on narratives.

OIT (Bob Neathamer)

- There has been a 20–30% reduction in funding, and they may cut back the GIS option.
- One professor is getting their PhD.
- OIT asked for \$200 per committee member to supplement the salary for one professor; Neathamer asked for contributions from those present to offset his outlay.

Local Jurisdictional/Government Reports

Jackson County (Kerry Bradshaw)

- Business is slow.
- They are still working towards getting maps online.
- The department is developing a control layer of corner coordinates.
- There was discussion concerning drafting a letter from our chapter to the County Commissioners showing a benefit to both surveyors and the general public for getting maps online, and urging the commissioners to fund deployment.

City of Grants Pass (Craig Claassen)—Claassen is working on a PLSS base layer for the Josephine County GIS. He is now working on 35S06W.

Other New Business

Elected vs. Appointed County Surveyor—Shawn Kampmann's letter was published in the *Mail Tribune*.

Crater High School field trip to Prescott Park—Joseph Bova and Pat Barott will be presenting a class and field trip on the original GLO surveyors, basic PLSS, and navigation for David Nolen's freshman class participants at Crater High School.

Job Fairs/Career Days—No upcoming Job Fairs or Career Days were identified.

Fall Workshop—Rather than compete with other chapters, we will not be doing a workshop in the fall. We will aim toward a workshop in January.

Discussion of a summer 2011 chapter meeting—A joint picnic and barbecue with the Umpqua chapter at Diamond Lake is still on schedule for July 23.

Program

Herb Farber presented an excellent program on the history of surveying in Southern Oregon. He is offering the same program to public service organizations as part of PLSO's outreach and education element of the strategic plan.

PDH hours

Kerry Bradshaw moved that we allocate 1 PDH for this meeting. Craig Claassen seconded. The motion passed. ◉



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



COLLECT

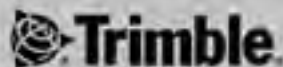


ENGAGE



DELIVER

SUCCESS FOUND HERE



© 2014 Trimble. All rights reserved. Trimble, the Trimble logo, and TSC3 are trademarks of Trimble. All other trademarks are the property of their respective owners.

**FOR MORE
INFORMATION CALL YOUR
TRIMBLE DEALER**

GeoLine Positioning Systems
Portland, OR
800-523-6408

Pacific Survey Supply
Medford, OR
800-866-9130

Rogue River Chapter community outreach

■ *Stephan Barott, Chapter President*
Joseph Bova, Secretary-Treasurer

Crater High School field trip with David Nolen's freshman class

Joseph Bova and Stephan Barott presented a brief introduction to the history of surveying in Oregon. They presented the class with copies of original field notes and plats following in the footsteps of Ives and Hyde for a section near Prescott Park in Medford. Slides from a slide presentation prepared by Farber Surveying in Central Point, titled "Oregon's Survey History" was handed out and discussed.

The following day a field trip to Prescott Park resulted in scientific research of wild plants and shrubs, trail building and maintenance, and of course, retracement of Ives & Hyde. One original quarter-corner was visited showing original bearing trees and corners established by the Jackson County Surveyor. From this corner, many of the students could see the high school and their houses, and compared the view of the Rogue Valley with the one described by Ives and Hyde in 1854.

The day resulted in many of the students commenting on how difficult it must have been for the early surveyors—not having roads nearby with cars or busses to take them to the sites. It was also noted that slick rocks and poison oak added to the difficulty of surveying in a straight line. In addition to hand held GPS with pre-loaded coordinates, the students used hand compasses, tapes, and pacing to retrace the surveyed line.

Overall, it was a very positive experience for the students and the instructors. Many of these students may one day be our future surveyors. ◉

► Crater High School teachers separate students into groups.



Joseph Bova and students check coordinates on handheld GPS to search for one-quarter corner.



2011 Trig-Star update

■ *Joe Ferguson, Trig-Star Coordinator*

Trig-Star is over for the year and I would like to thank all who were involved in this endeavor. I know there are some out there who ask, "Is it really worth our time and effort"? For those who continually put out the effort (on their own time) to make presentations and to give tests, the answer is 'Yes!', because they continue to do it year after year.

Why is that? Do they think that any of these students will actually turn into surveyors? I believe the answer is 'hope'. Hope that yes, one of them might just decide to pursue the profession of land surveying. Hope that maybe some of them will see that

what they are learning in school does have a practical application in the outside world. Hope that when they see surveyors along side the road they might slow down just a little because they listened to a surveyor once tell how dangerous the job can be. Hope that when their parents are having issues with a neighbor over a tree or a fence that they can say, "Hey, a land surveyor can help us with that." Or could it be that just maybe they just enjoy connecting with students? ☺

To all of the presenters and proctors, thank you for your dedication year after year.


2011 Oregon High School Winners

Cameron Johnson	West Salem
Claire Berry	Coquille
Elizabeth Olson	Central HS
Elliot Oblander	Franklin
Jacob Chaney	Dalles
Koah Nguyen	Benson
Logan Curry	Phoenix
Nathan Jordan	Grants Pass
Simon Ewing	Springfield

Our state champion was **Simon Ewing of Springfield High School**; Guy Dent, LSIT as proctor. Simon will be taking the national test with a possibility of winning \$2000.

Good Luck Simon!

PROFESSIONAL LISTINGS



HOFLAND SURVEY MONUMENTS

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

RICHARD HOFLAND
503.320.2685
hoflandsurvey@earthlink.net

P.O. BOX 515
145 W. MAIN STREET
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.

Wow!

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



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

Advertise in *The Oregon Surveyor* by contacting Karl Doreza at:

503-445-2241
800-647-1511 ext. 2241
Email: karl@llm.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

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 Oregon Surveyor
PO Box 2646
Salem, OR 97308-2646

PRSR STD
US POSTAGE
PAID
SALEM OR
PERMIT NO. 526

THE LOST SURVEYOR

Can you tell me what church
this is and where it is located?

Latitude 45° 06' 25.5" N

Longitude 122° 51' 15.7" W

Answer on page 5

