THE VOLUME 34 NUMBER 5
OCTOBER/NOVEMBER 2011

OREGON SURVEYOR

A publication of the Professional Land Surveyors of Oregon









Join or Renew Your PLSO Membership!

Please watch for this membership renewal postcard coming to your mailing address!



Follow these easy steps:

- 1. Go to www.PLSO.org.
- 2. Log into the site as a member with the username and password (which you were emailed from webmaster@plso.org).
- 3. Choose the Members tab and go to RENEW NOW.
- 4. There will be two choices for membership. It is recommended that you choose the 18 month option to avoid having to renew in just a few months and get the benefit of 2011 dues rates (a 5% dues increase that will come in 2012).
- 5. Have your Visa or MasterCard ready or print the form and mail with a check.

For interesting news and regular updates "like" PLSO on Facebook!



Renew your 2012 membership at www.PLSO.org



THE OREGON SURVEYOR

Volume 34, No. 5 October/November 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



CONTENTS

From your Chair	3
Editor's note	4
View from the PLSO office	6
Reports	
PLSO Board of Directors Minutes, September 2011	8
Scholarship Committee	12
PLSO Board of Directors Minutes, October 2011	14
Legislative Update	19
Legislative Committee Report	19
News from the Chapters	28
Features	
Oregon GPS User's Workshop	17
PLSO Letter to the FCC Regarding LightSquared	18
3-D Laser Scanning	22
Practical Location	24
Common Retirement Planning Mistakes	27
Finding Work in a Down Economy	31

Did you know?

Are you looking for something fun and exciting to do this weekend? PLSO has a BRAND NEW geocache waiting for someone to find it and all of its treasures. I've included a link (below) to the PLSO page at geocaching.com, where you can find a complete list of PLSO geocaches.

www.geocaching.com/seek/nearest.aspx?u=PLSO+Oregon+Surveyor&submit4=Go

Happy hunting!

—Ryan Godsey

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

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

DACES LIAISON

Pat Gaylord

Scott Freshwaters

OSBEELS LIAISON

Mark Mayer

PPI FUND

Gary Anderson

PUBLICATIONS

(THE OREGON SURVEYOR)

Oran Abbott, Editor

Chuck Wiley

PROFESSIONAL PRACTICES

Bob Neathamer

SCHOLARSHIP

Steve Haddock

STRATEGIC PLAN

Gary Johnston

....

TRIG-STAR

Joe Ferguson

WESTFED

Greg Crites

From your Chair

■ Gary Anderson, PLS; 2011 PLSO Chair

ave you ever struggled to get a jar lid unstuck, a bolt, or anything pried loose? Applying vibration, more leverage, or simply getting a better grasp of the item at hand can often do the trick. I am reminded to share a thoughtful reflection that I heard from a colleague last winter. "Those periods of largest growth that I have experienced in my career, and in my life, were also periods of significant struggles and hard work." I agree—this seems true. We often can feel a great strain to break even a thin seal. Indeed, many are struggling mightily this year and much hard work is left ahead, but through these difficulties, we can all learn and grow wiser from our experiences. Our struggles can often be lessened when we share our hard-learned wisdom with others. Call me a "nut" if you wish, but I would rather be pried loose, and be sharing knowledge with others, than be stuck in my own ways so long that I become a rusted-up bolt.

From my desire to provide a report on the PLSO activities, I considered promoting volunteerism; or encouraging the recruitment of new members; or to giving updates on GPS/FCC issues (we nearly held a protest/rally last month!). I also thought of the conference committee, which is working hard to develop a successful joint (ASPRS/GIS) event which will be educational for all. These thoughts brought me to research what qualities differentiate surveying from, only mapping. The NCEES Modal Law of Surveying provides a framework which remains, it seems, in some debate.

As many professions experience encroachment due to technological advancements, their relevance comes down to the expected use of their product or service and what liability will be incurred. It is normal for the average person to see a map, any type of map, and assume it is accurate. While reviewing one major online mapping service's "disclaimer", I realized their position is as long as maps are never "relied upon," you can map anything you want. But whenever someone's possible reliance places the general public at risk, you have the cause for a regulated licensing system to determine who should be performing that task.

Roughly quoted, a surveying website blogger recently noted: technology has given us cars, but a license is required to drive, along with the expectation of taking responsibility for one's actions. Technological advances in the auto industry do not grant exemptions. Drive on your property—no problem. Enter the public right-of-way (which requires the work of a licensed surveyor to determine the location, not just a pretty picture) and you better have all of your paperwork in order.

Back to being "pried loose," another example (I have been surveying for wind farms recently) are the newest high-tech wind turbines which each have eight distinct bolting systems that require specific torque and maintenance protocols. Their bolt system's joint strength is important to the longevity



of each wind turbine, and if every bolting system is not torqued properly the system is doomed to fail. Wind turbines experience constant vibration, so a 100% re-torque of each turbine's bolting is a standard activity, from base to blade. My point being: in turbine construction and maintenance, as well as in survey mapping or construction staking: there are many tools available and there are varied procedures to be trained and applied routinely and redundantly.

Speaking of blades, advances in cutlery now make extremely sharp instruments affordable to the general public. However, this does not suggest that just anyone can be successful at cutting out a brain tumor. In order to practice surgery, a doctor must be licensed. This provides the public assurance that a surgeon has the training, experience, licensure

Continues on page 7

To contact the PLSO office

MAIL PO Box 2646, Salem, OR 97308

PHONE 503-585-4551 FAX 503-585-8547

EMAIL office@plso.org WEBSITE www.plso.org



Join the group: Professional Land Surveyors of Oregon



Join the PLSO group at www.linkedin.com

twitter

www.twitter.com/ORLandSurveyors

THE OREGON SURVEYOR

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



Then I went to high school, I took a test to determine what field of endeavor I would best be suited for. The test results reflected Forestry (which I knew before I took the test). I studied Forestry at Oregon State University. After a stint in the U. S. Army, I got a job in surveying here in Oregon, which I rather liked. I think most surveyors are analytical and it is one of the reasons why they like surveying (plus being outdoors).

Now, if I am correct in this analytical thinking, why do we have a big issue coming up—or is it already here—of *LightSquared vs. GPS*? The question raised is, "Will LightSquared wipe out GPS?" If a property owner says their west line runs down the stream bed, that may be okay for numerous people, but not a surveyor. The surveyor wants to know exactly where the line is—within 0.05 feet on each corner. Part of the line might be in the stream bed, part on the left side, and part on the right side. What about Light Squared? Are they on the right, left, down the middle, or where are they? They are new, so why are we trying to fight them? Why don't they give us an example of what they can do or not do? All I hear or read is, "maybe," "might," "possibly," "if," etc.

What happens when a young girl dies in a vehicle accident because the help she needed went 20 miles in the wrong direction? How many military missiles will miss their targets? It should not take more than one letter to the FCC to get some action. Our PLSO secretary, Mary Louise VanNatta, has written a letter, with our Board's recommendation, that makes me quite proud that we hired VanNatta Public Relations for our association. The letter is well written, asks several of the questions that need to be asked, and also requires an answer. (*See the letter on page 18*).

Do not forget to read the entire magazine and stay in PLSO with the new recruitment. Surveyors tend to be very independent, and the economy and politics are just brush-on-the line.

May you and your families have a great holiday season. •

Trivia: John Wayne played the part of a surveyor in what movie?

The Lost Surveyor From the back cover

LAT 45° 19' 47" N LONG 121° 54' 44" W

Answer: The level didn't give you any clues? It's located across the Zigzag River, just west of the highway in downtown Rhododendron, Oregon, in Clackamas County. The elevation is 1,596 feet (as indicated on the level).

FACT: Reliability for the long run

Series 50RX

There are reasons why today's Sokkia users have been using Sokkia for an average of 12 years*. Reliability is one of them. The 50RX continues to build the Sokkia reputation for performance you can depend on day after day. It has the highest protection against dust and water in its class and is rated for high-precision operation in the widest range of temperatures.

Get the facts.

You'll get Sokkia.

SOKKIA

www.sokkia.com

"Based upon independent polling of surveyors nationwide as of August 2010.



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

View from the PLSO office

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

PLSO into the future: Will we get older or wiser?

again. One of the guaranteed ways to make sure that PLSO thrives in the future is including more people in the learning and networking. This article is going to look at what societies and organizations, like PLSO, will face in the next 10 years.

members. Tradition can sometimes be exclusive; we have to begin evaluating programs or rules that "exclude" others. A discussion about age is incomplete without revisiting the generations discussion. I'm the last of the Baby Boomers (1946–1964) which make up the majority of our PLSO



- PLSO is moving to a July–June calendar year to relieve the burden of conference and year-end expenses all in December. You can renew for six or 18 months (but please renew for 18 to save us from contacting you in just a few months!).
- PLSO has 717 members—526 Corporate, 82 Associate, 76 Student and 33 Life.
- Just under 500 licensed surveyors living in Oregon, are not members of PLSO
- PLSO membership will be important as our economy is recovering.
 Networking and education offered by PLSO helps keep you competitive.

According to John Graham, president and CEO of the American Society of Association Executives (ASAE) about six percent of members are 65 years old or older, 39 percent are 55–64 years old, 30 percent are 45–54 years old, 18 percent are 35–44 years old, three percent are 25–34 years old and only one percent are under the age of 25.

We also need to look at the cultural make-up of our groups. According to the Pew Research Center currently, one in seven Americans is considered Hispanic. That will change to nearly one-in-three in 2050.

What does this mean for PLSO and other organizations?

We can't be selfish or wed to too much tradition. I once observed a group that only allowed dues-paying members to ask questions during presentations. That turned off a number of prospective members. In 10 years, even the youngest of us will be nearly 60 and perhaps are winding down our high pressure involvement in careers or our volunteer organizations. If PLSO is interested in its future, it needs to be thinking about membership and leadership from Generation X (1965–1980) and Generation Y (Why?)/Millennial Generation (1981–present).

Generation X, those 31–46 years old, have been described as the "work to live," not "live to work," group who wants plenty of information, but will resist over-scheduling. There is some lack of trust in institutions and they want to be the boss of their own time. Generation Y has been saddled with the reputation that "straight-line thinking" is difficult for them because they believe they should be able to get where they want to go without



following cumbersome "traditional steps" on the ladder. This group is today's teens and young 20s.
Remember, they have always had the internet and the immediate gratification of information that goes with it.

PLSO is doing many things "right" to attract new members. Getting students excited about surveying is an early start. By supporting student chapters, scouts and providing youth scholarships, we introduce young people to surveying who (hopefully) may one day become a member. To attract those who could join PLSO, but haven't, the organization has worked hard to create mentoring opportunities. One chapter had "Bring an Associate" night to introduce this group to PLSO, resulting in a handful of new members! A new website, with member-driven profiles and groups, a store and hopefully videos, will provide faster information.

So in the future, how will PLSO leadership and members attract this new generation of members? We know from research that programs like fast track leadership, more flexible membership and education options are all incentives to recruiting younger members. We will need to ask more questions, provide a more customized menu of services and create more multi-generational, diverse programming.

Are you interested in helping? Contact Chair-Elect, Mason Marker by phone, 541-273-2191 or by email mason.marker@oit.edu. ∘ (and insurance) necessary to successfully perform surgery. A doctor doesn't just whack out the infected area. Instead, he/she takes great care to protect the surrounding "others" (vessels, organs and nearby systems). Doctors perform surgery, along with the help of a team of others, much like licensed Professional Land Surveyors work with others while consistently striving to protect the public by maintaining the integrity of surrounding ownerships and by following related jurisdictional requirements and professional standards of practice.

Currently, my wife and I are attending a local Citizens Emergency Response Training (CERT). Through eight weeks of classes, we expect to learn how to put out fires, provide emergency medical assistance and more generally, how to maintain our

own and our neighbors' safety in the event of a major disaster. Attending CERT does not make us fire fighters or paramedics, and certainly doesn't turn us into police officers. Rather, CERT is intended to share knowledge and skills which can help us to fill in the gap when those experts cannot immediately be everywhere they are needed. Through these classes, we are becoming "pried loose" from our comfort zone of complacency. We are attending these classes not to concentrate on possible trauma or tragedy, but to gain awareness and knowledge which would allow us to be ready to help others.

Whenever public health, safety and protection are potentially at risk, a professional is needed. Trim your own toe nails—okay. Remove you own kidney—not such a good idea. Can a young child get behind the wheel of a

car and motor off down the road? Yes, it has happened, but at great public risk. Clearly, just about anyone can learn the procedures and professional standards of practice to benefit from new advances in mapping technology. But, does anyone have the right to practice surveying? No, because it is not a right. Surveying exists as a licensed profession; as such, it is a privilege which comes with many corresponding responsibilities.

Do not allow the constant vibrations of blowing wind to shake you loose unexpectedly. Become involved with PLSO and join in the discussion. Share your experience with others. Mentor others and listen for fresh perspectives.

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. •

Help us raise over \$8400/year for PLSO and get paid doing it.

We'll even do most of the work for you...

PLSO has teamed with Harness Technology and SurveyorConnect to provide website design and hosting services that will raise money for both PLSO and the surveying community.

Here's how it works:

- Refer any type of business or colleague to us and when they purchase new website design services from us, you get a \$100 reward and PLSO gets a 10% donation.
- Refer any type of business or colleague to us who purchases our hosting for \$14.95 per month or more, PLSO gets \$7 per month, per hosting client.
 As a reward, you receive the first month's hosting fee.
- Even if only 100 businesses switch to our hosting services, we can raise over \$8,400 per year or more for PLSO members, programs and scholarships.

Not just for surveying businesses—Refer us any business, anywhere!

Contact David Souza
503-884-6225
david@surveyorconnect.con





PLSO Board of Directors Meeting Minutes

September 10, 2011 • Mookies Grill, Springfield, Oregon

Attendees

Officers

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

Board Members

CENTRAL (1) Not present

MIDWEST (2) David Wellman (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) Tom Del Santo, President-Elect

SOUTHWEST (6) Edith Forkner, President | Mike Erickson, President-Elect

UMPQUA (7) Not present

WILLAMETTE (8) Lee MacDonald, President | Jamey Montoya, President-Elect

BLUE MOUNTAIN (9) Michael Posada, President | Rod Lewis, President-Elect

Committee Chairs

PROF. PRACTICES/NSPS Bob Neathamer | FINANCE Gary Johnston EGAC/TRIG-STAR Joe Ferguson | GPS USERS GROUP John Minor LEGISLATION Dan Linscheid | OACES/LEGISLATION Scott Freshwaters

Guests

Jeanette Pruitt (Administrative Assistant at PLSO office), Jean Ferguson

Call to Order

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

Review and Approve Agenda

The agenda was reviewed and approved.

Approval of Minutes

The minutes of the May 14, 2011 Board Meeting were reviewed.

MOTION: It was moved and seconded to accept the minutes as presented. Motion passed.

Report FROM THE Executive Secretary

VanNatta reported current balance of the account is \$79,157.43 and there are 734 members, with 634 being dues paying members. VanNatta reported that they have spent a lot of time on the financial reports and were required to do additional financial filing and add a "conflict of interest policy" to the bylaws to meet new IRS standards which now affect PLSO.

The Survey Merit badge was first mentioned at the May board meeting and more help is needed for a November 12 event at the Evergreen Air Museum.

The PLSO office is currently in the process of obtaining a 2nd class postage permit. VanNatta mentioned there is a filing fee, but it will save PLSO money in the long run.

VanNatta is also becoming more active with NSPS nationally. Compared to other states at the State Executives meeting in San Diego last July, Oregon is doing extremely well right now, and other states were very impressed. VanNatta was elected as program manager for the 2012 conference. VanNatta also reported that there wasn't enough training at the conference, but there was plenty of sharing of ideas amongst the various state executives.

Concerning the website, VanNatta reported that the new website is almost ready for member usage, and good progress has been made.

The David Thompson Brigade event went well for all who attended. VanNatta reported that the office spent a lot of time working on communications between the office, Astoria, and the Brigade. Neathamer commented that VanNatta's article was very good in the Oregon Surveyor.

Report FROM THE Chair

Gary Anderson reported that he and Lee Spurgeon met with Mike Salsgiver of the Associated General Contractors (AGC) to discuss commonalities between them and PLSO and mentioned that it is a good avenue for reaching out to other organizations. AGC was previously unaware of PLSO, but were impressed with the work done by VanNatta Public Relations and Fred VanNatta (Public Affairs).

At the Survey Summit, PLSO was presented with an NSPS (National Society of Professional Surveyors) certificate of appreciation for PLSO's efforts with the scouting jamboree. Anderson would like to offer the certificate to Pat Gaylord.

Anderson reported that the professional practices committee reviewed a few cases. One case covered an incident that occurred a number of years ago between PLSO members. Another came from a private citizen who named two PLSO members. They found no merit in these cases. Anderson brought them up to the

committee, because one member sent a follow up appeal to make sure the bylaws were being followed. Anderson followed it up by reading from Article XII, Section 2, A of the bylaws:

ARTICLE XII - DISCIPLINE SEC. 2. - PROCEDURE

A. Any disciplinary complaint filed with the PLSO Board of Directors shall be in writing addressed to the Chair. The complaint shall specify the basis for the complaint in accordance with the specifications contained in Sec 1 GROUNDS FOR DISCIPLINE above. When a disciplinary complaint has been brought before the Board of Directors they shall hold a closed meeting and carefully set out the procedure they will follow in full accordance with the procedures contained herein. Unwillingness to follow these procedures on the part of PLSO Board will be cause for termination of the disciplinary complaint process.

The board decided to discuss this during the professional practices report.

Jobs and Education—Anderson reported the PLSO was contacted by a firm in Canada, who was one of the sponsors for a canoe that participated in the David Thompson Columbia Brigade. VanNatta followed up with them and mentioned that they would like to advertise their employment opportunities on the PLSO website and are willing to pay PLSO.

Anderson reported that PLSO has been contacted by students about job shadow opportunities, AGC expressed an interest in seeing what surveyors do as well. It was suggested doing an annual event in coordination with schools.

Willamette Stone State Park—Anderson shared information on a contact from Oregon State Parks. Opportunities to improve the Willamette Stone State Park were discussed. Interpretive signage and promotion of the park's location needed to be improved. Other ideas included identifying parks containing public land corners and donation land claims, CLT

(Community Land Trust) and including the Boy Scouts. Anderson requested that members let him know about other examples or ways that PLSO could be involved.

Historical information—Paul Galli is looking through PLSO historical records. The old *Oregon Surveyor* magazines were donated to the Oregon Historical Society (OHS). Galli went to OHS and requested permission to scan old copies. This work will commence soon. If members wish to help, they should contact the PLSO Office.

LightSquared—Representatives from LightSquared showed up at Survey Summit and participated in discussions. Members have written letters and sent them to Oregon Representatives. It pushes into the GPS frequency and service. Anderson has reached out to the company, but LightSquared has not responded. Fassbender is talking with Peter DeFazio who said he will contact the FCC to clarify that GPS will not work with transmitters planned by LightSquared. Thatcher heard that LightSquared is powerful and it will probably go through but GPS users may be compensated. Wellman commented that with LightSquared operations, GPS won't work with his applications. VanNatta recommended sending a letter from the board. Neathamer said the hearing was Thursday and the original plan was a satellite not ground based. It will be an uphill battle. He added that this is one reason NSPS membership is important. PLSO joined the coalition on SaveOurGPS.com.

David Thompson Columbia Brigade—Thank you to all participants! The Brigade went well.

OSBEELS—Linscheid sent county surveyors an OSBEELS list about license suspensions. The Excel spreadsheet will be sent to chapters. Please forward any updates you find to this list on to OSBEELS and/or the licensee.

NCEES—NCEES & ACSM are conducting a survey about testing and another survey about surveyors in training. PLSO might want to encourage students to get involved for future testing.

PLSO management—Conflict of Interest policy needs to be developed for IRS policy for the future. Board packets: board would function more effectively if packets were sent a week before board meetings. The new PLSO website is still evolving. It has been a big undertaking. There will be an area for board members only.

Membership drive and dues increase—The PLSO Membership Dues Task Force, composed of Cone, Anderson, Johnston and Spurgeon, presented its report. They reviewed the dues research and dues have not been increased in at least eight years.

The task force recommended that due to the change of the membership calendar year to July–June and the fact that the PLSO bylaws (Article X, Section 1) only authorizes the board to implement a 5% annual dues increase:

- 1. Members are offered a 6 month membership renewal at \$63 which would be good for January 2012—June 2012. However, members would be discouraged from choosing this option as it would be more of a hassle than if they chose the 18 month plan.
- 2. Members are offered an 18 month membership renewal at \$189.
 This membership would be good from January 2012—June 2013.
- 3. After December 31: dues will be \$66 for the six month plan (to June 30, 2012) and \$198 for the 18 month plan (to June 2013).

Thatcher asked for clarification of current and future rates. No increase this year, dues are still \$126 a year, but split into \$63 (6 months) or \$189 (18 months) to meet the new schedule. Dues would go up 5% next year. If we have an interest in raising it more, we would need to present it at the annual meeting.

Continues on page 10

There is a discussion about having states "bundle" state and NSPS memberships, but that would be a higher cost. Spurgeon suggested that PLSO notify NSPS that we are interested in doing that as well. Barott noted if you combine them, it might look like too much. It is still in the discussion stage.

MOTION: Spurgeon moved accepting the committee report with no dues increase until next year (2012) and the 6 month-rate reflect the 5% increase after the first of the year. Discussion: Current membership expires December 2011; next renewal date would be July 2012. Clarification: 18 month renewals would be at current rates through June 2013 if renewed before January 2012.

Restated motion: Spurgeon moved accepting the committee report with no dues increase until next year (2012). Both 6 and 18 month dues rate will be increased 5% after January 1, 2012. Thatcher seconded. Motion passed unanimously.

Chemeketa Community College Program—

MacDonald discussed the status of the Chemeketa CC program. Spurgeon asked if any new programs were being developed. George Fox is offering a course on surveying to their civil engineering students. Johnston mentioned that there is a career fair in Salem on Monday, November 7. It is at Chemeketa Community College in Building 7. Posada reported that Blue Mountain Community College is struggling and that someone is often volunteering their own time to keep the program going. Marker said at OIT there are 20 students participating in the PLSO student chapter. Gary Anderson provided applications to give to the students at the next chapter meeting.

Strategic Planning and Financials—Johnston said financially PLSO is doing well but more is going out than is coming in.

The new dues rates should help, and conference registration should help as well. Regarding a workshop convened September 9, he can provide a more accurate accounting after workshop financials are received. Issues that have put PLSO behind in the budget include: Oregon Surveyor magazine (PLSO budgeted for 4 issues, but board elected for 6); new IRS rules incurred CPA charges of \$2,000; and scholarship fund expenses were more than budgeted. Cone asked if we are having more major expenses. VanNatta said the website is mostly done pro-bono but costs might come in later down the road. Thatcher inquired about the scholarship fund. Johnston explained some of the Oregon Community Fund process. Discussion on other ways to cut back was held. It was noted that Pioneer Chapter held a fall 2010 workshop and deposited all the income in 2010, but bills were paid in 2011. The PLSO Board can direct the conference committee to be more considerate of costs and be more conservative.

Strategic Plan—Johnston reviewed the different areas and asked for input. *Inspire Members*: Spurgeon reported Pioneer chapter had a meeting which encouraged members to bring an associate. They discussed how to take an exam, the requirements and professional responsibilities. Fifteen Associate members showed up. Four joined and inactive members came. People stayed afterwards to network. Conduct outreach: List includes: Trig-Star was a big hit; Boy Scout Merit Badge University will be November 12; Chapters were going to encourage more involvement in EGAC; Geocache program, Anderson met with AGC and Chapters are inviting other professionals or be part of their events; conference is combined with GIS group; Clough's involvement in the Triathlon races. All will be noted as accomplishments in the Strategic Plan.

Advance Legislative Agenda:
Freshwaters believes there was success in this area. There was good information on emails from Freshwaters and members reported it was the appropriate length and timely. Fostering excellence: The PLSO website is getting there; MacDonald talked about curriculum in surveying at Chemeketa CC.

Committee Reports

Conference Committee—Anderson said the NSPS student competition will be held at the conference. Cy Smith is participating in the committee and has a good idea about how surveyors can participate in GIS. The theme is "From Points to Polygons, Bridging the Gap." Mason will speak to OSU and OIT about participation in the competition. The conference will be at the Red Lion Hotel on the River in Portland.

The Board was asked to consider the location for the 2013 conference. Kent is in conversations with Eugene. Would we like the board to consider same venue for three years? Salem is handy for whole state? Where should we meet in 2013 for the conference?

Discussion: Fassbender emphasized there are limited spaces available for our type of conference in the state and we also need to consider price. Deals are better if we negotiate a longer contract period. Redmond, Salem and other venues outside of hotels were discussed. A question was asked about how the joint conference works with LSAW. Conference is less of a money maker when it is a joint-conference. VanNatta cautioned about the high cost of using a hotel as a venue. The present conference is for public relations and recruitment opportunity, rather than a money maker. The Board needs to act soon to lock in dates for 2013 conference.

MOTION: Spurgeon moved the conference committee pursue a contract with the Eugene Hilton in 2013 for conference space, for two years. Cone seconded.

Motion passed unanimously.

Scholarship—See report on page 12.

EGAC & Trig-Star (Ferguson)—Trig-Star is starting again. Now is the time to get teachers interested and get into their spring curriculum.

New Business

Out of agenda order

Contract renewal—Service contracts are up for renewal. Anderson spoke to VanNatta about same cost or lower for another two years. Would like to entertain the motion before October meeting. Next week the contract would be sent out along with comments solicited by the task force and tools to express comments and ideas. Bylaws require a time period to provide input. The task force will meet and draw up proposal. The bylaws were reviewed regarding email voting. Neathamer will coordinate the email vote.

MOTION: Spurgeon moved that an email discussion on the service contract take place between September 22–25.

Clarification: The review committee of Anderson, Henricks, Gaylord and Kent would meet/have conversations with VPR to continue with current cost or reduce it accordingly.

<u>Lewis seconded.</u>

Discussion: Would more time be needed to discuss this? It was determine there was enough time. Motion passed.

(After meeting update: Votes were tallied Sept. 28 with VPR contract renewal affirmed!)

Two other contracts: LLM and Public Affairs lobby contract need to be considered. The committee will report back. There may not be any PLSO legislation to bring that we need lobby

involvement next Legislation session. Put ideas in writing to Freshwaters or Anderson about lobbying, or Anderson or Abbott about LLM. Spurgeon reminded the group that PLSO cannot just "turn off" relationships. Lobbyists are involved for many years in the business and maintain good relationships with legislators.

Legislative (Freshwaters)—The Right-of-Entry bill did pass. In 2012, each representative can sponsor a maximum of two bills; each committee can introduce five bills. PLSO doesn't have enough muscle to get new bills introduced. Having Fred VanNatta monitor things can benefit the surveying profession. He wants to keep PLSO in the know, so that it is ready for the 2013 legislative session. If there is any input on legislation or about changes to existing laws, let a chapter committee member know.

Bylaws—VanNatta will coordinate with Bacon for the new conflict of interest policy to be presented at the next board meeting.

OSBEELS (Linscheid)—Standards of Practice is looking to address how narratives are written. Mark Mayer has expressed interest in attending. Law enforcement cases keep increasing. Legislation has directed OSBEELS and some other agencies to raise the standard in complaint cases from 'preponderance of evidence' to 'clear and convincing evidence.' Linscheid passed out information to share with other members.

Minor asked about purpose of the OSBEELS Seminar. Linscheid said there was no intent to compete with PLSO. Every year 2% of licensed surveyors get audited. They either meet requirements or don't. The seminar came from the external relations committee. It's an avenue to help people get their CEUs. Gary Johnston suggested PLSO could exhibit their booth at the symposium. Talk with Jenn Gilbert.

Webmaster (Gary Anderson)—The website is making good progress; PLSO can hopefully have website renewals running soon. It is more likely that PLSO will get younger members interested through the website. The lifeblood is the younger members.

Professional Practices/NSPS (Neathamer)— We had good coverage by VanNatta and Kent in San Diego. The Governors made motion to leave ACSM and NSPS followed suit. Two out of the three groups were in favor of the change. GLIS voted "no" on disbanding. It will be a long process. Each organization is a member now. Discussion is still happening about a name. The strategic planning committee will be conducting a new business model. Several committees have been set up to try to work with state societies to be a member of both NSPS and whatever the new organization will be.

The Board revisited the issue of professional practice complaints. Some changes need to be implemented in conflicts that come up. Some action or motion in regards to complaints received over the last few months with Article 12 section 2A.

Neathamer suggested a task force review Article XII, Section 2 of PLSO bylaws. It's not a function PLSO should serve. Most disciplinary actions should be addressed through OSBEELS. Discipline, as it related to PLSO, is primarily being able to take away the right to be a member.

MOTION: Lee Spurgeon recommended that board will not discuss this issue further. Lewis seconded.

Discussion: Statute/Standard of limitations. Anderson to provide letter from the Board.

Motion passed unanimously.

Amendments procedure. Article 12 needs to be reviewed. Under the PLSO Operations Manual, Professional

Continues on page 12

Practices also needs to be reviewed. The Operations Manual states that membership of Professional Practices committee needs at least one board member. Anderson requested that chapters provide support for committees and solicit volunteers. Anderson asked Neathamer and Bacon to look deeper into revisions.

OACES (John Minor)—Next meeting is Sept. 22. It is good to get the county surveyor's perspective.

GPS User's Group—ODOT is implementing the newly passed coordinate legislation and has appointed Logan Miles and Paul Galli to serve two years on the advisory committee called for in the new legislation.

LightSquared—Gary Anderson recommended that VanNatta draft a letter on behalf of the board. Surveyor Connect has information on their website.

Oregon Surveyor—Submit more articles and minutes for the magazine.

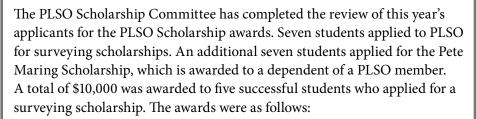
Awards—Nominations are needed for awards and new officers, etc. Please submit candidates and nominations at October meeting. Please review rules about submissions, they are in bylaws.

Archives—The Oregon Historical Society has past magazine copies. Paul Galli is working on scanning them to store electronically. Look for members in the 1990s. Thatcher will email information. Looking for magazines from 1994–1999. Johnston will check on those.

Geocaching—Individual chapters should be hosting one in their respective areas. If there is a program that is park-sanctioned and can dovetail with our organization, that idea might work. Get younger folks involved. Clough has some geocaching items.

Spotlight on the PLSO

Scholarship Committee



4-1111-	4411414541115		
STUDENT	SCHOLARSHIP	SCH00L	AWARD
Jason Weisz	Charles Guiles	OIT	\$3000
Joel Herzberg	Brian Weigart	OIT	\$2000
Timothy Brown	PLSO General	OIT	\$2500
Michelle McBride	PLSO General	OIT	\$1500
Greg Wheelhouse	PLSO General	OSU	\$1000

The **Pete Maring Scholarship** in the amount of \$500 was awarded to **Laura Gordon**—stepdaughter of Marc Brittain, PLS of Roseburg, Oregon. Laura plans to become a physician and work in the medical profession.

Congratulations go to all of the students. Please remember to support this program. Now is a good time to start looking for auction items and thinking about other forms of fundraising for next year's scholarship efforts.

Regards,

Stephen K. Haddock, PLS, CFedS PLSO Scholarship Chair 541-443-2922

Good OF THE Order

Minor suggested some ideas to resolve disputes. One resource is online at www.n2nmediation.com.

Other Chapter Activities

Pioneer chapter is having a CPR class designed for surveyors on October 7. Galli is putting together a program.

Anderson would like input about Willamette Stone 20-year Plan.

Adjourn

Being no further business, the meeting was adjourned at 3:00 pm. •

Watch for your notice to renew your PLSO Membership ONLINE! The membership year will be changing from January–December to July–June. Information regarding more membership options are coming soon. Now is a great time for new membership recruitment!

Visit www.PLSO.org for more information.





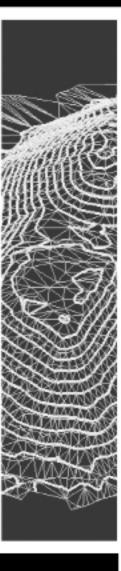




How do you measure success?







No matter what challenges you face. No matter what opportunities await you. Trimble is dedicated to helping you establish and secure a pathway to your continued success.

Whether your version of success means fewer hours in the field or finding new market opportunity, the answer lies in complete surveying solutions that you can trust.

Get the most from every day and every challenge. Total solutions give you the freedom to Collect, Share & Deliver with workflows that make the most sense for your business.

Still Looking for your next big success? Search no further: www.trimble.com/success

SUCCESS FOUND HERE



© 2016, Intrible Havigation Limited, All rights received. Hintitle and the Gode 5 Françai Rope to a trademark of Timble Havigation Limited, registered in the limited States and in other countries.

FOR MORE INFORMATION CALL YOUR TRIMBLE DEALER GeoLine Positioning Systems Portland, OR 800-523-6408 Pacific Survey Supply Medford, OR 800-866-9130

PLSO Board of Directors Meeting Minutes

October 22, 2011 • Oregon Institute of Technology, Klamath Falls, OR

Attendees

Officers

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

Board Members

CENTRAL (1) Andrew Huston, President-Elect
MIDWEST (2) Jeremy Sherer, President | Tim Fassbender (alt for Ron Rice)
PIONEER (3) Lee Spurgeon, President | John V. Thatcher, President-Elect
ROGUE RIVER (4) Stephan "Pat" Barott, President | Fred Frantz, President-Elect
SOUTH CENTRAL (5) Allen Hart, President | Tom Del Santo, President-Elect
SOUTHWEST (6) Edith Forkner, President
UMPQUA (7) Ron Quimby, President
WILLAMETTE (8) Lee MacDonald, President | Jamey Montoya, President-Elect

Committee Chairs

PROF. PRACTICES/NSPS Bob Neathamer | FINANCE Gary Johnston

Guests

Caleb Schwab, Daniel Helmrick, Rob Ledgerwood, Jack Walker

Call to Order

The meeting was called to order at 10:07 am by Chair Gary Anderson.

BLUE MOUNTAIN (9) Rod Lewis, President-Elect

Welcome & Introductions

Chair Anderson welcomed guests and postponed introductions until the students arrived.

Review/Approve Agenda

There were no changes or additions to the agenda.

MOTION: Fassbender approved the agenda as prepared. Quimby seconded.

Motion passed.

Approval of Minutes

MOTION: Fassbender moved to accept the minutes as presented.

MacDonald seconded.

Motion passed.

Report FROM THE Executive Secretary

 VanNatta prepared a report in advance, but elaborated that we have two more dues paying members this year than we did last year at this time.

- She described the work on the PLSO website and the membership renewal process. Anderson emphasized that we need to explain the membership date change.
- She showed the membership postcard that will be mailed out at the end of the month.

OIT Presentation

Jack Walker, Professor and Chair of the Geomatics Department at the Oregon Institute of Technology shared information about the program. He also asked PLSO to commit \$2000 a year to help them attend the ERISA conference in San Diego to have a booth. The booth and travel costs about \$4000. A short discussion was held and Anderson asked the membership to consider this with their chapters. Not many students attend this conference, but companies can learn about OIT through the conference.

DRAFT MINUTES—To be approved at the December Board Meeting.

Report FROM THE Chair

- Anderson received a response from the White House about his LightSquared letter.
- A local theater production is looking for props from PLSO members for a play.
- NSPS has deep discounts on materials.
- Greg Crites has indicated he will be leaving his position as WestFed Representative for PLSO.
- Anderson has written an article for *Building Futures* magazine.
- Daren Cone accepted a Forest Engineer position with the State of Oregon Department of Forestry in Salem and has left the Rogue Chapter. Fred Franz will be taking his place and Barott will stay on another year as Chapter President.
- There are proposed sponsorship levels available to companies and they were passed around to the Board.
- There will be updates to the Bylaws, with new policies to meet IRS recommendations that will come to the Board in December.
- Anderson was asked to participate in a rally for SaveOurGPS (similar to one that was in Seattle).
 The timing was a little short.
- Paul Galli has almost completed the scanning of back issues on *The Oregon Surveyor* magazine.
- Anderson recommended that the Board and other PLSO Members join URISA.



• Daniel Helmricks, a student at OIT, is on the committee for the Young Surveyors Network with FIG. They are helping the Young Surveyors Group in Italy. They are working on outreach to under-developed countries to encourage interest in surveying. African countries are a focus.

Student Chapter presentation

Postponed until 11:30 am.

Additional agenda item

Financial update

Johnston reported that our resources have decreased by \$25,000 over the past year. PLSO currently has a \$68,000 reserve. He estimates PLSO will gain about \$10,000 by the end of the year, based upon financial projections. The budget prepared in January 2011 forecasted a loss. He shared that the PLSO board needs to be mindful of the many requests for funds, while the organization likes to be charitable, it should do this carefully.

He encouraged the Chapters to provide workshops that pay for themselves (by having break even or fundraising events) and should recruit membership enthusiastically.

- Anderson added that PLSO needs to recruit new members and budget carefully.
- Anderson asked if the more centralized accounting process is working.
- Spurgeon said that they would like some equipment for the chapter.
- Pioneer said they want a large screen and projector for presentations.
- Willamette Chapter has its student appreciation dinner at OSU and it is getting expensive. Their workshop income was sufficient to offset that event
- Thatcher mentioned that what Pioneer Chapter needed most was a big screen.

- Barott said they are getting reimbursed quickly and they have equipment available for use.
- Johnston said Chapters need to estimate what things cost or income they might make in a workshop. He emphasized a "break-even" plan should be in place.

Out of agenda order

Contract renewals (VanNatta PR, Public Affairs & LLM Publications)

Anderson thanked the Board for moving to approve the VanNatta Public Relations contract. There was no increase in cost in the contract, which was renewed for two years.

The Public affairs contract modification/renewal is being considered. They are looking at Fred VanNatta's role in the organization as the time moves along. The Legislative Committee will meet in early November on that contract.

The LLM contract covers *The Oregon Surveyor* magazine. Anderson is pleased with the production of the publication. There is a provision for LLM to provide our webmaster with a flip page version of the magazine. Advertising was discussed. The PLSO will not pursue the 2nd class postage permit because of mailing issues with the post office. Negotiations will begin with LLM soon.

Out of agenda order

National Survey Competition

Introductions were made. Caleb Schwab spoke about the National Survey Competition that was held in Las Vegas. He will be advising the team this year and the competition will be in Oregon. They developed a digital terrain model of what Crater Lake might have looked like based on the data set acquired in 1886.

Old Business

Strategic Planning/Student Input Focus

(Gary Johnston)—A discussion about the value of PLSO membership was held with students. One comment was, "What do you get out of a membership? We only get a magazine?" Students receive complimentary registration for the annual conference in exchange for their assistance with conference activities. For an Associate, it is difficult to show value.

- Graduates from surveying programs said that their company limits their attendance at conferences. They may prefer to attend ones that offer more programs that are weekend sessions and provide more technical guidance (like instruction on the *BLM Manual*).
- Fassbender said that the regular chapter meetings offer networking and instruction.
- Students complimented the new website and have looked/liked the Facebook page. They thought programs like Trig-Star have been helpful, yet most people seem to find surveying through interest in math. One student received an email from the college about PLSO.
- Get students to recruit students.
 College students often go back to their high schools. Many students in the OIT Geomatics program are non-traditional (older) students.
- When asked what the next generation wants from PLSO, they said they want to make a difference and valued the fraternal, social aspect of a group and wanted a place where they would have a comfortable, safe environment to ask questions, to make connections, to keep up with the issues of the industries, to learn ways you can do surveying, and to get updates about what goes on in the community.

Continues on page 16



- Mentoring was discussed. If there was someone who Associates could direct questions to, they could both help each other.
- A PLSO presence on campuses would show value.
- Students want something to add to their education, the meetings are hit or miss. The Chapter meetings can get a reputation of not being very interesting. If there are no professionals or associates at the meeting, it's not very appealing.

Membership—Tabled for the meantime. *Out of agenda order*

PLSO Foundation (Anderson)—Anderson and Fassbender are working on the Foundation. There would be some benefits—such as obtaining grants, paying public employees for speaking and using money for other charitable purposes—instead of just scholarships through Oregon Community Foundation (OCF). Anderson explained that PLSO cannot provide charitable benefits to members, but people could give their contributions directly to OCF. Grant money is a little more problematic and difficult to get.

Sherer asked about management of the non-profit. There is volunteer commitment and a management component. Anderson said he and Fassbender will prepare a FAQ on this process for the next board meeting.

In an informal vote, the group supported the formation.

OSBEELS Standard of Practice—Narrative"draft"—Anderson reviewed the narrative issue from the last meeting. He emphasized that PLSO needed to weigh in on this issue.

Lewis said **Blue Mountain** felt that the rules make a regular survey look more like an ALTA. They were negative on it. MacDonald from **Willamette** said they held significant discussion. There is some support for the legal premise, but it appears to be micromanaging the process. The existing ORS's cover

those things. Quimby of Umpqua said his chapter felt there didn't need to be any more rules and professionals are already doing this in their narratives. Forkner said **Southwest** felt the group understood the purpose of the rules and they will be continuing discussions. Hart in **South Central** said they had not yet discussed this. Barott said Rogue River discussed it and no decision was made. A discussion about educating stakeholders regarding the value of the narrative is important. Sherer of MidWest said they discussed the issue at their chapter meeting. Spurgeon of **Pioneer** said they had a spirited discussion and have asked OSBEELS to provide additional information.

There appears to be some lingering confusion about what OSBEELS wants to see. On December 9 there will be an OSBEELS Standards of Practice meeting to discuss this. Neathamer said that the Oregon laws now have higher standards and OSBEELS is doing what it can to meet that. The surveying members of OSBEELS will be seeking PLSO board input.

PLSO seeking a legislative remedy to the rule was discussed. Professional vs. technician was considered. Washington State has adopted Standards of Practice. Anderson will bring questions to OSBEELS's attention.

New Business

Anderson called for nominations for PLSO Board Chair-elect.

MOTION: John Thatcher nominated Lee Spurgeon for Chair-elect for 2012. Fassbender seconded. Motion passed.

Nominations closed.

The Extra-Ordinary Meeting will be held on December 3. Life Members and Surveyor of the Year nominations were given to the Executive Secretary and will be accepted up to the next meeting.

Chapter Activities

Chapters reviewed activities.

MacDonald will participate in a career fair in Salem and later in November will also meet at Evergreen Air Museum for the Boy Scouts Merit Badge University event.

Committee Reports

Conference (Allen Hart)—It was recommended to the Board that PLSO send at least one member (ideally two—one of standing committee and one of "host" chapter) of the PLSO conference committee to other conferences to study and analyze quality programs.

VanNatta suggested that the Conference Committee may benefit from conference planning educational programs, such as green meeting planning or hotel contract negotiation.

Hart reported that an Associate member wanted to know if there was any possibility of a discounted conference fee for Associate members.

MOTION: Spurgeon moved that the Conference Committee be given the authority to set a special rate for Associate members at the annual conference. MacDonald seconded. Clarification: Fassbender said that we used to have a discount for Associate, but they paid for meals. Motion passed.

MacDonald pointed out the Secretary-Treasurer breakfast would be too late if scheduled at the conference in March. VanNatta reported that she would set up a secretary-treasurer conference call or webinar to go over things they need to know.

Scholarship (Steve Haddock)—Haddock was not present. Anderson reminded people to bring in items for the scholarship auction.

Education Goals and Actions/Trig-Star (Joe Ferguson)—Ferguson was not present, but provided his report in

writing. There will be a high school student program at the conference.

Legislative (Scott Freshwaters)—Freshwaters provided a report in writing. The Oregon Association of Realtors have discussed a proposed constitutional amendment to oppose all new or increased fees on real estate transactions.

PLSO / OSBEELS (Dan Linscheid)—Not in attendance.

Webmaster—Harness Technology was not in attendance. VanNatta said she will open the membership early for the board and wants them to renew to make sure everything works.

NSPS & Professional Practice (Bob Neathamer)— VanNatta distributed the letter that she prepared for Congressman Greg Walden on Save our GPS. Walden is the head of the telecommunications committee. PLSO will also be filing a letter with the FCC electronically. Neathamer said this was an excellent letter that hit all the discussion points. Early in December is NSPS Lobby Day. There are issues with NSPS that we will be discussing over the next few weeks.

WFPS (Greg Crites)—Crites will continue through the June 2012 meeting. PLSO should find a replacement prior to the June meeting so there could be some overlap in this role.

PLSO Liaison to OACES (Scott Freshwaters)—No report.

Oregon GPS Users Group (John Minor)—Minor was not in attendance. There will be a class in Albany at the Comfort Inn on converting from Trimble's TGO to TBC. You will have to convert if you are using Trimble. Barott noted that TGO can still be used for everything but network adjustment.

Publications / Oregon Surveyor (Oran Abbot)—Abbot was not in attendance.

Awards (Logan Miles)—Miles was not in attendance, but requested all of the outgoing officer's names. Anderson said all outgoing officers are expected to come to the conference.

Good of the Order

The next board meeting is December 3 at Mookies in Springfield.

Adjourn

Being no further business, the meeting adjourned at 3:02 pm. \circ

GPS Nuts & Bolts and Best Practices

A workshop presented by the Oregon GPS User's Group

January 11, 2012

Comfort Suites, 100 Opal Court, Albany, Oregon

Schedule

8:30–9:00 am Registration

9:00–10:30 am New Coordinates for CORS and Passive

Marks in the new NAD83(2011) (Epoch

2010.0) reference frame, plus

Absolute vs. Relative Antenna Calibrations

Presenter:

Mark Armstrong, Oregon NGS Advisor

10:30-10:45 am Break

10:45 am – 12:00 pm Understanding Geoids

Presenter:

Dan Hoekstra, Statewide Land Surveying

12:00–1:00 pm Catered Lunch

1:00–4:30 pm Best GPS Practices Panel

Presenters:

Static GPS—Herb Farber, Farber Surveying RTK GPS—Ken Murto, David Evans and Assoc. Real-time Network GPS—Ken Bays, ODOT Airborne GPS—Shelby Griggs, Orbitech GIS GPS—Jim Lahm, Electronic Data Solutions

Cost (includes lunch)

\$45 members registering prior to January 5 \$60 non-members and at the door

Workshop PDH 6 hours

To register, contact

Cael Neathamer
PO Box 1584, Medford, OR 97501
541-732-2869
cael@neathamer.com

PLSO Letter to the FCC regarding LightSquared Submitted electronically

Ms. Marlene Dortch, Secretary | Federal Communications Commission | 445 12th St SW | Washington, DC 20554

October 23, 2011

Re: LightSquared Subsidiary, LLC, Application for Modification of Authority for Ancillary Terrestrial Component; IB Docket No. 11-109; IBFS File No. SAT-MOD-20101118-00239; Written Ex Parte Communication



Dear Ms. Dortch:

We write to express our deep concern about the above referenced proceeding. We urge the FCC to take no action that could jeopardize, in any way, the utility of GPS systems, which are a critical part of our business.

The members of the Professional Land Surveyors of Oregon, comprised of over 750 public and private land surveyors, depend upon GPS technology to effectively do our jobs. Our high-precision GPS receivers are the backbone of land surveying and without it, we would need to revert to out-moded line-of-sight surveying methods. This would not produce results we would find acceptable.

We understand that a company called LightSquared, which is licensed to operate a mobile satellite system ("MSS"), would like to convert the spectrum for which it is licensed by the FCC to build a ubiquitous wireless broadband terrestrial network. We also understand that the spectrum for which LightSquared is authorized is nearby to the spectrum that GPS devices receive. Because both are satellite-based systems today, they can apparently successfully co-exist in nearby spectrum bands. However, LightSquared's proposal would result in incompatible uses being located in nearby spectrum bands. Because LightSquared would have the more powerful system, it will apparently cause destructive interference to GPS. While we certainly support the FCC making additional spectrum capacity available for wireless broadband, it should not do so at the cost of destroying GPS, which plays a critical role in our business and the United States economy in general.

We understand that testing has already taken place which shows the interference that LightSquared will cause to GPS and that, as a result, LightSquared has modified its proposed use of the spectrum it holds. As the FCC has apparently recognized, more testing of this new proposal must take place, and only when testing shows that there will be no interference, should LightSquared be able to proceed.

Apparently, LightSquared believes that it can produce test results showing no harmful interference under its new plan by introducing filters that would be used on high precision GPS equipment, like that used by land surveyors. Saying that the interference is solved through the use of filters is not an answer, or at least not a complete answer. Surveyors who purchase sophisticated and expensive position-finding equipment should not be expected to buy a filter so that their GPS devices can continue to work—particularly if they need to do so to accommodate a third party's profit-making venture. It is fundamentally inequitable if surveyors are sacrificed to LightSquared's businesses. We understand that there has been no real-world testing of these filters, so there is no evidence that they can be successfully integrated into existing devices and made to work, particularly in the challenging environments in which surveyors operate. Finally, in the unlikely event that these filters work, LightSquared must be required to pay for all parts and labor necessary to install the filters and make them operational. LightSquared cannot be permitted to proceed until every device is retrofitted at LightSquared's expense.

We appreciate the FCC's careful consideration of this matter and its commitment not to destroy the important functions that GPS technology plays in the surveying industry.

Very truly yours,

The Board of Directors of the Professional Land Surveyors of Oregon

For a complete list of names, see www.plso.org.

Legislative Update

■ Scott C. Freshwaters, 2011 PLSO Legislative Chair PLSO was 2/4 in bills passing.

H82893, the right-of-entry bill, was signed by the Governor

on June 2, 2011 and will become effective January 1, 2012. **HCR17**, commemorating the achievements of David Thompson, passed. I had the pleasure of attending the completion of the journey in Astoria. It was a fun time and PLSO was well represented and acknowledged.

HB2892, the Boundary Line Agreement bill, made it from the House into the Senate, and was assigned to the Judiciary Committee where it died a peaceful death without a hearing. This was due to the Chair of that Comm., Sen. Prozanski taking the advice of an attorney friend to kill the bill. His friend is a land use attorney who advised that it is bad law.

HB2351, the Corner Preservation Fund fee increase bill, had a hearing in the House Revenue Committee where we met opposition from the Oregon Association of Realtors, the Oregon Homebuilders Association, and the Mortgage Bankers. After listening to the audio archive testimony, I believe the opposition did not make a strong case, but it was enough to stop the bill in its tracks.

Sometime after the hearing, I was in the Statehouse and had a conversation with Fred VanNatta and Jon Chandler of OHBA that was somewhat encouraging in regards to the future of this fee increase. It was mentioned that if we can get the local homebuilders to support this bill, then there will be support from the state organization. Also, it was speculated that if the OHBA supports the fee increase then the Realtors will also support it.

HB3386, the OACES bill that changes portions of ORS chpt 92, made it from the House into the Senate, where it did not get a hearing, and died.

S8877, the ODOT coordinate bill, was signed by the Governor 6/01/11 and became effective on that date.

In regards to attempting to introduce legislation during the abbreviated 2012 session, the committee is still debating that option. We may not attempt anything due to the limits of two bills per Legislator and five per committee. The value placed upon each bill will be extremely high, and I don't believe that PLSO has enough "muscle" to get a bill introduced during that session.

To all of you who emailed, testified, or called a Legislator or Legislators in support of our bills, I send a hearty *thank you!* Also, thank you to our Lobbyist, Fred VanNatta, who worked tirelessly on behalf of our organization.

While the legislative process can be frustrating, disheartening, and disappointing, I still am grateful that we live in the greatest country on earth and have the best form of government ever devised by man. •

Legislative Committee Meeting Minutes

November 1, 2011 • VanNatta Public Relations

Members in attendance: Evelyn Kalb*, Dan Linscheid, Ron Quimby, Mark Hoye, Tim Fassbender, Fred VanNatta, Scott Freshwaters, Mark Riggins

Call to order: Freshwaters called the meeting to order at 1:05 pm.

Business:

- Proposed legislation was discussed with Freshwaters mentioning an issue broached at the OACES fall conference. This has to do with corporate or business names in lieu of individual surveyors' names and license number marking set monuments. After some discussion, this was deemed a non-issue.
- Evelyn Kalb would like to pursue the boundary line agreement legislation during the 2013 general session. Freshwaters will follow up on this by visiting Sen. Prozanski and his "attorney friend" to learn more about their position in opposing our bill last session.
- Another piece of legislation discussed was the proposed constitutional amendment by the OAR that would ban any new "real estate transfer tax." If successful, this amendment could bar any increase to the fee collected for the corner preservation fund.
- Freshwaters started a discussion about the fact that OACES gets free use of our lobbyist to promote some of their bills. Quimby remarked that any OACES legislation to be considered by PLSO must come through this committee for approval prior to support by PLSO.
- The contract with our lobbyist, Fred VanNatta was discussed and Fred mentioned that he is living in an "unsuccessful retirement" and would like to really retire (and fish more). He agreed to serve out the remaining term of his existing contract and also agreed to reduce his monthly retainer from \$2,250 to \$1,200 (effective Nov. 1, 2011) for the duration of the contract, with no other contract modifications. We also discussed the hiring process of a new lobbyist and the various types of services, contracts, and costs that we should look at. Fred agreed to assist us in the hiring process, even after his contract expires.
- Dan Linscheid gave the committee a historical perspective outlining the rationale behind OSBEELS proposal to start codifying some general "standards of practice" for Land Surveyors. The first step is the proposal to "tighten up" the requirements for narratives.
- Tim Fassbender, as an aside and topic of general interest, asked if this group understood the rationale behind his efforts to form a 501 3(c) non-profit entity for the handling of donations to PLSO. Everyone did understand and gave Tim their support and words of encouragement.

The meeting adjourned at approximately 3:00 pm. • *Evelyn Kalb attended via telephone and left after about 10 minutes.

BLM Public Land Survey Plats

■ Bureau of Land Management, Oregon State Office

The following public land survey plats for Oregon were approved and/or filed during the period of **Sept. 2010–Sept. 2011**. This list is also available electronically by contacting the Portland BLM office at *khensley@blm.gov*.

Oregon, Willamette Meridian

T. 30 S., R. 9 W.	Dependent Resurvey
1. 30 3., N. 9 W.	•
T. 3 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 14
T. 29 S., R. 9 W.	Retracement
T. 7 S., R. 2 E.	Dependent Resurvey & Subdivision of Section 33
T. 6 S., R. 2 E.	Dependent Resurvey & Subdivision of Section 35
T. 14 S., R. 2 W.	Amended Plat
Tps. 6 & 7 S., R. 7 W.	Dependent Resurvey
T. 6 S., R. 10 E.	Dependent Resurvey
T. 41 S., R. 15 E.	Dependent Resurvey & Subdivision of Sections
T. 41 S., R. 14½ E.	Dependent Resurvey & Subdivision of Sections
T. 3 S., R. 44 E.	Dependent Resurvey
T. 26 S., R. 12 W.	Dependent Resurvey & Subdivision of Section 36
T. 21 S., R. 27 E.	Dependent Resurvey & Subdivision of Section 9
T. 27 S., R. 11 W.	Dependent Resurvey
T. 13 S., R. 7 W.	Dependent Resurvey & Subdivision of Section 15
T. 27 S., R. 13 W.	Dependent Resurvey
T. 23 S., R. 8 W.	Dependent Resurvey
T. 22 S., R. 7 W.	Subdivision of Section 6
T. 35 S., R. 5 W.	Dependent Resurvey & Subdivision of Section 27
T. 34 S., R. 2 W.	Dependent Resurvey & Subdivision of Sections 16 & 17
T. 30 S., R. 3 W.	Retracement
T. 21 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 4
T. 20 S., R. 4 W.	Dependent Resurvey
T. 19 S., R. 1 E.	Dependent Resurvey
T. 29 S., R. 8 W.	Dependent Resurvey
T. 29 S., R. 6 W.	Retracement

T. 28 S., R. 8 W.	Retracement
T. 30 S., R. 7 W.	Retracement
T. 28 S., R. 3 W.	Retracement
T. 26 S., R. 7 W.	Retracement
T. 30 S., R. 3 W.	Retracement
T. 30 S., R. 11 W.	Dependent Resurvey & Subdivision of Section 24
T. 28 S., R. 3 W.	Dependent Resurvey & Subdivision of Section 23
T. 24 S., R. 6 E.	Dependent Resurvey & Subdivision of Section 1 & Survey
T. 14 S., R. 7 W.	Dependent Resurvey & Subdivision of Section 15
T. 6 S., R. 11 E.	Dependent Resurvey & Subdivision of Section 27
T. 23 S., R. 3 W.	Retracement
T. 20 S., R. 6 W.	Retracement
T. 29 S., R. 4 W.	Retracement
T. 14 S., R. 1 W.	Retracement
T. 24 S., R. 8 W.	Dependent Resurvey
T. 21 S., R. 9 W.	Dependent Resurvey & Subdivision of Section
T. 30 S., R. 8 W.	Retracement
T. 31 S., R. 6 W.	Dependent Resurvey & Subdivision of Section 25
T. 30 S., R. 6 W.	Retracement & Rehabilitation
T. 3 S., R. 44 E.	Dependent Resurvey & Subdivision of Sections 2 & 12
T. 31 S., R. 14 W.	Dependent Resurvey & Subdivision of Sections
T. 15 S., R. 1 W.	Dependent Resurvey & Rehabilitation
T. 30 S., R. 3 W.	Dependent Resurvey & Subdivision of Sections
T. 23 S., R. 3 W.	Dependent Resurvey
T. 7 S., R. 9 W.	Dependent Resurvey & Subdivision
T. 30 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 13

T. 15 S., R. 1 W. Dependent Resurvey T. 27 S., R. 3 W. Dependent Resurvey T. 27 S., R. 4 W. Dependent Resurvey T. 34 S., R. 3 W. Dependent Resurvey T. 29 S., R. 3 W. Dependent Resurvey T. 26 S., R. 7 W. Dependent Resurvey T. 10 S., R. 2 E. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey T. 26 S., R. 1 E. Dependent Resurvey T. 24 S., R. 4 W. Dependent Resurvey T. 24 S., R. 5 W. Dependent Resurvey T. 26 S., R. 3 W. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey T. 24 S., R. 7 W. Dependent Resurvey T. 24 S., R. 7 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey T. 27 S., R. 5 W. Dependent Resurvey T. 28 S., R. 8 W. Dependent Resurvey T. 29 S., R. 3 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey T. 35 S., R. 6 W. Dependent Resurvey T. 36 S., R. 3 W. Dependent Resurvey T. 37 S., R. 6 W. Dependent Resurvey T. 38 S., R. 6 W. Dependent Resurvey T. 39 S., R. 3 E. Dependent Resurvey T. 30 S., R. 4 W. Dependent Resurvey T. 30 S., R. 3 E. Remonumentation of Section 24 T. 30 S., R. 3 E. Remonumentation of the V4 Section Corner of Sections 15 Sections 11 Remonumentation of the Corner of Sections 11 Remonumentation of the Corner of Sections 11 Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey T. 23 S., R. 4 W. Dependent Resurvey T. 23 S., R. 4 W. Dependent Resurvey T. 24 S., R. 4 W. Dependent Resurvey		
T. 27 S., R. 4 W. Dependent Resurvey T. 34 S., R. 3 W. Dependent Resurvey T. 29 S., R. 3 W. Dependent Resurvey T. 26 S., R. 7 W. Dependent Resurvey T. 26 S., R. 7 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey Subdivision of Section 34 T. 18 S., R. 28 E. Dependent Resurvey & Subdivision of Sections T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 10 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 T. 23 S., R. 1 E. Dependent Resurvey & Subdivision of Section 1 T. 23 S., R. 34 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 15 S., R. 1 W.	Dependent Resurvey
T. 34 S., R. 3 W. Dependent Resurvey T. 29 S., R. 3 W. Dependent Resurvey T. 26 S., R. 7 W. Dependent Resurvey T. 26 S., R. 7 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey Subdivision of Section 34 T. 18 S., R. 28 E. Dependent Resurvey & Subdivision of Sections T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Section 5 T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey & Subdivision of Sections 2 & 13 T. 24 S., R. 7 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey T. 9 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 27 S., R. 3 W.	Dependent Resurvey
T. 29 S., R. 3 W. Dependent Resurvey T. 26 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 10 S., R. 2 E. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey & Subdivision of Section 34 T. 18 S., R. 28 E. Dependent Resurvey & Subdivision of Sections T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Section 5 T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 1-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 27 S., R. 4 W.	Dependent Resurvey
T. 26 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 10 S., R. 2 E. Dependent Resurvey T. 25 S., R. 3 W. Dependent Resurvey & Subdivision of Section 34 T. 18 S., R. 28 E. Dependent Resurvey & Subdivision of Sections T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Section 5 T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 2 E. Dependent Resurvey & Subdivision of Section 1 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 34 S., R. 3 W.	Dependent Resurvey
T. 10 S., R. 7 W. & Subdivision of Sections T. 10 S., R. 2 E. Dependent Resurvey Subdivision of Section 34 T. 18 S., R. 28 E. Dependent Resurvey & Subdivision of Sections T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Section 5 Dependent Resurvey & Subdivision of Section 5 T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 31 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey Remonumentation of Certain Original Corner Points Dependent Resurvey	T. 29 S., R. 3 W.	Dependent Resurvey
T. 25 S., R. 3 W. Dependent Resurvey & Subdivision of Section 34 T. 18 S., R. 28 E. Dependent Resurvey & Subdivision of Sections T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Section 5 T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey & Subdivision of Sections T. 26 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 1 T. 23 S., R. 34 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 3 E. Remonumentation of the ¼ Section Corner of Sections 17-4 T. 23 S., R. 3 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 26 S., R. 7 W.	•
T. 18 S., R. 3 W. Bependent Resurvey & Subdivision of Sections Dependent Resurvey & Subdivision of Section 5 Dependent Resurvey & Subdivision of Sections T. 24 S., R. 3 W. Dependent Resurvey & Subdivision of Sections Dependent Resurvey & Subdivision of Sections 19 & 31 Dependent Resurvey & Subdivision of Sections 17 & 21 Dependent Resurvey & Subdivision of Section 17 Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 10 S., R. 2 E.	Dependent Resurvey
T. 12 S., R. 1 E. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Section 5 Dependent Resurvey & Subdivision of Section 5 Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Dependent Resurvey & Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 25 S., R. 3 W.	•
T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Sections 10 & 23 T. 24 S., R. 4 W. Dependent Resurvey & Subdivision of Sections T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey & Subdivision of Sections 2 & 13 T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 E. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 T. 23 S., R. 34 E. Dependent Resurvey & Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 18 S., R. 28 E.	& Subdivision of Sections
T. 24 S., R. 4 W. & Subdivision of Section 5 T. 1 S., R. 5 W. Dependent Resurvey & Subdivision of Sections T. 20 S., R. 33½ E. Dependent Resurvey & Subdivision of Sections 2 & 13 Dependent Resurvey & Subdivision of Sections 2 & 13 T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 1-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey Beginning the first the fi	T. 12 S., R. 1 E.	
T. 20 S., R. 33½ E. Dependent Resurvey T. 26 S., R. 5 W. Dependent Resurvey & Subdivision of Sections 2 & 13 T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey T. 9 S., R. 3 E. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 24 S., R. 4 W.	& Subdivision of Section 5
T. 26 S., R. 5 W. Dependent Resurvey & Subdivision of Sections 2 & 13 T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey T. 9 S., R. 3 E. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 1 S., R. 5 W.	•
T. 24 S., R. 5 W. & Subdivision of Sections 2 & 13 T. 24 S., R. 7 W. Dependent Resurvey & Subdivision of Sections T. 24 S., R. 8 W. Dependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey Example Subdivision of Sections 19 & 31 Dependent Resurvey Dependent Resurvey Example Subdivision of Sections 17 & 21 Dependent Resurvey Example Subdivision of Section 26 Example Subdivision of Section 26 Example Subdivision of Section 1 Example Subdivision of Section 1 Example Subdivision of Section 24 Example Subdivision of Section 31 Example Subdivision 31 Example Subdi	T. 20 S., R. 33½ E.	Dependent Resurvey
T. 24 S., R. 7 W. Bependent Resurvey T. 33 S., R. 6 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey T. 9 S., R. 3 E. Dependent Resurvey & Subdivision of Sections 17 & 21 Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 1 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Dependent Resurvey & Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of Certain Original Corner Points T. 23 S., R. 35 E. Dependent Resurvey	T. 26 S., R. 5 W.	
T. 33 S., R. 6 W. Dependent Resurvey & Subdivision of Sections 19 & 31 T. 29 S., R. 3 W. Dependent Resurvey T. 9 S., R. 3 E. Dependent Resurvey & Subdivision of Sections 17 & 21 T. 3 S., R. 6 W. Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of Certain Original Corner Points T. 23 S., R. 35 E. Dependent Resurvey	T. 24 S., R. 7 W.	· · · · · · · · · · · · · · · · · · ·
T. 33 S., R. 6 W. T. 29 S., R. 3 W. Dependent Resurvey Dependent Resurvey Subdivision of Sections 17 & 21 Dependent Resurvey Subdivision of Section 26 Dependent Resurvey Subdivision of Section 26 Dependent Resurvey Subdivision of Section 1 Dependent Resurvey Subdivision of Section 1 Dependent Resurvey Subdivision of Section 24 Dependent Resurvey Subdivision of Section 31 T. 23 S., R. 2 E. Dependent Resurvey Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 24 S., R. 8 W.	Dependent Resurvey
T. 9 S., R. 3 E. Dependent Resurvey & Subdivision of Sections 17 & 21 Dependent Resurvey & Subdivision of Section 26 Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 24 Dependent Resurvey & Subdivision of Section 24 Dependent Resurvey & Subdivision of Section 31 Dependent Resurvey & Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 25 & 26 Dependent Resurvey & Subdivision of Section 31 Remonumentation of the Corner of Sections 11-14 Dependent Resurvey Dependent Resurvey	T. 33 S., R. 6 W.	
T. 9 S., R. 3 E. & Subdivision of Sections 17 & 21 Dependent Resurvey & Subdivision of Section 26 T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 24 T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 29 S., R. 3 W.	Dependent Resurvey
T. 22 S., R. 4 W. Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 1 Dependent Resurvey & Subdivision of Section 24 Dependent Resurvey & Subdivision of Section 31 Dependent Resurvey & Subdivision of Section 31 Remonumentation of the ¼ Section Corner of Sections 25 & 26 Dependent Resurvey & Subdivision of Section 31 Remonumentation of the Gorner of Sections 11-14 Dependent Resurvey Dependent Resurvey	T. 9 S., R. 3 E.	
T. 18 S., R. 1 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 24 T. 37 S., R. 2 E. Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 3 S., R. 6 W.	· ·
T. 37 S., R. 2 E. Dependent Resurvey & Subdivision of Section 31 T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 22 S., R. 4 W.	· · · · · · · · · · · · · · · · · · ·
T. 23 S., R. 34 E. Remonumentation of the ¼ Section Corner of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 18 S., R. 1 E.	
T. 24 S., R. 34 E. of Sections 25 & 26 T. 24 S., R. 34 E. Remonumentation of the Corner of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 37 S., R. 2 E.	•
T. 24 S., R. 34 E. of Sections 11-14 T. 23 S., R. 35 E. Remonumentation of Certain Original Corner Points T. 24 S., R. 4 W. Dependent Resurvey	T. 23 S., R. 34 E.	
T. 24 S., R. 4 W. Corner Points Dependent Resurvey	T. 24 S., R. 34 E.	
·	T. 23 S., R. 35 E.	
T. 23 S., R. 4 W. Dependent Resurvey	T. 24 S., R. 4 W.	Dependent Resurvey
' '	T. 23 S., R. 4 W.	Dependent Resurvey

T. 8 S., R. 19 E.	Dependent Resurvey & Subdivision
T. 22 S., R. 3 W.	Dependent Resurvey & Subdivision of Section 9
T. 28 S., R. 10 W.	Subdivision of Section 30
T. 3 S., R. 45 E.	Corrective Dependent Resurvey
T. 8 S., R. 26 E.	Perpetuation of Certain Original Corner Points
T. 30 S., R. 2 W.	Dependent Resurvey & Subdivision of Section 11
T. 20 S., R. 6 W.	Dependent Resurvey & Subdivision of Section 33
T. 18 S., R. 12 W.	Dependent Resurvey & Survey
T. 16 S., R. 1 W.	Retracement
T. 19 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 13
T. 13 S., R. 6 W.	Dependent Resurvey
T. 3 S., R. 3 E.	Dependent Resurvey & Subdivision of Section 35
T. 25 S., R. 8 W.	Retracement
T. 30 S., R. 8 W.	Retracement
T. 30 S., R. 7 W.	Retracement
T. 17 S., R. 1 W.	Retracement
T. 15 S., R. 2 W.	Dependent Resurvey
T. 13 S., R. 42 E.	Dependent Resurvey
T. 33 S., R. 3 W.	Dependent Resurvey & Subdivision of Section 3
T. 27 S., R. 3 W.	Dependent Resurvey & Subdivision of Sections
T. 18 S., R. 1 W.	Dependent Resurvey
T. 19 S., R. 8 W.	Dependent Resurvey
T. 24 S., R. 7 W.	Retracement
T. 3 S., R. 5 E.	Dependent Resurvey
T. 8 S., R. 4 E.	Dependent Resurvey & Subdivision of Sections 29 & 30
T. 29 S., R. 8 W.	Retracement
T. 40 S., R. 10 E.	Dependent Resurvey
T. 18 S., R. 14 E.	Dependent Resurvey & Survey
T. 18 S., R. 13 E.	Dependent Resurvey & Survey
T. 26 S., R. 3 W.	Dependent Resurvey
T. 8 S., R. 10 E.	Dependent Resurvey & Survey
T. 38 S., R. 2 E.	Dependent Resurvey & Subdivision of Section 8

3-D Laser Scanning

■ Gary Anderson, PLS
Reprinted from Building Futures (Fall/Winter 2011), with permission from the author.

een any good movies lately? Rise of the Planet of the Apes? Transformers 2? If you've watched a movie or spent time on your gaming system recently, you have seen 3-D scanning in action. Laser scanners are widely used in the entertainment industry to create the special effects which make movies and games so entertaining and lifelike.

Did you realize that this same technology is used throughout the construction industry? 3-D laser scanning (which is also called laser imaging or high-definition surveying) offers cost-effective and time-saving benefits for a variety of construction applications. Westlake Consultants, Inc. has offered 3-D laser scanning to augment our surveying and industrial measurement divisions for nearly a decade, making the firm one of the first in the area to utilize this technology.

A 3-D laser scanner captures data about every visible surface, providing 3-D coordinates for millions of points. The results of scanning look like photographs, but they are rich in data. On our computers, we can get measurements from the data without having to revisit the site. We can quickly answer questions such as: How long is a wall? How far apart are the windows? How high are the ceilings? Are the walls plumb? Are the floors flat or sloping? How can we install heating ducts around existing pipe runs?

It's time to market your business!

Advertise in The Oregon Surveyor.

Contact Karl Doreza: 503-445-2241 800-647-1511 ext. 2241

Email: karl@llm.com



The dense detail which 3-D scanning provides can be revisited and new questions asked over and over. (This is often called "mining" the data.) This can be very helpful since, over the life of a construction project, designs may be altered and objectives may change. The completeness of 3-D scans can reduce the need for multiple site visits, to measure and re-measure. Scanning truly helps us "measure twice, cut once."

Because laser scanning captures data quickly, and with an extremely high level of detail, it's useful for many construction-related activities.

The large size or irregular shape of an object or site is no longer a great challenge. By scanning around an object or throughout a site and then merging the scans, we create a visual database that is reliable for viewing, dimensioning, or mapping. Data can be extracted for selected areas, and it can be processed to create accurate 3-D CAD drawings.

Scanning at various stages of construction offers real benefits for the contractor and the owner. Scans can capture data about the location of rebar, conduits, utilities, etc., before they are covered by walls or concrete floors. When a question arises, the owner can look at the scan data and find out what is hidden from sight and exactly where it is. If the floor needs to be drilled, it makes it easy to find a safe spot where rebar and piping will not be in the way.

Industrial facilities with manufacturing or processing systems are good candidates for 3-D laser scanning. Factory space can be inventoried and planning can be done for renovations or systems modifications, such as installation of new machinery. (Specialized scanners are even used to gather very precise data for machining replacement parts.)

3-D laser scanning can also be used to support Building Information Modeling (BIM). BIM is the process of modeling an entire building in detail to simulate the planning, design, construction, and even the operation of a building over its entire lifespan. One major benefit of BIM is that it allows architects, engineers and construction professionals to identify potential design, construction or operational problems.

Westlake recently completed a 3-D scan to help validate a BIM model for Gilbert Hall on the University of Oregon campus in Eugene. Built in 1921, Gilbert Hall was slated for remodeling and our client wanted to be able to compare the existing building with the BIM model. 3-D scan data was used to confirm dimensions and the locations of internal





Westlake performed 3-D laser scans during construction of Portland Community College's new Willow Creek Workforce Training Center. Our goal was to show the location of power conduit to confirm installation per design, and to provide detailed data to prevent conflicts for post-pour penetrations. Our scans also captured the locations of post-tension cables, rebar and utility conduits for a true and useful as-built of pre-pour conditions.

structures and detail. Our 3-D scanning data allowed the BIM model to be adjusted to reflect 'real' conditions, and our client realized significant time and cost savings by avoiding revisions and delays in construction.

Other disciplines where scanning has proven valuable include:

- Civil and geotechnical engineers use 3-D laser scanning data frequently in their work. Scans of dangerous or inaccessible sites, such as landslides, bridges or overpasses, and even busy roadways provide accurate data safely and without interfering with traffic.
- For the marine industry, 3-D laser scanning is used frequently to create an inventory of interior spaces, decks and hulls. As-builting of hulls or other complex, irregular shapes is also achieved with scanning.
- Archaeologists use scanning to capture the exact details of an excavation or historical site. Scanning is more

- valuable than simple photographs because scan data is both visually and geometrically reliable.
- Forensic science is yet another application of scanning. Police departments around the country are using 3-D laser scanning as part of their crime and accident scene investigations.

If the cutting edge technology of 3-D scanning sounds interesting, you may want to learn more. You can easily access articles on the Internet which describe the wide range of uses for 3-D scanning. A 3-D scanning technician must possess many of the skills of a professional surveyor, including a good sense of spatial relations and a talent for math. \circ

This article was prepared for and printed in Building Futures (Fall/Winter 2011), the Construction Industry Journal for Students, which is a publication of the Oregon Building Congress.

More information at www.obcweb.com.





Scanning can also be useful to provide surveying data at high traffic or sensitive sites. Westlake has been surveying and scanning at the Oregon Zoo in support of construction slated to upgrade this major tourist attraction. We chose to include scanning in our surveying scope to reduce the number of site visits needed, allowing us to be less of a potentially disruptive presence to both the animals and zoo guests. This photo shows scanning being performed in the former hippo enclosure, which is scheduled to be replaced with additional rhino habitat.

Practical Location

■ Knud E. Hermansen and Robert Liimakka

Practical location is an equitable doctrine allowing parties-in-interest (e.g., adjoining neighbors) to fix the location of their common boundary in a location that may differ from the location where a surveyor would place the common boundary.

Equity jurisdiction permits courts to recognize a boundary location where certain elements exist. Equity has long recognized that a line of peaceful possession or occupation, in certain circumstances, established without fraud or deceit should not be disturbed.

The first element generally required for practical location is that the record boundary be vague or unknown. Some states require that this boundary be vague after examination by a competent surveyor. The remaining states only require that the boundary be vague or unknown to the partiesin-interest. The purpose for this element is to prevent parties from usurping the legal requirement that parties alter the location of their record boundaries by written instrument. By requiring the boundaries be vague or unknown, the legal fiction is created that the partiesin-interest have not altered the location of their deed boundaries. Rather, the parties-in-interest have fixed a definite location for the boundaries described in their respective deeds.

The second element is that the parties-in-interest, by their acts, fix the boundary by definite monumentation. While corner monuments are sufficient, also acceptable are fences, walls, building lines, etc. This element is to insure the boundary location does not continue to migrate and be a source of dispute. It also provides actual notice of where the parties-in-interest have fixed the location of the common boundary. The parties-in-interest can not claim to have been misled as to the

location they have fixed.

The third element required for practical location is that the parties-in-interests' conduct and actions (or in some cases lack thereof) show recognition that the boundary so located by the parties-in-interest is recognized and accepted by the parties-in-interest as their boundary.

Finally, most courts have further required that there be either: 1) recognition for some length of time (usually the statute of limitations) or 2) some loss would be suffered by a reliant party if the deed boundary were upheld or 3) the practical location falls within the realm of possibility for the location of the deed boundary (though maybe not the location chosen by a competent surveyor). Without this last element, most courts would be reluctant to change the location of the record boundary fixed by a surveyor since there is no compelling reason to adopt a location other than the record location.

Consider the following example where practical location may be recognized:

John and Jim are adjoining lot owners. One summer day while both are doing yard work, they begin discussing where their common boundary is located. Neither is sure. After drinking a couple of beers they decide that the best and least expensive way to determine their common boundary is to split the frontage (after all, they believe, they have the same size lots). John goes to get his plastic tape and Jim goes to get some old metal posts he has. Together they split the front and back distance and place the metal posts in the ground to mark their corners. For the next ten years they each respect the metal posts they set. Jim builds a new garage based on the metal posts marking his boundary. John passes away and his daughter obtains the property upon John's

death. She has the property surveyed and discovers the metal posts are three feet on her (deceased father's) property. She demands Jim respect the surveyor's monuments rather than the metal posts. Jim's garage would be in violation of the set back distance required by municipal zoning if the surveyor's opinion is determined to be the correct location of the common boundary.

In the example, the surveyor hired by the daughter should locate the record boundaries based on a complete and comprehensive evaluation of the evidence within the framework of the rules of construction. It is not the duty of the surveyor to determine if a location by practical location has been fixed by the parties-in-interest. However, the surveyor would have been wise to inform the daughter that the metal posts established by her father and Jim may now be the ownership boundary based on the doctrine of practical location or equity. Of course, it would be up to Jim to prove each of the elements of practical location in order to have the metal posts recognized as the location of the common corner.

The daughter's surveyor may want to consider wording such as the following in a letter or report to the daughter:

I have established the location of your common corner based on the best available evidence with due consideration to the rules of construction established by the court through precedence (stare decisis). My opinion conflicts with metal posts that appear to have existed in its location for some time and have been recognized as a monument to the corner. I do not know the history of the metal posts or how long the posts have existed. Under certain circumstances, a court would recognize these posts as the corners even though it is not cited as a monument to your deed or is

located where your deed description would place the common corner. Much like a person that makes a mistake on their taxes ten years ago, the court is often reluctant to unsettle what has appeared to have been an innocent mistake in the past. Seeking the counsel of an attorney will give you a better explanation of the law and your chances of success should a dispute ensue.

The doctrine of practical location can be useful foundation for the surveyor's opinion in the situation where the location made by the parties would reasonably coincide within the realm of possibilities for the location of the record boundary.

Consider the previous example and assume that Jim's deed called for a frontage of "200 feet more or less" and John's deed called for a frontage of "200 feet more or less" and the situation the surveyor discovered was the following diagram (see below).

As the diagram shows, the metal post falls within the realm of possibilities given the vague deed description (though not an equal allotment of the excess). While the post may not be where a surveyor would place the common corner, the post does fall within the realm of possible locations fixed by the deed description.

As such, the courts would tend to favor the position of the post as the deed corner simply because the parties-ininterest have historically done so.

In this situation, the contents of the letter or report may state the following:

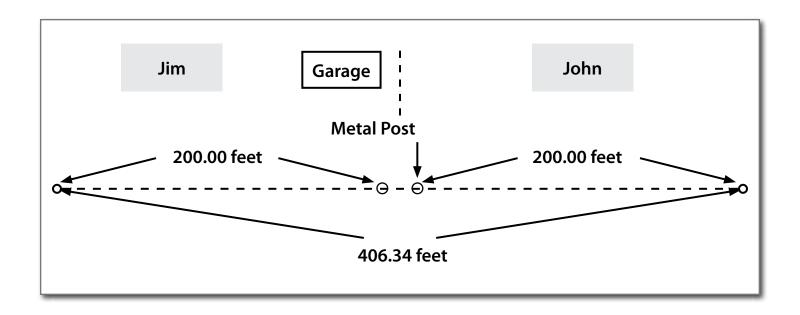
I have determined your common corner is the location fixed by an existing metal post. There are three factors that support this decision. First, the metal post has existed for some time without apparent dispute or disagreement as to its location. Second, predecessors in title have appeared to recognize the post as marking the location of the common corner. Finally, there is reasonable compliance between the position of the post and with the deed description given the loose and imperfect description (e.g., "200 feet more or less"). Under the circumstances, the courts often presume that the post location is a practical and reasonable location monumenting the common corner location intended by the original grantor.

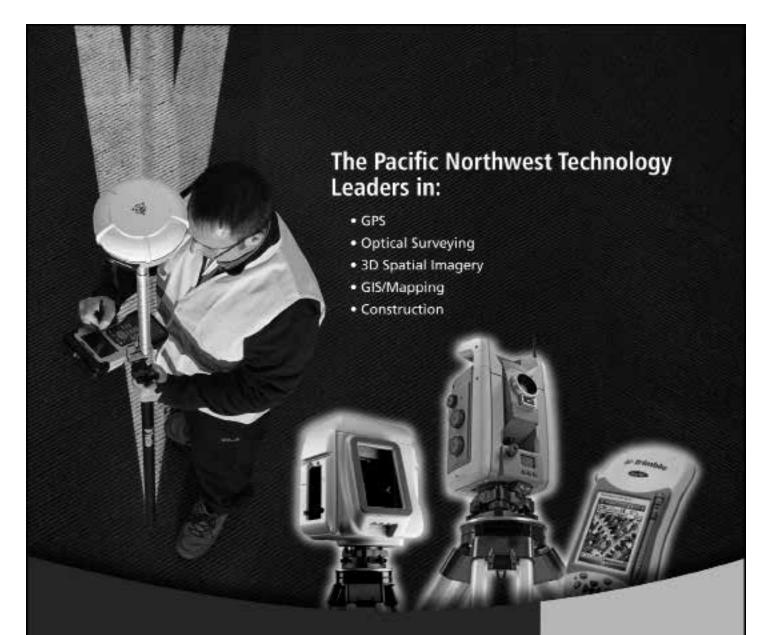
Practical location is similar to the equitable doctrine of acquiescence. The major difference is that practical location requires the parties-ininterest all participate, while acquiescence requires only one party act while the other parties-in-interest acquiesce to the acts of the one party.

Some commentators equate practical location to a boundary by unwritten agreement. The difference between practical location and agreement is subtle and not always clear (some courts do equate the two doctrines). For an agreement the law requires an offer, acceptance, and consideration. In other words, an agreement requires a bargain fairly reached where each party derives some real or imagined benefit from their bargain. These elements are not required for a boundary by practical location. As a consequence, an unwritten agreement is appropriate where the parties are placing the boundary in a location different from what they know or perceive to be a location fixed by their respective deeds. •

Knud E. Hermansen is a surveyor, engineer, and attorney. He teaches surveying at the University of Maine and operates a consulting firm providing services in title, land development, boundaries, and easements.

Robert Liimakka is a professor in the Surveying Engineering Program at Michigan Technological University. He is a professional surveyor and holds a MS in Spatial Information Science and Engineering from the University of Maine, Orono and is currently working on a doctorate in civil engineering.





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 118th Ave. SE, #400 8ellevue, 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.



Common Retirement Planning Mistakes

■ Ron Kelemen, CFP

ith the economy and the stock market down this year, many people are making a very common and dangerous mistake. They are over-weighting the recent past and assuming that the economics of their personal situations are the center of the economic world, and that those conditions and their portfolio trends will not change. There are many other retirement planning mistakes. Here are a few of them:

- 1. Not knowing what your "number" is. This is the investment net worth you need to be financially independent. Without this, you may keep working out of fear that you won't have enough, never realizing that maybe you already do. Or, you invest too conservatively or aggressively.
- 2. **Assuming a constant rate of return.** No trend follows a straight line forever.
- 3. **Assuming too high a rate of return.** The difference between 10% and 15% compounded over 10 years on a \$500,000 portfolio is \$725,900. The difference between 10% and 20% is \$1,799,000. That's a very big "Oops!" if you based your plans on the higher assumptions and missed. Likewise, assuming a 1% or a 2% return for eternity can affect your enjoyment of life today, and your retirement later.



- 4. Relying too much upon friends, relatives, and acquaintances for advice. Their circumstances and risk tolerance are different from yours, and their advice may be tainted because they are psychologically invested in what they have done for themselves.
- 5. **Being distracted by "financial noise."** Most of the financial news you hear is irrelevant to you. It can confuse and paralyze you, while wasting your precious time.
- 6. Checking the portfolio too frequently. Studies show that the more a person checks his or her portfolio, the less volatility that person, on average, will be able to tolerate.
- 7. **Comparing yourself to "The Joneses."** This is always a losing proposition! What really counts is your progress toward meeting your goals and objectives, given your circumstances, income, and assets.
- 8. Improper diversification through too much concentration and the wrong asset allocation. Ten different technology stocks or three similar mutual funds do not constitute diversification. Also, spreading your portfolio evenly across several asset classes may be ineffective asset allocation.
- 9. Taking too much money from your nest egg each month for retirement income, not taking into account your life expectancy and the variability in investment returns. On the other extreme, not taking enough withdrawals when you have your health and energy to enjoy the early years of your retirement can be an irreversible mistake.
- 10. Not taking full advantage of tax-deductible retirement plans during your working years. Never underestimate the power of tax deferral and compound interest! Especially with the beneficial provisions for retirement plan contributions. ⋄

Ron Kelemen is an independent Certified Financial Planner™ with 30 years of experience. He offers fee-only investment management and wealth management advice through The H. Group, Inc., one of the largest independent registered investment advisory firms in the Northwest. Ron can be reached at 800-285-6240 or www.planningvisionprocess.com



News from the Chapters

Willamette #8

■ Nathan Magness, Secretary

March 21, 2011

Chapter President: Lee MacDonald

Called to Order: 6:55 pm Adjourned: 9:00 pm

Attendees: 23 members, 2 guests

MOTION: Pete McDowell made a motion to approve the February 2011 minutes. Seconded by Tyler Parsons. Motion passed.

Reports

Legislative (Dan Linscheid)—The corner restoration fund increase is not flying. Realtors and land owners are among the groups resisting the fee increase. Linn County is requesting that we contact our representatives to pass the increase. Linn County has had to lay people off this year. The proposed increase in fee is \$15. If passed, each county can still choose not to increase the fee or to increase the fee by any amount up to the \$15 limit.

Tyler Parsons spoke about HB 2893—the right-of-entry bill. He says there are many problems in the current bill. A discussion ensued about various situations raised by the current version of the bill. California has a better example of a right-of-entry law. We need to contact our representatives or this bill may make it through. We cannot modify the bill because it has already passed in the House.

MOTION: Pete McDowell proposed that the Willamette Chapter recommend to the PLSO board that they kill the right-of-entry bill. Seconded by Leonard A. Rydell. Motion passed.

Board of Directors (Lee MacDonald)—

- Some bad checks have been passed using an old PLSO checking account that had been closed.
- The EZ tax form cannot be used for the PLSO due to the charity status.
- Lee is going to meet with scouts to do a day of traverse activities.
- We can write off PLSO dues as a business expense but not as a charitable contribution.
- Pat Gaylord has withdrawn his nomination to NSPS and an alternate has been selected.
- We may have a poll coming out on what skills Chemeketa CC should teach in surveying classes.

- Tyler Parsons reported on the PLSO website plans. Tyler Parsons would like to step down as webmaster, as he has served as webmaster for 14 years. The attendees showed their appreciation for Tyler's work by giving him a loud round of applause. PEAK does our current web page and they gave a presentation on some website upgrades. We are interested in having credit card options in our website. Wendell Harness is the new nominee for webmaster and it will be a paid position.
- The Annual Conference resulted in approximately \$31,500 cash flow. The lower registration cost worked well.
- Trig-Star is progressing well at the college and high school levels. We need to work on the younger grade levels.
- The PLSO Midwest and Blue Mountain chapters have given a vote of "no support" for the bill making changes to the right-of-entry law. The Pioneer chapter had mixed opinions. Much discussion ensued.

Award presentation

A plaque was presented to Jack Burell for his service as President of the Willamette Chapter PLSO.

MOTION: Nathan Magness proposed for the chapter to buy dinner for Jack Burell. Seconded by Jamey Montoya. Motion passed.

Presentation

Leonard Rydell conducted an ALTA survey in Willamina, Oregon and discussed the situations encountered on the job.

Adjourn

MOTION: Jamey Montoya proposed to adjourn the meeting with 1 PDH credit. Seconded by Mark Riggins. Motion passed. •

April 21, 2011

Chapter President: Lee MacDonald

Called to Order: 7:00 pm Adjourned: 8:27 pm

Attendees: 21 members, 2 guests

MOTION: Leonard Rydell proposed to approve the March 2011 minutes. Seconded by Pete McDowell. Motion passed.

Reports

Workshops—Gary Johnston talked about the Willamette chapter and a fellow PLSO chapter putting on a water boundary workshop in September. He needs volunteers for work on the day of the workshop. A lawyer has offered to be the speaker for free. A price for the class has not been

Willamette #8. continued

decided yet. This presentation is intended to be a fundraiser as well as educational.

Legislative (Lee MacDonald)—Lee called Jim Weidner and was told that HB 93 has passed the House with three nay votes. It is now in the Senate. We need people to call their representatives. The ODOT (Oregon coordinate systems) bills are still alive.

The House passed a resolution for the David Thompson Brigade. Two PLSO members are going to row in the canoes.

Board of Directors (Lee MacDonald)—Lee MacDonald plans to have a representative from Chemeketa CC speak at the next PLSO Board of Directors meeting.

New business

Chuck Gibbs asked members to contact Viki Berger (Salem), co-chair of the revenue committee, about HB 2351. He wanted to have her to schedule a work session on the bill. She is the only holdout of three needed to have the hearing. This bill gives counties the option to raise the fee that contributes to the corner restoration fund in Oregon counties. **Presentation**

Dave Bateman presented, "Attorney Calls about a Fence." What happens when an attorney calls about one of your previous jobs? What should you do? What is the time limit of liability? How long should you keep your records? He also discussed a survey case from Buell, Oregon.

May 16, 2011

Chapter President: Lee MacDonald

At 7:00 pm the **12th Annual Student Dinner** was called to order by Professor Robert Schultz at LaSalle Stewart Center in Corvallis, Oregon.

Professor Schultz gave special recognition to Paul Rydell and the PPI staff for their participation.

Old Business

Correction of April minutes: HB 98 should be HB 2892.

Reports

Trig-Star—Gary Johnston and John Nemechek gave Trig-Star presentations in their local areas.

Legislation—HB 2351 Corner Preservation Fee Increase has been held up in the House and is likely dead. SB 877 ODOT OCRS bill was approved by the House and is still viable.

Administrative—A new OAR is in the works, requiring PDH proof upon renewal.

PLSO Website—A redesign is in the works, focusing on completing PLSO business online. For more information, contact Wendell Harness, webmaster. Tyler Parsons was recognized for his years of service as the previous webmaster.

Chemeketa Community College Survey Program—PLSO is putting more efforts into job fairs, etc. to boost enrollment.

PLSO Annual Conference—Last year's conference raised \$9,700 for the Scholarship Fund. It was rounded to \$10,000. Two students present at the dinner received PLSO scholarships.

Herb Farber book, *History of Surveying*—Lee MacDonald mentioned that this book is available through PLSO.

Cemetery Plats—Pat Gaylord has been working on the exclusion of cemetery plats from regular plat rules.

Program

Bob Schultz spoke about the OSU surveying programs. The ABET-accredited program is designed to prepare students coming out of OSU to be prepared for their EIT and/or FLS exams upon graduation. OSU is one of six institutions nationwide that is ABET-accredited. Professor Schultz noted some of the past graduates that were in attendance: Tyler Parsons and Ted Langdon.

- A student at the dinner who will be graduating from Chemketa Community College's survey program spoke about the shortcomings of their program.
- David Kidd from LBCC, spoke on their courses which prepare students for OSU's survey program.
- Michael Wing, OSU Forestry Management Program, was present. He is involved with the photogrammetry program. Forest Geomatics will be offered at OSU.
- The American Congress on Surveying and Mapping has an OSU ACSME chapter and is looking for student participation.
- Ron Singh, ODOT Lead Surveyor, gave a PowerPoint presentation on machine-control. He explained how the surveyor's role would change with this method. He noted the differences between machine guidance assist and full control. The three main components are: design and data, the computer-sensor machine, and GPS. The team involved in preparing the presentation was: ODOT, Wildish, K & E, Pacific Excavation, Bentley, Paul Rydell and the PPI Group.
- Professor Schultz gave special recognition to Nancy Brinkman.
- Paul Rydell, PPI Group, gave door prizes.
- Marcus Reedy, David Evans and Associates, presented a Kindle as a door prize.

Motion: Lee MacDonald moved to adjourn at 9:00 pm. Tyler Parsons seconded.

Motion passed. •





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.



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

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

PORTLAND 5400 N.E. Columbia Blvd # A Portland, OR 97124 800-472-7007

- when it has to be right



Finding Work in a Down Economy

■ Greg Newkirk, GISP, GIS Manager, Fremont County, Idaho Reprinted with permission from URISA, www.urisa.org. As seen in the GIS Professional, Issue 245, Sept/Oct 2011.

or three years, I watched **◄** municipal corporations shed jobs in response to the down economy. My city was not affected for almost a year, but eventually succumbed to lower tax revenues and shrinking reserves. All of us watched with great sadness as long-time associates emerged from the manager's office with the dreaded separation packet. Every few months, another employee or two was let go. Then, the massive layoffs began. Hundreds of employees were let go. Fear and gloom settled over the entire workforce with the announcement of department mergers and program eliminations. The organization targeted senior staff and managers as much as anyone else.

Twenty-five years ago I came to this organization as part of a strategic career move. During that time, the

direction. I began by applying for anything for which I was qualified. Responses were slow if at all. After many months, I started getting interviews. This was when I began to take a greater assessment of the challenges ahead and what it was that I really wanted. Did I want to stay in my house, the Pacific Northwest, the West Coast, or was I willing to relocate anywhere? How important was my career or did I just want to survive? I did a lot of soul searching and strategizing for a job search.

The first thing I did was to begin networking. This cannot be overemphasized as it is how I obtained my present employment. The second thing I did was to prioritize my job search. It appeared to me that most available GIS jobs were for application developers, technicians and entry-level staff. I had

I never got an interview for any of these jobs. I did get an interview for mid-level position in North Carolina. This organization had somehow gotten beyond a bias against older workers. Still, one of the interviewers was honest with me and indicated his surprise that I was not applying for managerial positions. I was, but it could be a long time before I landed one of these and needed to pursue every option. I finally decided to broaden my job search to rural America for managerial positions. This is where younger, less experienced individuals often look for career advancement. I began applying for these positions and started to get calls for interviews. I stood a good chance of landing one of these positions.

During this time, a position appeared near where I first went to college. My

"The desire for work and the dignity that comes from it are strong motivators."

.....

organization provided enough career opportunities that I never left. I bought a house, raised my family and made dozens of friends, and my contributions to the Washington State PERS slowly became a pair of golden handcuffs that discouraged me from seeking career opportunities elsewhere. The latest plan was to retire in five years and live out my life in the Portland-Vancouver metropolitan area. But I was among those selected for one final massive layoff.

There was the usual shock and disbelief, then a flood of emotions whipped me like a storm in every worked at the senior level for the last 15 years analyzing data and managing projects, which significantly narrowed the jobs available. Senior level jobs in the Portland-Vancouver region appeared every few months. Nationwide they appeared once a week. These were the ones that provided me with interviews. Unfortunately, there are many highlyqualified applicants and each organization could select the "best fit", meaning the job search could go on for a long time before I landed a job. So I also applied for junior level and technical jobs. But I ran into what has every appearance of age discrimination.

daughter also went to the same college. She married someone local to the region and that is where they settled. This is where the networking I talked about earlier gets complicated. A friend of her mother-in-law told her about a position in their county government. She told my daughter. My daughter told my wife. Together, they persuaded me to apply. So I sent in my resume and was eventually offered the job.

One of the most painful things I have ever done was to leave my home and friends of 25 years, forced out by the loss of a job. I do not regret this

Continues on page 32

decision, but it still hurts. Some of my former co-workers have similarly moved on and are doing well. One is in Cheney, Washington and another went to Grants Pass, Oregon. A third was unemployed for so long he took a job in Astoria, Oregon and flies home to Colorado once a month. I learned through the example of these co-workers and friends that the desire for work and the dignity that comes from it are strong motivators. In the end, their example is what helped me to make such a difficult decision.

On an interesting aside, I recently returned from a trip to Mt. Rushmore. The majesty of that monument is overwhelming, but I saw it from a different perspective than might have been expected. Most of it was built during the great depression by individuals of all crafts and trades, people who needed work and would take whatever was available. I found it easy to identify with them, more so than with the men they etched into the rock. And of these etched men, I found the words of Roosevelt (least known of the Rushmore presidents) more applicable and rewarding than any other. "The first requisite of a good citizen is that he shall be able and willing to pull his weight—that he shall not be a mere passenger." I have spent much of my career advancing the field of GIS. I have also mentored people in the field and helped others find jobs. And when I needed it most, they help me locate job opportunities.

Ironically, this new position has taken me full circle. When I attended a nearby college 35 years ago, I had a few professors who made a difference in my education. One in particular has a grandson now serving an internship in my department. It seems strange just how small the world really is. For years, my wife has been telling me that I see the world as a glass half-empty. Now I begin to see that it is also half-full. \circ

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

PROFESSIONAL LISTINGS

DAVID C. SMITH & ASSOCIATES, INC.



Aerial Topographic Mapping
Digital Terrain Model Data (DTM)
LIDAR Data
Digital Orthophotography

Low Altitude Survey Accuracy Helicopter Mapping

Scott Smith, C.P., R.P.P. Doug Smith, C.P., P.E., R.P.P. www.davidsmithmapping.com - 1734 SE Tacoma, Portland, OR 97202 · (503) 232-5285



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 <u>free!</u>
- Single Frequency Systems (Base and Rover) less than \$8,000.00 Easy Post Processing. Software included.
- · Ashtech. 20+ years of quality you can depend on.
- · Includes training and one year of support.

Resource Supply, LLC

11607 SW Winter Lake Drive Tigard, OR 97223 Call Jon at 503-521-0888 today

www.resourcesupplyllc.com Email: jon@resourcesupplyllc.com



 $\frac{\text{Resource}}{+} \frac{+}{\text{Supply}}$

Suppry

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

March 13-16, 2012

2012 PLSO and GIS in Action **Joint Conference**

Red Lion Hotel on the River - Jantzen Beach

From Points to Polygons, Bridging the Gap

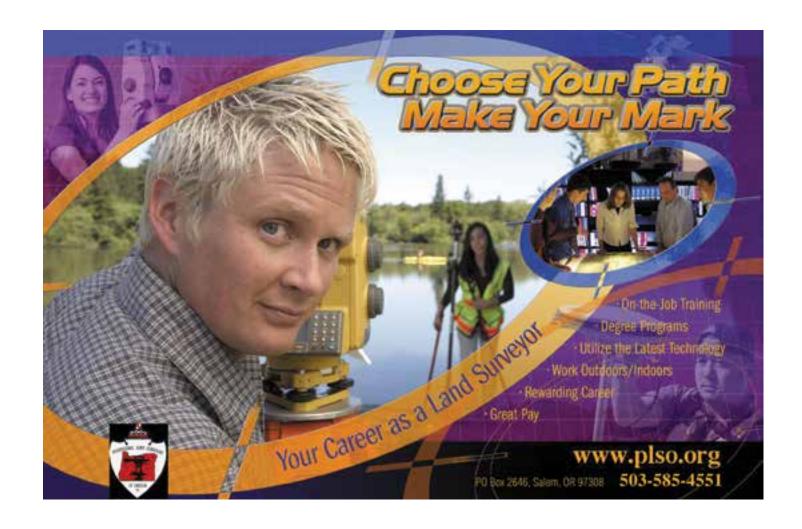
1, 2, 3, OR 4 DAY PACKAGES AVAILABLE!

Sponsored by:









PRSRT STD US POSTAGE PAID SALEM OR PERMIT NO. 526

The Lost Surveyor

