The Oregon Surveyor

Vol. 32 No. 2
April/May 2009

A Publication of the Professional Land Surveyors of Oregon

Affiliated with NSPS WFPS

Siuslaw River Bridge, Florence Oregon
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 PLSO Officers</td>
<td>2</td>
</tr>
<tr>
<td>From Your Chair</td>
<td>3</td>
</tr>
<tr>
<td>Editor’s Note</td>
<td>4</td>
</tr>
<tr>
<td>View from the PLSO Office</td>
<td>5</td>
</tr>
<tr>
<td><strong>Reports</strong></td>
<td></td>
</tr>
<tr>
<td>PLSO Board Meeting Minutes—March</td>
<td>7</td>
</tr>
<tr>
<td>NSPS News</td>
<td>12</td>
</tr>
<tr>
<td>ACSM Government Affairs Update</td>
<td>15</td>
</tr>
<tr>
<td>News from the Chapters</td>
<td>28</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td></td>
</tr>
<tr>
<td>Willamette Stone</td>
<td>11</td>
</tr>
<tr>
<td>State Heritage Site</td>
<td></td>
</tr>
<tr>
<td>50/150 Project</td>
<td></td>
</tr>
<tr>
<td>Strategic Industry Partnership</td>
<td>16</td>
</tr>
<tr>
<td>Will Boost OSU Surveying Initiative</td>
<td></td>
</tr>
<tr>
<td><strong>Articles</strong></td>
<td></td>
</tr>
<tr>
<td>Surveyors: Unsung Heroes or Out of Touch?</td>
<td>20</td>
</tr>
<tr>
<td>A Lesson Taught by the</td>
<td>22</td>
</tr>
<tr>
<td>Project from Hell</td>
<td></td>
</tr>
<tr>
<td>The Life and Times of</td>
<td>26</td>
</tr>
<tr>
<td>Bert Mason, Jr.—Part 31</td>
<td></td>
</tr>
<tr>
<td><strong>Announcements</strong></td>
<td></td>
</tr>
<tr>
<td>Teaching with Spatial</td>
<td>18</td>
</tr>
<tr>
<td>Technology (TwiST)</td>
<td></td>
</tr>
</tbody>
</table>

## Cover Photos by Oran Abbott

![Cover Photo 1](image1.png)

![Cover Photo 2](image2.png)

## Publications Committee

<table>
<thead>
<tr>
<th>Contact</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oran Abbott – Editor</td>
<td>503-253-3198</td>
</tr>
<tr>
<td><a href="mailto:oranabbott@gmail.com">oranabbott@gmail.com</a></td>
<td></td>
</tr>
<tr>
<td>Greg Crites</td>
<td>503-223-6663</td>
</tr>
<tr>
<td><a href="mailto:GAC@deainc.com">GAC@deainc.com</a></td>
<td></td>
</tr>
<tr>
<td>Bert Mason, Jr.</td>
<td>503-786-5936</td>
</tr>
<tr>
<td><a href="mailto:bmjr@peak.org">bmjr@peak.org</a></td>
<td></td>
</tr>
</tbody>
</table>
# 2009 PLSO Officers

## Chair
**GARY JOHNSTON**  
16155 Mcbee Rd  
Dallas, OR 97338  
503-623-3105  
garyjohn@wildblue.net

**TIM FASSBENBER**  
City of Eugene  
858 Pearl St  
Eugene, OR 97401  
541-682-2704  
tim.h.fassbender@ci.eugene.or.us

## Past Chair
**EDWARD J. HENRICKS**  
Weyerhaeuser Co.  
1586 Thornton Lake Dr NW  
Albany, OR 97321  
541-926-7771  
ed.henricks@weyerhaeuser.com

## Executive Secretary
**MARY VANNATTA, CAE**  
PO Box 2646  
Salem, OR 97308-2646  
503-585-4551  
execdirector@plso.org

## Central
<table>
<thead>
<tr>
<th>PresidEnt</th>
<th>Brian Reeves</th>
<th>541-383-2582</th>
<th><a href="mailto:reevesbw@msn.com">reevesbw@msn.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Scott Freshwaters</td>
<td>541-593-1792</td>
<td><a href="mailto:scottfr@cmc.net">scottfr@cmc.net</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Kevin Samuel</td>
<td>541-350-1616</td>
<td><a href="mailto:kevin_r_samuel@yahoo.com">kevin_r_samuel@yahoo.com</a></td>
</tr>
</tbody>
</table>

## Midwest
<table>
<thead>
<tr>
<th>President</th>
<th>Kent Baker</th>
<th>541-345-5879</th>
<th><a href="mailto:kentbaker@comcast.net">kentbaker@comcast.net</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Renee Clough</td>
<td>541-746-0637</td>
<td><a href="mailto:renee@branchengineering.com">renee@branchengineering.com</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Dan Nelson</td>
<td>541-682-3989</td>
<td><a href="mailto:dann@branchengineering.com">dann@branchengineering.com</a></td>
</tr>
</tbody>
</table>

## Pioneer
<table>
<thead>
<tr>
<th>President</th>
<th>Shaun Fidler</th>
<th>503-558-9686</th>
<th><a href="mailto:shaun@constructionmappingteam.com">shaun@constructionmappingteam.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Joe Ferguson</td>
<td>503-777-3541</td>
<td><a href="mailto:joe@flspdx.com">joe@flspdx.com</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Mark Mayer</td>
<td>503-572-2453</td>
<td><a href="mailto:mark.mayer@bluedotgroup.com">mark.mayer@bluedotgroup.com</a></td>
</tr>
</tbody>
</table>

## Rogue River
<table>
<thead>
<tr>
<th>President</th>
<th>Herb Farber</th>
<th>541-664-5599</th>
<th><a href="mailto:herb@farbersurveying.com">herb@farbersurveying.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Craig Claassen</td>
<td>541-479-6055</td>
<td><a href="mailto:cclaassen@grantspassoregon.gov">cclaassen@grantspassoregon.gov</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Stephen (Pat) Barott</td>
<td>541-776-1272</td>
<td><a href="mailto:sbarott@charter.net">sbarott@charter.net</a></td>
</tr>
</tbody>
</table>

## South Central
<table>
<thead>
<tr>
<th>President</th>
<th>Evelyn Kalb</th>
<th>541-356-2381</th>
<th><a href="mailto:evelyn.kalb@oit.edu">evelyn.kalb@oit.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Mason Marker</td>
<td>541-273-2191</td>
<td><a href="mailto:mason.marker@oit.edu">mason.marker@oit.edu</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Jill Fritz</td>
<td>541-891-9433</td>
<td><a href="mailto:jill.fritz@oit.edu">jill.fritz@oit.edu</a></td>
</tr>
</tbody>
</table>

## Southwest
<table>
<thead>
<tr>
<th>President</th>
<th>Edith Forkner</th>
<th>541-751-1021</th>
<th><a href="mailto:edith_forkner@or.blm.gov">edith_forkner@or.blm.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Walter White</td>
<td>541-756-3958</td>
<td><a href="mailto:wwhite@shn-engr.com">wwhite@shn-engr.com</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Corey Woodruff</td>
<td>541-267-2872</td>
<td><a href="mailto:coreywoodruff@stuntzner.com">coreywoodruff@stuntzner.com</a></td>
</tr>
</tbody>
</table>

## Umpqua
<table>
<thead>
<tr>
<th>President</th>
<th>David Beedle</th>
<th>541-874-3258</th>
<th><a href="mailto:djbeedle@rosenet.net">djbeedle@rosenet.net</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Randy Smith</td>
<td>541-440-4281</td>
<td><a href="mailto:survey1@co.douglas.or.us">survey1@co.douglas.or.us</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Brent Knapp</td>
<td>541-459-4170</td>
<td><a href="mailto:brent.knapp@umpqua.com">brent.knapp@umpqua.com</a></td>
</tr>
</tbody>
</table>

## Willamette
<table>
<thead>
<tr>
<th>President</th>
<th>Dave Malone</th>
<th>541-924-3981</th>
<th><a href="mailto:dave@colesurveying.com">dave@colesurveying.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Jack Burrell</td>
<td>541-926-0942</td>
<td><a href="mailto:burrelljk@callatg.com">burrelljk@callatg.com</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>John Wise</td>
<td>541-367-7359</td>
<td><a href="mailto:wiseguy@cmug.com">wiseguy@cmug.com</a></td>
</tr>
</tbody>
</table>

## Blue Mountain
<table>
<thead>
<tr>
<th>President</th>
<th>Tim Simons</th>
<th>541-966-0242</th>
<th><a href="mailto:tsimons@ci.pendleton.or.us">tsimons@ci.pendleton.or.us</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>President-elect</td>
<td>Robert Butler</td>
<td>541-963-1908</td>
<td><a href="mailto:rebutter@eoni.com">rebutter@eoni.com</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Steve Haddock</td>
<td>541-443-2922</td>
<td><a href="mailto:haddsurv@uci.net">haddsurv@uci.net</a></td>
</tr>
</tbody>
</table>
The arrival of spring brings forth a new array of PLSO activities. The 2009 conference is behind us, but already the conference committee is holding meetings to plan for the 2010 event in Salem. Workshops have been held or scheduled at two locations. Our education and outreach efforts continue with visitations to schools, TrigStar competition and presentations at career fairs and community events. An important accomplishment early this year has been the update to our Strategic Plan. The Plan deserves special mention in this article.

I believe that the Strategic Plan is frequently overlooked and unappreciated by the general membership. I did not give it much attention in its early development since I was not active on the Board at the time. The Plan actually serves an extremely important role for PLSO. In accordance with the Plan, the PLSO Board, the chapters, and the general membership have definitive concepts in place to keep the organization attuned with changing priorities and challenges. The Strategic Plan is a dynamic record that is to be reviewed annually to uphold priorities established by the PLSO Board. Besides serving as a plan, the document records achievements that have already been accomplished.

The Strategic Plan has four elements that are termed “Directions” established for 2009. These Directions are: (1) Inspire Members; (2) Conduct Outreach; (3) Advance Legislative Agenda; and (4) Foster Excellence. They are supported by specific ideas that are to be accomplished now and through the next several years. Many of these ideas are presently being implemented, but I will mention one that is especially significant this spring.

Our Oregon 50/150 event is a particularly unique project. It recognizes the 50th anniversary of PLSO in concert with the 150th anniversary of Oregon’s statehood. The project will enhance the setting at the Willamette Stone State Park in Portland. The project will remove invasive vegetation, improve the trail route, add new signage and replace others. The setting at the Willamette Stone itself will be complemented by addition of three benches. The benches will be inlaid with brass lettering to commemorate prominent surveyors in Oregon’s history: John B. Preston, Oregon’s first surveyor general; William Ives, the original surveyor contracted to set the initial point and conduct the initial survey of the Willamette Meridian; and C. Albert White, respected Cadastral Surveyor with the Cadastral Surveys Branch at the Oregon State Office of the Bureau of Land Management. On May 2, members of PLSO and the Boy Scouts of America dedicated a work day to maintenance at the site. The formal dedication for improvements at the Willamette Stone Park is May 30. You can find more details about the event on the PLSO website.

I mention the Oregon 50/150 project because it illustrates a PLSO activity inspired in part due to the Strategic Plan. This Plan has provided direction to keep us focused on opportunities to promote surveying as a profession.

This project supports two of the four Directions contained within the PLSO’s Strategic Plan. For our “Outreach” it performs community service by enhancing the appearance of the setting at the initial point of the Willamette Meridian and it advertises the accomplishments and contributions of surveying in Oregon’s history. The outreach effort involves boy scouts with the Oregon 50/150 project by giving the scouts a chance to perform community service, educates them about surveying, and provides them with the opportunity to earn the surveying merit badge. The project also fulfills elements of the Direction to “Inspire Members” by increasing visibility of PLSO to the public and by encouraging volunteerism.

The 2009 update to the Strategic Plan has been printed and the PLSO Board is devoting time at each board meeting to review and update accomplishments. Board members are encouraged to review the plan throughout the year to keep it in focus and consider changes or additions. The Strategic Plan is also published for all members on the PLSO website, and is located within the miscellaneous category of the member’s section. I strongly suggest that every PLSO member take the time to review the plan to be familiar with the direction it provides. Individual members can certainly offer specific directions to their chapter officers to help improve the PLSO’s effectiveness and contribute to the advancement of our profession.

I intend to present an overview of the Strategic Plan as I have the opportunity to attend future chapter meetings around Oregon this year. The presentation will be an added reason for me to join you at one of your local meetings. I hope to see you at one of those sessions in the near future. You are also welcome to attend board meetings as a guest. It would be an opportunity for you to see how professionally your PLSO board conducts its business on your behalf. Just let one of your chapter officers know so adequate space and refreshments can be provided.
Wayne Browning, a friend of mine from Oregon, recently retired and his wife was hired for a job in Florida. It was time for the couple to change from being 40-year residents in their Oregon home to something new. Earlier this spring, Wayne and I packed up a 26-foot truck, loaded a car carrier and trekked cross-country to Florida.

The weather was perfect; the snow, thunderstorms, and tornadoes were both ahead of us and two days behind us. We had a little snow going over the Rockies, but not on the road. While driving through the Midwest a Chinese Pheasant tried to “dive bomb” us. He left a crack in the fiberglass in the front fender with a few feathers added.

We traveled to Panama City in the northwest Florida panhandle where the highest elevation in the state is about 20–100 feet. We spent two days unloading the truck while experiencing Florida thunderstorms; fortunately we were under cover. Outside of thunderstorms, the most variable weather is hurricanes. But most people cannot even remember a hurricane hitting Panama City. It is explainable and quite obvious why it is so rare when viewing a map of the area.

The beaches in Florida are well-known for their white sand and crystal clear water. Some of the best beaches in Florida are in Panama City. Tyndall Air Force Base is located there and has one of the best beaches in the area. There are no houses, or cars, or roads—just white sand and the Gulf. From Panama City we drove southeast along the coast, across a 4½ mile bridge over a bay and a 5 mile bridge over to St. George Island. The island is 20 miles long, ½ mile wide and covered with buildings. To the north of Panama City is the town of Destin. The beach is covered with 18–25 story condominiums for 20 or 30 miles. These beaches are dramatically different from the Oregon beaches.

While visiting in Florida, I talked with Henry Ritchie, II, a surveying company owner. His business has dropped from 2006—when he had about 700 jobs per year—to about 175 jobs in five states in 2009. I also talked to the County Surveyor, Robert Zierden. He said the economy has dropped since 2003; 13,000 condos are for sale at 4.5% interest. In the real estate market, $700,000 homes and condos (many of which were built from 1999–2003) are now selling for $150,000 to $200,000.

Before returning home, we traveled west along the Gulf to New Orleans. The devastation along the coast from Hurricane Katrina was incredible. Anywhere from one lot to nine lots inland from the Gulf were completely wiped out. In New Orleans the devastation was equally dismal—the houses are still standing, but they are boarded up, locked and unoccupied. In most areas along the Gulf the piles of debris are gone, but the landscape will never look the way it was before Katrina.

It was an interesting trip and I learned several things (some of which I may share later). It was especially interesting talking to the local surveyors and finding out what they are dealing with in Florida.

There are several good articles in this issue, so be sure to read them.

Have a good summer with your families. ◉
Surveyors have a lot of “tools of the trade.” You go to school to learn to use those tools. From the pencil, to the high tech, sophisticated equipment with names that I can’t even pronounce, they are all necessary to do the job. At your association office, we also have tools that help us serve the members of PLSO and help everyone who volunteers their time to further the organization have a great experience. Here are a few things we couldn’t live without:

Computers: Technological tools, like computers and all their programs are critical to our work with PLSO. Computers, of course are always in use at the office for word processing, bookkeeping, maintaining your extremely valuable database, internet research and email. PLSO has multiple list servers for the membership at large (Surveyor-L); those who want to follow legislation (PLSO-laws); the Education group, conference group and the board. Aside from fantastic leadership, the infrastructure that holds an association together (the office) over the decades is the quality of its administrative record keeping (money and data), the preservation of its critical documents, the maintenance of the technology and the experience of the staff.

Wheels: From the technology of computers to the simplicity of the wheel, your PLSO office needs to keep rolling along. Our cars keep us running errands and getting to the meetings that are an important part of our jobs. We carpool if we’re heading to a board meeting out of town, and I’ve found that a great time to get to know people on a personal level. Especially after a five hour meeting, the group is a little “rummy” and more likely to share interesting details about their lives! You’ll find other wheels around the office as well. Especially, on the carts we use to tote all the board meeting materials around as well as on the brand new PLSO trade show booth that fits neatly into a rolling suitcase.*

Phones: Okay, so if you know me, you know I spend a lot of time on the phone. I can clock over 1,000 minutes a month on a cell phone and prefer the comfort of a headset so I can talk and drink coffee at that same time. You may think that everyone is using email to communicate, but you might be surprised how many people still use the phone or even send letters to the PLSO office. Most often, it is our retired members who take the time to call or write a nice note or send a suggestion along. We also receive a variety of inquiries daily from the public; people who are concerned about their property line or who are trying to reach a surveyor. We’re becoming very familiar with the staff at OSBEELS. Most of our phone time is spent with the dedicated organization leadership who are using their valuable free time to work on behalf of the members.

Interpersonal Skills: Maybe not considered a traditional tool, association work—while administrative in nature—thrives on the engagement and interest of the person on the “other end of the phone.” Handling people’s problems and finding satisfactory solutions is a gift and a skill; enthusiasm about the work is critical to make everyone’s experience with PLSO positive. We hope we are bringing that to everyone who encounters PLSO!

*You can reserve the PLSO trade show booth for career fairs by using the PLSO calendar on www.plso.org.
Introducing

GSR2700 RSX  GNSS Reference Station

GSR2700 RSX
+ GSR2700 ISX
A better way
to RTK!

800.4.SOKKIA
sokkia.com

A better way to RTK.

Advanced: High-precision GNSS reference station offers GPS + GLONASS RTK corrections and raw data to an unlimited number of rover receivers for maximum satellite availability.

Versatile: Includes GSR Reference Station Software for remote Internet access of valuable GNSS data, graphical monitoring of operational status, and configuration of reference station settings. Offers full NTRIP caster support for RTK data transmission to GSM data links.

Powerful: Features 1.8 GHz processor and 1GB RAM.

Functional: Compact, lightweight, and easy to set up in your home or office.

Efficient: Utilize with SOKKIA’s GSR2700 ISX Fully Integrated High-Performance GNSS System for superior RTK surveying efficiency — no base required.

GNSS Reference Station  $14,500.00

Establish your own GNSS CORS station and become part of the growing RTN’s in Oregon and Washington. Easy to use software archives files automatically and exports rinex files to another server for job efficiency.

Contact your Regional Sales Manager, Jeff Whittaker, at 503-515-6807, or email jeff.whittaker@sokkia.com for more information.

HERITAGE  QUALITY  SUPPORT  VALUE
CALL TO ORDER
Meeting was called to order at 10:08 a.m. (Gary’s Note: The wall clock said 10:00, although written materials were still being distributed and actual proceedings may have been later) at the Weyerhaeuser Office in Albany, OR.
Welcome: Johnston opened the meeting and introductions were made.
The Agenda was approved.

Minutes of the January 28, 2008 meeting were presented:

MOTION: Linscheid moved, Farber seconded that the minutes be approved as presented.
Motion passed.

REPORT FROM THE EXECUTIVE SECRETARY
The PLSO accounts stand today (March 14, 2009) as follows:

Checking $ 227,348.12
(Exact balance as of 3/11/09)
Checking closed
Conference closed
Money Fund $ 105,029.55
(Down from $117,002.91 on 1/09)

Total Assets $ 332,377.67

Membership by class

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>March 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate</td>
<td>592</td>
<td>574</td>
<td>583</td>
<td>543</td>
</tr>
<tr>
<td>Associate</td>
<td>120</td>
<td>131</td>
<td>108</td>
<td>78</td>
</tr>
<tr>
<td>Special</td>
<td>34</td>
<td>31</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>Student</td>
<td>31</td>
<td>50</td>
<td>83</td>
<td>33</td>
</tr>
<tr>
<td>Life</td>
<td>29</td>
<td>28</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>Totals</td>
<td>806</td>
<td>814</td>
<td>838</td>
<td>712</td>
</tr>
</tbody>
</table>

VanNatta reported that hundreds of membership renewals and questions have come into the office for processing. Reminders were sent out and the website password was changed, which spurred contact with the office.

Individual chapters were provided lists of those members who did not renew to contact. Shaun Fidler followed up. Some people signed up for the conference as members, but did not renew. They have been contacted.

- Directory should be completed any time and available online.
- New member letters and cards were sent out to all members.
- Bank accounts have been consolidated and continuing to work to create a more manageable system.
- Budget continued to be finalized.
- New credit card system with better rate and swiper/online system instituted.
- Conference expenses are being collected and payments are made.
- A new trade show booth is being used.
- A Google Calendar has been added to the website to provide updated meeting information and to reserve the trade show booth. An area for legislative updates was created.
- The office is working to reconcile all 2009 conference expenses.
- The group contract and advance deposit were submitted to the Phoenix Grand Hotel for the 2010 conference.
- Johnston passed out information for the Presidents and President-Elects.
- He announced that Fassbender will step down as legislative chair and Scott Freshwater will take his place.
- Johnston encouraged the board to carefully monitor the legislative discussions.
- Nemecek is delving into the financial picture of the association.

Continues on page 8
They are working on a workshop for September.  

**South Central (5):** Kalb shared photos from student groups. A group wants to write a report on forensic surveying.  

**Southwest (6):** Minor reported for the Southwest Chapter. Last Wednesday they had Dan Linscheid and Pat Gaylord talking about “Right of Entry.” Almost every member of the chapter was there. They paired up with PEO and put on a joint dinner. All the local high schools were there (10) and there were booths.  

**Umpqua (7):** Beedle reported that Umpqua has had ODOT come out and talk about digital signatures, GPS and construction projects in Douglas Counties and SB 344. They have a seminar coming up on April 4. Smith suggested that PLSO sponsor a tee at the Harold Stockhoff Memorial Golf Tournament benefitting the Umpqua CC survey program.  

**Willamette (8):** Burrell reported on the Willamette Chapter. There are five counties in the Chapter. Their most recent meeting was in Monmouth. 25 people attended.  

**Blue Mountain (9):** Simons said Blue Mountain had a meeting a few weeks ago and talked about the high school job shadowing programs. They have talked about videoconferencing. Pendleton has the highest number of attendees, but they are still looking for locations for meetings.  

**OLD BUSINESS** None reported.  

**NEW BUSINESS**  
Smith requested that PLSO sponsor two tees at the Harold Stockhoff Memorial Tournament.  

*Motion: Fidler moved that PLSO sponsor two tees at the tournament, Minor seconded.*  

*Motion passed.*  

Anderson presented information on the TwiST program. He requested that PLSO Board donate $3,000 to the program. Farber mentioned that the program has received high marks.  

*Motion: Farber moved and Ferguson seconded that PLSO donate $3,000 to the TwiST Program.*  

*Motion passed.*  

Johnston told the board that he had some survey monuments that PLSO can purchase and use to sell.  

*Motion: Ferguson moved that we purchase the monuments for $1,000. Motion seconded.*  

*Motion passed.*  

Johnston brought up the travel policy, noting that under present policy, board approval is required for rates exceeding $95 per night.  

*Motion: Ferguson moved and White seconded to approve additional travel expenses for Johnston’s meeting in Washington.*  

Ferguson asked PLSO to support one of the local charities around the holidays—food bank or toy drive. He would like statewide support for one cause. Johnston will put it in the Old Business for next meeting. Fassbender mentioned that this used to be part of the Welfare and Ethics Committee and now the Professional Practices committee.  

Freshwaters mentioned he appreciated orientation on finances, but there is more in the board member binders that should be addressed. Johnston said that additional time for training will be provided at the next meeting.  

Freshwaters asked about a provision of the bylaws that says delinquent members could not “participate” in the affairs of the members. Henricks said that he expected that meant “voting” or conducting the business of the organization, was reserved for paying members. Fassbender reminded that the non-members cannot participate in formal business of the organization. VanNatta reminded the Chapters that they can formalize the meeting by...
opening and closing the business meeting. Neathamer said that the chapters should have a sign-in sheet with member/non-member on the sheet.

Strategic Planning Session
Farber discussed the strategic planning session. He asked the Board to review the handout, especially the “strategic directions” before the next board meeting. Farber said keeping up to date on this has provided continuity to the board and has helped prevent us from repeating issues. We can record additional progress in many areas. Farber would like to find a replacement for his position. The Strategic Plan section of the Operating Manual needs to be updated.

Neathamer reported that he met with OIT President Maples on his feelings about the program. He has a background in Geology. The Geomatics program looks like it is not going to be reduced, but OIT as an institution could be cutting back its budget an estimated 20% to 30%. It looks like it will be okay for now.

Dr. Scott Ashford, OSU spoke on the OSU Civil and Construction Engineering Program. The program provides a bachelor’s degree in civil engineering and construction management engineering. Students get enough coursework in surveying to permit them to take the LSIT exam. Dr. Ashford is hoping the department can expand to provide an advanced degree in geomatics. It will require the addition of an endowed chair position at an estimated cost of $3.5 million.

**COMMITTEE REPORTS**

**Financial**
Nemecek reported that he is putting the budget in QuickBooks and we can have reports at any time. VanNatta reported that those chapter presidents will get a detail of each check that has been attributed to their chapters two weeks before each board meeting.

**2009 Conference**
Johnston reported that he put together the financial report for the conference. There were 494 people who attended. The projected net income at this juncture is $33,524.97. Contingencies have been provided for some budgeted expenses that could still be received.

Ferguson provided comments on the conference and asked the committee to ponder ways to help members feel better about attending. The committee did debrief immediately after the conference. Communications to the attendees each day was an issue.

Fidler read a letter from a member about the difficulty of some people travelling in January. Johnston said that in 2010, we’re locked into January.

Freshwaters questioned the purpose of the annual conference—is it to raise revenue or to provide value to the organization or some combination of both? Henricks responded that the meeting was scheduled based on member input and that December was the runner up to January. In spring there were other concerns with work being busier and other chapters having their meetings during that time. Henricks would write a response.

Fassbender said the bylaws required a year-end meeting. Until 2002 that was the rule and then it was changed. He noted that there are more accidents and deaths in March then in January according to ODOT. Kalb said January is better for her business and travel schedule than March.

**Scholarship**
The silent auction at the Portland conference raised just under $5,000 and there was an additional $2,000 given with membership dues.

**Legislative**
Freshwaters recommends that PLSO provide more information to leadership when they assume new positions. That would include providing minutes of meetings and giving training. PLSO is following HB 2737, which would increase the maximum fee that can be assessed on real estate transactions for the county surveyor’s corner preservation fund. SB 344 would change the County Surveyor from an elected position to an appointed position, but optional if elected. Gary DeJarnatt, Jefferson County Surveyor attended, and spoke in support of HB 2737.

Mike Jackson from Lane County said he has made assisting private surveyors a priority if they call the office.

There is not a lot of money in the county. Chuck Gibbs from Linn County also spoke in support of HB 2737. He had been a private surveyor and understands the cost of restoring corners that should have been done by the public sector. There will be layoffs in the public sector. Linscheid said there were a lot of people opposed to the bill from the housing alliance. Linscheid is okay with the cap. Fidler felt that there should not be a dollar amount on HB 2737.

- Central (1): Reeves said they were in favor of raising fees for the corner fund, but want to leave the election as is.
- Rogue River (4): Meeting next week.
- South Central (5): No meeting yet.
- Southwest (6): SB 344 was not discussed. HB 2737 was supported provided that there was a cap. They did not support having the lobbyist speaking on this.
- Willamette (8): HB 2737 was discussed—Chapter supports it.
- Blue Mountain (9): SB 344 was discussed and the chapter wasn’t interested in adopting this bill.
- Umpqua (7): Beedle said they didn’t want to take away people’s right to vote. They are supportive of the restoration fund in HB 2737 with cap.

Linscheid reminded the group that corner restoration is just one part of the fee imposed by county clerks on real estate

Continues on page 10
The park’s cleanup day will be May 2, and the actual event and geocache rally will be May 30. Please encourage attendance; scouts can acquire two merit badges related to the Heritage Site and Oregon 150 project.

Webmaster Parsons reported that the Surveyor L email list is updated. On the PLSO calendar, we can add chapter meetings. Confirm your events by going through the PLSO.org website and making sure it all looks right. Wendell Harness is handling the legislative portion of the web page. Make announcements about new postings on Surveyor-L. There are a lot of “surveyor at work” pictures on the website.

Membership Fidler said that we have 212 delinquent members—but there are new members. The office provided the delinquent list and will try to visit the chapters this year. Freshwaters has 20 delinquent members in the Central Chapter. They contacted these people and many people were hard to find. One member was wondering why PLSO was sitting on such a large financial balance. Fidler said PLSO is working to increase membership by 10%.

Professional Practice Neathamer reported that when he looked at the responsibilities of the committee we need to revise the operating manual. He was contacted by two individuals about unlicensed practice. He will work to resolve those issues locally.

NSPS No report.

WESTFED Crites was awaiting the Salt Lake minutes. He has been asked to consider being a candidate for election as WESTFED chair. The PLSO board was supportive of this.

OSBEELS to PLSO Linscheid reported Grant Davis will be the president starting in July.

The Assistant AG will be looking into the notification rules. Linscheid has been assigned to OSBEELS through 2013. There were 22 registrants for the 4-hour Oregon PLS exam in April.

PLSO Liaison to OSBEELS Covered in OSBEELS to PLSO report.

PLSO to OACES Linscheid reported the counties were reviewing the authority to remove monuments for developments that have been deferred or denied due to deferred decisions on land use. He also noted the OACES web site would soon have scanned copies of aerial photos covering railroad RW.

Constitution and Bylaws No report.

Publications Johnston reported The Oregon Surveyor will be sent out within the week.

Awards No report.

GPS Users Group Annual Meeting in Bend will be held on June 19. October 16 there will be a workshop on OPUS and HTD program at Albany.

GOOD OF THE ORDER
Anderson reminded the group that next week is National Surveyors Week. A release was sent out from the PLSO office.

Ferguson noted that Steve Muma from ODOT Region 1 had a minor heart attack last week, but is doing well.

Fidler reminded the group that “Character Creates Courage.”

Johnston expressed the board’s appreciation to Ed and Connie Henricks for hosting the board meeting and providing an excellent lunch.

Being no further business the meeting was adjourned at 3:45 pm.

Respectfully Submitted,
Mary Louise VanNatta
Executive Secretary, PLSO
Willamette Stone State Heritage Site 50/150 Project

2009 is the 50th anniversary of PLSO

February 14, 2009 marked the 150th anniversary of Oregon’s admittance into the Union

PLSO’s 50/150 Project celebrates both of these significant events. As part of the Governor’s call for statewide projects celebrating Oregon’s 150th birthday, PLSO proposed to hold a cleanup day at the Willamette Stone State Heritage Site; install new benches by the Initial Point; adopt the existing geocache located at the Heritage Site and hold a dedication celebration as part of the Oregon 150 Take Care of Oregon Days as well as PLSO’s 50th birthday. Our project proposal was accepted as an Oregon 150 sesquicentennial partnership project.

In 1851, Oregon’s first Surveyor General, John B. Preston, established the Initial Point from which land surveying in the Pacific Northwest began. Surveyor General Preston awarded Contract No. 2 to William Ives to survey the Willamette Meridian north of the Initial Point as well as the east-west Baseline. William Ives began his survey on June 4, 1851 and completed his contract on August 16, 1851.

One of the smallest, if not the smallest state park at 1.6 acres, the Willamette Stone State Heritage Site, contains the Initial Point established in 1851; located in the west hills above downtown Portland. In 1996, C. Albert White, retired BLM surveyor, published his book “Initial Points of the Rectangular Survey System” in which his passion for the Willamette Meridian and Baseline shone through.

As part of the 50/150 project, PLSO will be dedicating three benches in the names of John B. Preston, William Ives and C. Albert White. These benches will be made of concrete on a single pedestal, embedded with metal plaques naming each surveyor. The benches are being created by the Cement Masons Local 555 and the name plates are being created by Hofland Survey Monuments. The development and construction of the benches has been lead by Gary Anderson, PLS of the Pioneer Chapter. Gary Anderson has also been our liaison with Oregon State Parks in coordinating the installation of the benches and clean up day.

Pat Gaylord, PLS, Pioneer Chapter, has contacted the existing geocache owner who has agreed to work with PLSO and make the geocache a part of the 50/150 project. We want this site to help educate geocachers on how important the “Willamette Stone” is to all surveys in Oregon and Washington.

Watch PLSO’s website www.plso.org for additional details.

For additional information contact:
Sue Newstetter: suenews@ortelco.net
Gary Anderson: ganderson@westlakeconsultants.com
Pat Gaylord: patg@hhpr.com

Did you see PLSO in the News?

In the April 14, 2009 edition of The Oregonian, Larry Bingham wrote an article titled “Test your knowledge of the Willamette Stone.” The article featured facts about the Willamette Stone, the Oregon 150 events and photos by Faith Cathcart.

Sources cited in the articles were Sue Newstetter, Tim Kent and Gary Anderson of the Professional Land Surveyors of Oregon.
National Surveyor’s Week

March 5, 2009
Dear PLSO Members,
In honor of National Surveyor’s Week, I would like to take the time to thank you for your important contribution to the city of Portland and all of Oregon. I also want to voice my support for your collaborative efforts in achieving a high performance standard for the land surveying profession.

Quality land surveying plays a critical role in planning and is fundamental to our ability to carry out city work. The city relies on your expertise to implement some of its most important plans and to develop projects that will serve Portlanders for generations to come. I recognize that surveyors must possess not only a high level of knowledge and skill, but also a commitment to serving the public’s best interest. I have a high regard for your ability to come together as professionals, encouraging values and ethics that unquestionably work to benefit all Oregonians.

Portland cannot become the world’s most sustainable city without a strong commitment to responsible surveying. On behalf of the city of Portland, thank you for your continued efforts to the growth and progress of our beautiful state.

Sincerely,

Sam Adams
Mayor of Portland

The week of March 15–22 was National Surveyor’s Week. The Professional Land Surveyors of Oregon are pleased to see federal recognition of our profession through this proclamation.

Surveyors have been an integral part of the development of Western Civilization. They have measured and mapped lands and marked boundaries throughout recorded history. Advancements in technology have changed the nature of surveying and cartography. Today, geomatics (surveying) professionals use an integrated approach to measuring, analyzing and managing spatial data, employing high-tech equipment like Geographic Information Systems (GIS), Global Positioning Systems (GPS), digital photogrammetry, digital total stations, satellite and terrestrial remote sensing to create a detailed but understandable picture of the Earth’s natural and man-made features.

As a profession, surveying is so diverse, that it attracts people from many different talents and interests. Surveyors work in private practice in small businesses and in corporations, large and small. These people commonly establish property boundaries and design and lay out land developments. Surveyors also work for public agencies, establishing control for street and highway projects plus a variety of other public works and mapping projects. Another facet of surveying is dedicated to measuring the earth’s surface to more accurately define its characteristics and monitor even minute surface movements. While the common image of a surveyor looking through a telescope on a tripod is somewhat accurate, it falls far short of showing the large variety of jobs performed by the modern surveyor.

Surveying can be largely an outdoor occupation, or can involve a large amount of work at a computer and any combination in between. The experience of working on a survey crew can be an excellent starting point, and many have progressed “through the ranks” with this work experience. Formal training can be obtained through a number of two-year programs in Oregon, including a program at Chemeketa Community College. A nationally acclaimed four-year program is offered at the Oregon Institute of Technology in Klamath Falls. The institution offers a bachelor of science degree in Geomatics with a Surveying Option, combining land surveying techniques with computer technology.

If you have specific questions you would like answered about the surveying profession, please contact the PLSO Office in Salem at 503-581-4551. They can refer you to a licensed surveyor if you have a specific question about educational programs in Oregon or career opportunities in the profession.
NSPS Enters its Second Decade of Involvement with the Boy Scouts Surveying Merit Badge

NSPS Past President Tommy Brooks (Alabama) and current NSPS Area 4 Director Wayne Hebert (Louisiana) are putting together their team and strategy for the NSPS-sponsored Surveying Booth on the Merit Badge Midway during the 2010 Boy Scouts Jamboree to be held at Fort A. P. Hill, VA.

Typically held every four (4) years, the 2010 Jamboree will be held a year later than normal so as to coincide with the 100th anniversary of the Boy Scouts of America (BSA).

Surveying was introduced in 1911, among the original 57 Boy Scouts Merit Badges, and remains one of only 11 of the original group to have been continually offered since then.

NSPS active involvement in the Surveying Merit Badge program came about somewhat inadvertently. In the summer of 1989, then NSPS Governor Curt Sumner (VA) was recruited by then NSPS Member Services Director Anne Glasgow to assist Army retiree Murray Manley of Fort Collins, CO in transporting surveying equipment from Dulles Airport to Fort A. P. Hill, VA, to be used at the Surveying Merit Badge Booth during the Jamboree.

While being interviewed at the Jamboree, Manley’s comment that surveying wasn’t really being handled properly inspired Sumner to volunteer to lead an effort to revise the Surveying Merit Badge Handbook, and to make a commitment to encourage NSPS to take the lead for participation at future Jamborees.

Along with Richard Alvarez of Menlo Park, CA, Sumner began the process of gaining approval for revisions to the Handbook that had last been amended in 1984. In 1992, the revised Handbook was published. It was dedicated to the memory of Manley, who had passed away before it was completed.

Beginning with the 1993 Jamboree, NSPS has sponsored the Surveying Merit Badge Booth, and recruited surveyors from across the country to serve as instructors.

For most of the time since then, Tommy Brooks has served as the leader of the volunteers at Jamborees, and worked with the BSA to make arrangements for the booth. He has also led a group that continues to review the Handbook’s contents. Their work resulted in the current edition, published on January 1, 2005.

Brooks has also created a Power Point presentation called “How to Teach the Surveying Merit Badge”, which is posted on the NSPS website, www.nspsmo.org.

Brooks and Hebert need about 22 surveyors to volunteer for the 2010 Jamboree in order to accommodate the anticipated number of Scouts who will want to work toward achieving the Merit Badge. During prior Jamborees, as many as 200 Scouts have attempted to complete the requirements. Their respective schedules, combined with a limited number of NSPS volunteers, have resulted in some of the Scouts not being able to complete the requirements.

NSPS views its participation with the Surveying Merit Badge, and being present at Jamborees, as fertile recruiting ground for future surveyors. Accordingly, it is very important that there are enough instructors present at the Jamboree to accommodate the Scouts who express interest.

Significant funds are required to assure the desired success of the NSPS efforts at Jamborees, and working with Scouts on the Surveying Merit Badge in general. Although NSPS sets aside some money for the Jamboree, Brooks says that corporate sponsors are also needed to help fund the effort, plus provide instruments (such as GPS units, standard surveying instruments, and computers) on loan. It is estimated that up to $25,000 will be needed, plus the loaned equipment.

In the general sense, surveyors are needed to volunteer nationwide, at the local level. Many surveyors (often fathers of Scouts) already get involved with their local Troop, but a much larger impact would result if a database of volunteers could be kept at NSPS headquarters, and by a unified effort between NSPS and its state affiliate associations to recruit volunteers.

Anyone interested in assisting NSPS in its efforts, either for participation at the 2010 Boy Scouts Jamboree, or on the local level, should contact either Tommy Brooks (thomas.brooks@mustangeng.com) or Wayne Hebert (waynehebert@chevron.com). They can explain what is required to qualify as an instructor.

There is a plan to post a “needs” list on the NSPS website for volunteers, and donations (both money and equipment).

You may also contact NSPS Executive Director Curt Sumner via email at curtis.sumner@acsm.net, or via telephone at 240-632-9716, ext. 106.
NSPS INSURANCE PROGRAM
Coverage Extension
Starting at only $500

Exclusive Extension Coverage provided by Assurance Risk Managers, the officially endorsed agent of the National Society of Professional Surveyors (NSPS).

Exclusive

- $2,000,000 General Liability
- 50,000 Surveyors Equipment
- 100,000 Computer & Media/Data including Surveying Equipment (GPS, Total Stations, Data Collectors, etc.)
- 50,000 Valuable Papers
- 50,000 Accounts Receivable
- 50,000 Property of Others
- 10,000 Employee Dishonesty/ERISA
- 50,000 Property Of Premises
- 10,000 Employee Dishonesty
- 15,000 Transit Coverage
- 10,000 Forgery/Alteration
- 10,000 Money Orders/Counterfeit Paper

Included

- Back-up of Sewers & Drains
- Business Income/Extra Expense
- Blanket Additional Insureds
- Blanket Waiver of Subrogation
- Per Project Aggregate

ADDITIONAL LIMITS AND COVERAGE AVAILABLE!

Assurance Risk Managers, Inc.
2851 South Parker Road, Suite 760 • Aurora, CO 80014
www.arm-i.com • 888.454.9562

Assurance Risk Managers, Inc. dba ARM Multi Insurance Services, Inc. CA License # 0C73841
WE NEED YOUR HELP!

We are working the proposed Preservation of Railroad Monumentation legislation through Congress and we’ve found a lot of interest in the issue, but we need your help. The Members of Congress and staff that we spoke to about the issue would like to hear real examples of how this issue affects property owners in their Districts. That’s where your help comes in. Have you experienced difficulties because railroad monumentation was removed? How did it affect your work? How did it affect the property owners who hired you?

Every story shows the importance of this issue. Send your stories to us and we’ll use them as we continue to bring this important issue to Congress.

Coastal State Renewable Energy Promotion Act—H.R. 1690

Recently, legislation was introduced which would require the surveying of coastal regions around the country. The Coastal State Renewable Energy Promotion Act amends the Coastal Zone Management Act of 1972. It authorizes grants to eligible coastal states to support voluntary state efforts to initiate and complete surveys of portions of coastal state waters and federal waters adjacent to a state’s coastal zone to identify potential areas suitable or unsuitable for the exploration, development, and production of renewable energy that are consistent with the enforceable policies of coastal management plans. It also requires that survey results be made available to the public and requires suitable areas to be given priority consideration by federal agencies for the siting, licensing, leasing, or permitting of renewable energy facilities.

National Geospatial Advisory Committee

Approximately half of the current appointments to the NGAC will expire in January 2010. It is anticipated that there will be a Call for Nominations issued later this year for the next round of appointments. Similar to the process that was followed for the initial round of appointments, it is also anticipated that an interagency review panel will evaluate the nominations and make recommendations on appointments to the Office of the Secretary of the Interior. The Secretary will make the final decisions on appointments to the committee. We will continue to lobby the Secretary of the Interior for an ACSM seat at the NGAC table.

FEMA Releases New Elevation Certificate

The Office of Management and Budget (OMB) has approved the collection of information under OMB Number 1660-0008, which includes the Elevation Certificate (FEMA Form 81-31) and the Floodproofing Certificate (FEMA Form 81-65). The new expiration date for both forms is March 31, 2012.

Significant changes to the Elevation Certificate and Instructions

- In Section A, items A8.d and A9.d are added, asking:  Engineered flood openings? ☐ Yes ☐ No
- In Section C, item C2.h is added, which reads:  Lowest adjacent grade at lowest elevation of deck or stairs, including structural support _________. __ feet □ meters (Puerto Rico only)
  (This information is provided if the certificate is being used to support a request for a LOMA or LOMR-F)
- The Instructions for Section A for items A.8.b-c and A.9.b-c have been revised, in part, to allow the height of flood openings to be determined from the interior grade or floor. The revision reads:  Enter … the number of permanent flood openings in the crawl space or enclosure(s)
  [for Items A9.b-c, in the attached garage] that are no higher than 1.0 foot above the higher of the exterior or interior grade or floor immediately below the opening. … If the interior grade elevation is used, note this in the Comments area of Section D.
- Instructions for other sections have been clarified and expanded, as needed.
- Two new Building Diagrams have been added:
  1. The new Diagram 1B is for raised-slab-on-grade or slab-on-stem-wall-with fill single- and multiple-floor buildings. (Diagram 1 from the old Elevation Certificate is Diagram 1A on the new Elevation Certificate.)
  2. The new Diagram 9 is for all buildings (other than split-level) elevated on a sub-grade crawl space.

The only changes to the Floodproofing Certificate are the new expiration date and revised Paperwork Burden Disclosure Notice. Significant changes to the Elevation Certificate and Instructions are noted in the box below.

As stated in WYO Clearinghouse bulletin W-09008, dated February 26, 2009, FEMA will permit a “phase-in” of the revised Elevation Certificate on a voluntary basis. During a 12-month transition period beginning April 1, 2009, FEMA will accept either the new form or the old form. This voluntary transition period will allow sufficient time for coordination and training of all affected NFIP stakeholders. Elevations certified on or after the last day of the transition period must be submitted on the new Elevation Certificate form with the expiration date of March 31, 2012.

Please go to the FEMA website at www.fema.gov for more information about this certificate.
Strategic Industry Partnership Will Boost OSU Surveying Initiative

The School of Civil and Construction Engineering at Oregon State University is forming a partnership with two industry-leading companies to help address the need for more geospatial surveying professionals and embrace the trend toward “geomatics,” as this age-old profession evolves in an era of sophisticated 3-D data flow, remote sensing, and other new technologies.

OSU has signed a memorandum of understanding with David Evans and Associates, Inc., and Leica Geosystems, Inc.

Through this three-way partnership, Leica Geosystems will make available hundreds of thousands of dollars worth of state-of-the-art geospatial equipment and software for use by OSU students on an ongoing basis. Industry experts from David Evans and Associates will work closely with OSU students and faculty in training and laboratory studies. Increased geomatics research efforts, course expansion, and new faculty are also anticipated as a result of this industry and education initiative.

“Understanding land surveying and data capture has been, and will always be, an integral part of being a civil engineer or construction manager,” said Scott Ashford, professor and head of the School of Civil and Construction Engineering, a major educational program at OSU with about 1,000 students.

“But the new techniques of land surveying and 3-D data capture now incorporate so many new technologies that it’s become the science of geomatics, and our educational programs have to reflect these changes in the industry,” Ashford said.

“Some civil engineering programs that can’t keep up with these changes are just dropping their surveying education classes, but we plan to go the opposite way, to rejuvenate and expand our curriculum, to help our graduates become work ready,” he said. “This unique partnership will allow us to do that, and we’re very grateful for this assistance.”

Another aspect of the problem, Ashford said, is the nation faces an increasing shortage of professional geospatial information surveyors, which are essential to the type of infrastructure improvements, road building and construction projects that are now envisioned as part of the nation’s economic recovery effort. The average age of a surveying professional is 56, and many new geomatics professionals are needed in this field, skilled in the latest technologies.

“We believe that industry and manufacturers should share in the social responsibility to help educational institutions stay on top of new technologies, changing work flow methodology, and new techniques in capturing 3-D spatial data,” said Ken Mooyman, president and CEO of Leica Geosystems, Inc. “We recently endorsed this unique concept at the American Congress on Surveying and Mapping, and are proud to be part of this strategic partnership.”

Jim Griffis, senior vice president of David Evans and Associates, Inc., said “It takes significant planning, time, and ongoing commitment from all parties to make it successful. DEA is a leader in the civil engineering industry and we need to help set the education bar at higher levels to continue hiring graduates that understand the latest in geomatic sciences.”

Some new technology to capture geospatial data, such as 3-D laser scanners called LIDAR—for Light Detection And Ranging—are now routinely used to allow a geomatics surveyor to accomplish as much in a day as used to be
done in several weeks. But much of this is done in an office as well as the field, Ashford said, using advanced design and processing software, 3-D mapping, and geographic information systems. This makes surveying more complex than ever, but also more cost efficient, accurate and with fewer time delays.

“We're already in the era where we have 'stakeless design and construction' on some road building jobs, where an operator runs the grader but a global positioning system tells it where to go, when to turn and how deep of a grade to cut,” Ashford said. “This is a huge industry transformation and the next five or 10 years are going to see even more changes. Students working with these programs really get into it – it’s perfectly suited for the PlayStation generation.”

Undergraduate students at OSU getting a degree in civil and construction engineering will have enough surveying courses available that they can take the state surveying exam to become a licensed professional, Ashford said. Through this initiative, OSU hopes to garner additional industrial support for an endowed professorship in this area and become one of the leading geomatics programs in the nation, he said.

“Geomatics is in the future of our profession, and we need more higher education programs to get involved in it,” Ashford said. “We need new research on the latest applications, resulting in high paying, professional jobs that provide opportunity for our graduates.”

---

![Erosion on a beach captured with a camera](image1)

The same slope pictured left as portrayed with LIDAR 3-D laser scanners

---

**About the OSU College of Engineering**

The OSU College of Engineering is among the nation's largest and most productive engineering programs. In the past six years, the College has more than doubled its research expenditures to $27.5 million by emphasizing highly collaborative research that solves global problems, spins out new companies, and produces opportunity for students through hands-on learning.

---

**About David Evans and Associates**

DEA is headquartered in Portland, Ore. This national leader in sustainable design and management solutions is consistently ranked among Engineering News Record’s Top 100 Pure Design firms in the U.S. DEA was also voted one of the top 10 civil engineering design companies to work for in 2008 by Civil Engineering News.

---

**About Leica Geosystems**

With close to 200 years of pioneering solutions to measure the world, Leica Geosystems products and services are trusted by professionals worldwide to help them capture, analyze, and present spatial information. Based in Heerbrugg, Switzerland, Leica Geosystems is a global company with tens of thousands of customers supported by more than 3,500 employees in 28 countries and hundreds of partners located in more than 120 countries around the world. Leica Geosystems is part of the Hexagon Group, Sweden.

---

**About Leica Geosystems**

With close to 200 years of pioneering solutions to measure the world, Leica Geosystems products and services are trusted by professionals worldwide to help them capture, analyze, and present spatial information. Based in Heerbrugg, Switzerland, Leica Geosystems is a global company with tens of thousands of customers supported by more than 3,500 employees in 28 countries and hundreds of partners located in more than 120 countries around the world. Leica Geosystems is part of the Hexagon Group, Sweden.

---

**Your Local Source for Professional GPS Systems**

“Expert Knowledge” and “Superb Support”

- Why order by mail when you can buy locally and have personal customer support by experienced professionals?
- Conveniently located to support our customers in the Pacific Northwest.
- GPS measuring equipment for control, topo, staking. Both static and RTK.
- GPS mapping equipment for GIS.
- Laser rangefinders, rugged hand-helds and mapping/surveying software.

---

**Resource Supply, LLC**

11607 SW Winter Lake Drive
Tigard, OR 97223
503-521-0888
www.resourcesupplyllc.com
Email: jon@resourcesupplyllc.com
Teaching with Spatial Technology (TwiST)

K-12 Educators: Learn some fun and easy ways to teach with GIS and GPS in the classroom!

June 22–26, 2009 • Chemeketa Community College • Salem, Oregon

Teaching with Spatial Technology (TwiST), is designed to teach K-12 educators how to use Geographic Information Systems (GIS) and Global Positioning Systems (GPS) in the classroom to create meaningful and challenging lesson plans for your students. Join us for a week in Salem, OR so you can become proficient in the many aspects of this exciting and imaginative technology.

These two technologies are the backbone tools for capturing and managing spatial data. There are literally thousands of applications that you can utilize with your students around your school and community. They can range from resource management to environmental assessment to cartography, etc., and can be taught at various levels of complexity. The applications are endless.

The Conference is sponsored by the Oregon Institute of Technology (www.oit.edu) in cooperation with the Institute for the Application of Geospatial Technology (IAGT) and Cayuga Community College in Auburn, New York. Other sponsors include the Land Surveyors Association of Washington (www.lsaw.org) and the Professional Land Surveyors of Oregon (www.plso.org).

The conference will be held in Salem, Oregon on the Chemeketa Community College campus from June 22–26, 2009. All instruction will be at the beginning/intermediate level. The course is a mixture of classroom study and field exercises.

You will be working on a project that you create and design within the parameters of the spatial technology that will be taught to you. Many examples will be provided to you for reference if needed. All of this will be accomplished by learning to use GIS software, a GPS receiver, and other related material.

Application Process
The course is limited to 24 registrants. The determination of acceptance is based upon the date the registration form is received and must be followed by payment within five days of registration receipt.

The minimum number of registrants is 18. All checks for registration will be held until the minimum is attained. You will be notified of receipt of your registration form and payment.

Registration deadline is June 5, 2009

Conference Costs
There is a registration fee of $500 to cover costs that the sponsors cannot. This fee includes all books and materials used in the conference, ESRI GIS software for teachers, a Garmin GPS receiver and PC cable for downloading data to your computer, a 2GB thumb drive, a hand compass, and other training material. A campus food service credit for some meal and break items will be provided.

Lodging
There are numerous commercial lodging opportunities available in the Salem area. There is no lodging within a comfortable walking distance to the college campus.

Prior approval from Campus Security is required if overnight parking is needed on the campus. They can be contacted at 503-399-5023.

Classroom Location
Our classrooms are in Building 4, upstairs.

Campus Parking
Parking permits are not required the first two weeks of any term. The course falls within this timeframe.

Other Information
Washington State Clock Hour requirements are being sponsored and supported by South Puget Sound Community College and a certificate of completion will be provided for Oregon Certification requirements.

A Geocaching event will take place on the Chemeketa Community College campus Wednesday evening.

Information
For more information about TwiST, contact Tim Kent, TwiST Course Coordinator, at takent@comcast.net or 360-254-4905 home/fax or 360-921-9233 cell.
Connect to a world of new possibilities.

TRIMBLE® ACCESS™ SOFTWARE

Whether your next performance breakthrough is driven by improved synergies between the field and the office, or process optimization through new streamlined workflows, Trimble Access unlocks the true potential of collaboration for surveying businesses.

Send data back and forth, not people.

No time for a trip back to the office? Using new Trimble Access software, you can easily synchronize work files to and from the Trimble TSC2™ Controller in the field.

Access efficiency

With Trimble Access, you can empower your team with new streamlined workflows. These easy-to-use specialized applications save time and flatten the learning curve to help give your business the competitive edge.

See Trimble Access in action. The Trimble Challenge movie is available online now. Trimble.com/access

FOR MORE INFORMATION CALL YOUR TRIMBLE DEALER
GeoLine Positioning Systems
Portland, OR
800-523-6408

Pacific Survey Supply
Medford, OR
800-866-9130
Surveyors: Unsung Heroes or Out of Touch?

Recently, a fellow surveyor asked me the following question, “Why does no one ever ask who surveyed that new building, bridge, park, road, etc.”

True enough, the public is often aware of the architect who designed a structure, or park, and the engineer who designed a bridge, scenic highway, or site plan. They are even likely to know the contractor who built it. Meanwhile, the surveyor who provided the data for other professionals to design, and the contractor to build, remains anonymous!

Throughout history, the surveyor (with a few notable exceptions) has been in the background of the development of our country. All the while, being a vital component of the backbone of society. Why is this the case?

We surveyors don’t have to tell each other of the importance of the work of our predecessors, and indeed of ourselves. We are proud of our heritage. We worship at the altar of Mt. Rushmore where our surveying heroes Washington, Jefferson, and Lincoln are immortalized (along with that “other guy”).

In fact, we revel in the self-shared glory of considering ourselves to be the “Last of the Rugged Individualists.” We consider ourselves to be that honest, true, and selfless group of professionals who live by our own code of honor that can result in financial hardship to ourselves while we are in service to our fellow citizens.

In our interaction with other professionals, we are often expected to correct their work (or at least bring errors to light!), and to hold the hand of the contractor to avoid costly mistakes, or catastrophe.

Surveyors have traditionally been the buffer between an approvable (but not buildable) plan, and one that can be constructed. In my 40+ years of surveying, I don’t recall ever being presented with a plan from an architect in which all of the incremental dimensions added up to equal the overall total dimension shown.

Likewise, rarely have I seen a design plan from an engineer that doesn’t require some level of recalculation. It almost seems as though the better technology becomes, the more plans tend to be “cartoons” that look good, but are often not mathematically or geometrically sound.

In spite of the importance of the services surveyors provide to fellow professionals, and to the public at large, we are often held in low esteem by our fellow professionals and others with whom we must work, even those for whom we toil in apparent selflessness.

Why do we not get the respect that we think we deserve? There are several schools of thought with regard to this question.

Some say that it is due to the low requirement for the formal education necessary as a prerequisite by more than half of the 50 states to qualify for taking the examinations to attain licensure as a surveyor. Some even question the professionalism of surveyors due to a lack of formal education. While I understand that the title “professional” may be defined to be applicable only to those who have attained some prescribed academic degree requirement, I do not believe that formal education and professionalism are synonymous. Professionalism, as it is typically understood to be defined relative to the services one provides, is a personal achievement that is based on character and the manner in which individuals conduct themselves in the pursuit of their work. It is not based on the number or hierarchy of degrees one holds. There are many instances in which this is evident in society. Still, the concept of aligning the title of professional with formal education is becoming more and more prevalent, and should not be discounted. It is certainly true that exposure to the broad opportunities in surveying practice is much more available to students in surveying-related college and university programs than it is to an individual who merely gains experience while working for a licensed surveyor whose services are limited to only one, or a few, of those areas of practice.

Others say it is because we bid our services against our competition to the ultimate lowest price. There is much evidence of this, also. Why would clients perceive that our services are worth more than we seem to believe them to be? When someone continues to lower the cost of services in order to “get the job,” clients will think one of two things: 1) this person must not think his/her services are worth much; or 2) this person must have been trying to cheat me with the first price quoted since it has now been lowered.

Neither perception is a good one for the surveyor, and our profession in general. Even if one “bids” for work, it makes sense as professionals for us to understand the cost of doing business and the value to the client, and the public, of the services we provide.

Still others say it is because we don’t present ourselves to the public in the same manner as do other professionals. Many believe it is a result of our relative inability to articulate well what it is that we do, and that our work is much more
than simple applications of mathematics. Additionally, it is perceived that we do not dress appropriately for the situation at hand. An uncle of mine once stated that people are supposed to judge you based on what is on the inside, not on your appearance outside. One of his sisters remarked, “If they don’t like what they see on the outside, they may never bother to look at what is inside.”

How many times have we heard it said, “We are our own worst enemies”? There is some element of truth in all of these things. However, other professionals suffer from negative perceptions also. Doctors get sued, lawyers are reviled constantly, engineers are sometimes considered by some to be “nerdy”. Some consider architects to be aloof and illogical. Contractors are sometimes put into the category with those who are considered unscrupulous. The list goes on and on!

So why are all of them more well-known, and in spite of the criticisms, much more prominent (and yes, respected) in the minds of the public, and young people who are planning for their futures?

What do they have that we don’t have? What do they do that we don’t do? How many times have we heard the radio commercials extolling the virtues of the architect? How much press is there for EEEK and MATHCOUNTS?

While personal, local and state efforts are critical for presenting ourselves as professionals, and our profession as a viable career option, without a national effort similar to those of doctors, lawyers, architects, engineers, and even contractors, our chances of gaining the recognition and respect due to us are critical for presenting ourselves as professional, and our profession as a profession. Additionally, it is perceived that we do not dress appropriately for the situation at hand. An uncle of mine once stated that people are supposed to judge you based on what is on the inside, not on your appearance outside. One of his sisters remarked, “If they don’t like what they see on the outside, they may never bother to look at what is inside.”

How many times have we heard it said, “We are our own worst enemies”? There is some element of truth in all of these things. However, other professionals suffer from negative perceptions also. Doctors get sued, lawyers are reviled constantly, engineers are sometimes considered by some to be “nerdy”. Some consider architects to be aloof and illogical. Contractors are sometimes put into the category with those who are considered unscrupulous. The list goes on and on!

So why are all of them more well-known, and in spite of the criticisms, much more prominent (and yes, respected) in the minds of the public, and young people who are planning for their futures?

What do they have that we don’t have? What do they do that we don’t do? How many times have we heard the radio commercials extolling the virtues of the architect? How much press is there for EEEK and MATHCOUNTS?

While personal, local and state efforts are critical for presenting ourselves as professionals, and our profession as a viable career option, without a national effort similar to those of doctors, lawyers, architects, engineers, and even contractors, our chances of gaining the recognition and respect due to us remain seriously hampered.

Why are organizations such as the AMA (doctors), ABA (lawyers), AIA (architects), NSPE and ASCE (engineers), AGC (contractors), and even MAPPSS (professional photogrammetric surveyors) more effective than are our national organizations (ACSM and NSPS) in their efforts to influence legislation and policy, present the professions they represent as viable career options, and be well recognized by the general public.

I think a very important reason is because the practitioners they represent recognize that, while the registration laws governing their practice are state laws, and unity of effort at the state level is critically important, they will only have an impact on a national scale by acting collectively.

The reason that these other organizations are so effective isn’t because they care more, or that they have more talented and persistent flag bearers than do we. It is because their constituents support their national efforts to a higher degree. A higher percentage of potential members support all of these organizations than do those of our national organization.

I don’t want this to come across as a sermon chastising those who are not members of ACSM/NSPS. While that would be a wonderful thing, the message here is that we must find a way to act together, not against each other. It is a proven fact that what we seek will not just come our way. We have to work for it. We must temper our desire to think of ourselves as rugged individualists with the reality that only by banding together will we be able to make a difference in our quest for more prominence and respect as a profession.

At this time, Department of Labor Auditors in Maine are refusing to recognize surveyors (licensed or not) as professionals. FEMA has decided to allow practitioners in Flood Determination companies to file Letters of Map Amendment using the online eLOMA option. Surveyors are being cast by some as being irrelevant due to new technologies that allow almost anyone to gather geospatial data and integrate it into documents that appear to the public to have the same (if not higher) reliability than those prepared by surveyors.

Surveyors are being asked to bid their services to other professionals, although those professionals were selected using Qualifications Based Selection (QBS) criteria, commonly known as the Brooks Act. There is concern that our profession is dying because we cannot attract enough young people to sustain it. These are but a few of the challenges that we face. What form the collective effort will take to accomplish our goals is less important than the fact that it must occur.

So, are we unsung heroes, or are we out of touch with the realities that surround us? I suppose it is a little bit of both. Our contributions to the well-being of our fellow citizens are clearly under-recognized, if not unappreciated. On the other hand, we must understand that only through substantial effort on our part will that recognition come.

These are tough economic times, and it is natural for us to look inward toward the sustainability of our respective businesses. I wish that I had a simple solution that would restore the confidence necessary to overcome the situation. Unfortunately, it appears that finding that solution will be difficult. All of the tenets on which I have always depended for a successful surveying business are still valid, but without consumer confidence, obtaining work will still be difficult. Still, I am confident that you share my concern for the present, and future well-being of our profession.

Now, at the beginning of my 11th year as the Executive Director of ACSM/NSPS, my resolve to address the challenges we face remains undeterred.

I trust that you will, if not immediately, then as times get better, join me in banding together through a stronger and more sustainable national presence that is not only desirable, but essential.

Some of you have heard me speak before, and therefore, you know that I often end presentations using advice from my Mom years ago when I asked her what I could say to a large audience that would leave the most positive impression. She said, “Tell them you’re done, they’ll really like that.” So, I’m done.☺
A Lesson Taught by the Project from Hell

By Renee Clough, PE, PLS

I tried to leave the names of people and jurisdictions vague in the hopes of not upsetting anyone. If you were involved in this project, please realize that I do not want to make anyone look bad, but do want to help people avoid the mistakes I made.

The site was a large tract of land on the outer edges of a small city with a city street though the middle of the site. The entire site, on both sides of the city street, was a vacant field. The owner was an elderly lady, Mrs. A. Unlike most elderly ladies, Mrs. A had actively participated in real estate transactions for much of her life.

The project started out innocent enough with a phone call to do an ALTA survey for a potential buyer, Mr. B, on a portion of the site east of the city street. We performed the ALTA survey without any troubles. The boundary calculations were challenging enough to be fun but not challenging enough to be frustrating. There was one easement across the site which Mr. B got vacated. I felt a little strange turning over an ALTA survey with so much white showing.

Mr. B decided to purchase the land and required the owner to be responsible for dividing off the area. I was contacted by the owner’s attorney, Mr. C, to begin the partitioning process. This is when I learned that another local surveyor, Mr. D, was already working on a partition for another buyer on the west side of the street. Mr. D’s plat was to layout two parcels on the west and one on the east. Obviously the best solution would have been for Mr. D’s plat to create two parcels on the west and two on the east; however, Mr. B didn’t decide to purchase until after Mr. D’s tentative was approved and Mr. D’s buyer didn’t want to wait for another tentative review. Consequently I was left to do a two parcel replat of Mr. D’s parcel east of the street. At this point I started to get a bad feeling, but shrugged it off and continued ahead.

Preparation of the tentative was slowed by simultaneous city code revisions, but we were able to get the tentative submitted in only slightly more time than expected. Just after the tentative was submitted, but before the public hearing, Mrs. A fired Mr. C. She felt that he was cheating her, although I never saw any evidence of this. The tentative approval only had two conditions: 1) record an Improvement Agreement for the street and 2) provide evidence that a septic system could be installed on the parcel that Mr. B would not be purchasing (Mr. B’s parcel has access to the city sanitary system).

At this point, it seemed like a good time to get the contract situation cleaned up. I had paper contracts with Mr. B and Mr. C and an oral contract with Mrs. A. I admit that I was also concerned about her health and was worried that I might end up with a bill that her heirs refused to pay. I sent her a contract with a letter explaining that it was our office policy to have a contract. The result of my request for a contract was an angry phone call about, “How dare you ask for such a thing”—“Don’t you trust me?”—“I paid every bill that you sent me.” True, she had paid every bill; how do you tell an elderly person you are afraid they will die before their bill is paid? In the end, against office policy and the sermons that I have preached to others, I agreed to do the final plat without a contract. My main motivation was that I wanted to stay on the project in the hopes of getting future work from Mr. B.

To obtain the necessary letter from the county sanitarian’s office, I had to have test pits dug on the site. I had discovered it was difficult to communicate modern code requirements to Mrs. A; the site looked to everyone in our office like a vacant field with weed grass. Consequently I took it upon myself to have the test pits dug and applied to the sanitarian’s office for their inspection and letter. A few weeks later I got a call from an upset rye grass farmer. He understood my situation when I explained it to him, but still wanted to be compensated for his loss. I also got a half-hour chewing by Mrs. A during which she mostly accused me of lying about the requirement to have the test pits.
Shortly after this drama, we received the letter from the sanitarian’s office and the plat was ready for review submittal to the city and county. The same day I got the letter from the city saying there were no review comments, Mrs. A put the project on hold. Because Mr. B hadn’t called to check on the project status for a number of months, she assumed that he no longer wanted to purchase. I asked if she would like to inform Mr. B (at no charge) and was specifically told that I was not to contact him. A few days later I received the county’s review letter; the largest comment the county had was to change the plat to a subdivision because it was creating more than four lots within a calendar year.

The project then sat for almost two months until Mr. B called me to find out when I expected the plat to record. I explained that the project was on hold and that I had been specifically instructed not to contact him.

I encouraged him to contact Mrs. A and talk things over with her. A few days later I received an irritated phone call from Mrs. A wanting to know why her project hadn’t been completed. I explained that I couldn’t complete it because she had put it on hold and gave her a task list and approximate time for completing the project. She gave me authorization to proceed, but only after accusing me of lying when I told her that I was required to set monuments for the plat.

I submitted my response to the county as quickly as I could and encouraged them to check the pins quickly before another disaster erupted. I also sent Mrs. A copies of the plat and the Improvement Agreement for her records. When the county sent their review comments, they also included the tax pre-pay amount. The tax pre-pay was rather substantial because the property had been in farm deferral for a number of years. Mrs. A was angry about the amount of the tax pre-pay, but agreed to let me and my notary come over to get her notarized signature on the plat and Improvement Agreement and to get the tax pre-pay check from her. As soon as we arrived, she said that she wasn’t notarizing anything until she had time to read it and she wasn’t going to read it that day and that she wasn’t paying the tax pre-pay. I was frustrated, but quietly listened to her stories about her youth for an hour or so then excused myself.

About a week later I got a call from her saying that the plat was all wrong and she wouldn’t notarize it. For a few minutes I tried to explain things to her over the phone, but it was clear we weren’t getting anywhere so I told her I would come over the next day to review her concerns. Her primary concern seemed to be the name I had used for the existing road on the south side of the project. At this point I called Mr. B

Continues on page 24
Project from Hell, cont.

D for advice because from what I had heard, he had a good relationship with her. He advised that I offer to “change” the street name (put both names on the plat) and that by making this apparent concession she would agree to anything else I wanted. The next day I started our conversation by telling her that I had researched the street name and found a place in the county records that used the name she wanted, so I would put that name on the plat. Her response was that she was willing to notarize any time. I was floored. She then proceeded to write the tax pre-pay check while accusing the county of lying and cheating. My notary got her signature on the plat and Improvement Agreement the next day and everything recorded shortly thereafter.

Once the plat recorded, my first reaction was to push it as far back in my mind as possible so that I wouldn’t have to relive the frustration that came with all the memories. But then I realized that if I didn’t learn from the situation it might happen again which seemed worse than reliving the frustration long enough to figure out what went wrong. I realized a number of things that will hopefully help me on all my projects—not just the ones from hell.

Realization 1
The first thing that I realized was that clients want to have a personal connection with the people working on their project. One of the things that Mr. D had done from the very beginning of his project was to have one of the people working with him make a personal visit to Mrs. A’s house each month. This was also evident when she stopped the project due to lack of communication by Mr. B. Looking back, she did become less aggressive with me after our first personal meeting.

In retrospect, if I had gone to see her in person as soon as Mr. C contacted me, I could have explained the partitioning process and made a personal connection thereby eliminating one source of future surprises and giving her the feeling that I was “on her side” and there to help her instead of an anonymous voice on the phone. If I had also met with her in person to review the conditions of approval, I could have made sure that she understood the requirement that led to the test holes and been informed of the need to work around the rye grass farming.

I realized that if I didn’t learn from the situation it might happen again which seemed worse than reliving the frustration long enough to figure out what went wrong.

Realization 2
This led me to realize that clients need to feel involved in their project. Looking back on some of our conversations, I believe the primary reason she was calling me was frustration over not knowing what was happening. It was her money paying the bills and she did have a right to know how it was being spent. I was fighting an uphill battle each time she called to ask the status because she had already decided that I was in the wrong. If I had periodically called, sent a letter or gone to visit her to say what had (or had not) been accomplished to-date, she would have known that the project was progressing on schedule and not to worry or it was not progressing and who was really the cause of the delay.

Realization 3
I have to credit Mr. D for setting up the realization that clients need to feel that they have input on their project. I admit that when he suggested putting both street names on the plat I had severe doubts that it would work. When it did work I spent a lot of time thinking about why. It is easy to feel that as surveyors and/or engineers we have “been there, done that” and to expect the client to sit back and watch us work. However, from the client’s perspective there are two reasons they don’t want to sit back and watch (1) they worked hard to earn the money that is paying your bills and (2) they want to make sure that the product you deliver truly meets their needs/desires. Listening to a client’s ideas and opinions then finding a way to implement them or explaining why you can’t shows them that you are trying to provide them with the best product for their needs. Once they realize this they are more likely to trust your judgement in places where it truly counts.

These realizations all add up to one overall concept: communication. Good communication is the key to a good project.

Communication has never been my strong point; if it was, I probably could have made this article a lot shorter! I realize now that whether I like it or not I need to become more communicative. I have decided to make it a personal policy to have face-to-face meetings with clients whenever possible and when I can’t do that, to have more frequent phone and/or written contact with clients. I am hoping that by forcing myself to do this I will gradually become more comfortable, and eventually look forward to, communicating with clients. If this doesn’t seem to increase my comfort level, I am considering signing up for Toastmasters. ☉
Free Yourself from the $30,000 Base Unit

Lower Costs and Increased Productivity with Leica SmartRover and ORGN

Now the world’s best-performing, lightest weight GPS system networks into the Oregon DOT Geometronics Unit. Using the Oregon Real-time GPS Network (ORGN) with the Leica SmartRover frees you from a costly base station. Conduct On-the-Fly setups in the most convenient location and instantly begin the survey. Now one crew with one Leica Geosystems SmartRover can increase your productivity and profits.

Leica SmartRover

- SmartTrack and SmartCheck for best GPS results
- All-on-the-pole convenience
- WinCE and Bluetooth/MIL spec ruggedness
- Fully Compatible with Leica TPS 1200 and SmartStation

To schedule a no obligation demo contact Steve Hills (Oregon), Jason Halttunen or Rob McFall (Washington)

KUKER-RANKEN INCORPORATED
When the worlds of tradition and technology combine, your opportunities are endless. Since 1928

7920 S.W. Cirrus Drive, Beaverton, OR 97008
1-800-472-7007

6510 216th St. S.W. Suite E, Mountlake Terrace, WA 98043
1-800-454-1310

4905 Pacific Highway East, Suite 1, Fife. WA 98424
1-888-562-3082
Photogrammetry classes must be expanding at Syracuse. We found a new Assistant Professor Alfred O. Quinn, a pre-war student of Professor Church. Al was a burly, pink-faced Irishman whose head inclined permanently toward one shoulder (the result of an injury while playing lacrosse). He had been a Lieutenant in the Navy during WWII.

Shortly after the beginning of the term, Al called me to his office (actually, his desk, for there was no room separate from the classroom for either him or Professor Church). Waving a piece of paper at me, he asked if I knew anything about a Kendall Wood from Portland, Oregon. I did not. The paper was a letter from K. B. Wood Forest Engineers in Portland, Oregon, requesting permission to send a representative to Syracuse to use the school’s Multiplex equipment for an experimental study in forest mapping. I admitted that I had never heard of the outfit; but I wrote down the address, and that night, I sat down at my little Underwood and sent off a letter of application for a job.

Al’s letter of cooperation, and my letter of application must have arrived in Portland simultaneously. We received letters by return mail: Ken’s assistant would be in Syracuse within the week; and I was to act as his assistant. There was no money involved; but I would receive plenty of free experience.

Spencer B. Gross arrived on time. He was a rather tall, well built young man with thinning blonde hair, a different manner and a ready smile.

After a round of introductions, we inspected a large room across the hall from the office/classroom. It housed a large table of edge-laid maple on which lay the remains of a small Multiplex mapping apparatus. In a far corner leaned the Zeiss surveying equipment that we had used the previous year. In another corner was a tiny photo lab, which was meagerly equipped, but served our purpose adequately.

Professor Church explained to us that the Multiplex was the first such equipment that had ever reached the United States—in fact, it was the first one ever built. It had been designed and built in Germany, prior to WWII, for use as a training device to enable students to see and understand the principles of stereophotogrammetry. Dr. Hugershoff, I believe, brought it to the U.S. in an effort to interest government agencies in its use. Unable to arouse any interest, he presented the model to Professor Church and returned to Germany.

Spence and I had our work laid out for us. First, we had to determine whether the pile of debris lying before us could be reassembled into a mapping machine. The tiny projectors were designed to accept diapositives in the European ratio of 5 units to 7 units; whereas the American standard was 10 units by 10 units. Spence had a friend from the old days in the 29th Engineers still working for the Army in Washington, and who was capable of creating plates which would work. However, the springs which had held the plates in precise position in the
projectors, had long since rusted into dust. This, we solved with wedges of toothpicks and wooden matches.

Next, we found that the switches, which controlled the lamps in the projectors, had also fragmented—they were tiny ceramic sockets such as once were found hanging from cords hung from the ceilings of our grandmothers’ living rooms in the 1890s. This, we solved by discarding the switches altogether, and simply wiring straight through, so that the lamps were on any time that the machine was in use. The frugal Germans had provided only a single rheostat to control all of the lamps, so that it was impossible to balance the light intensity in various parts of the stereo-models.

Finally, after a week of hard work, we were ready for the trial run. We set up the bar on the heavy maple table, installed the projectors, installed a big U.S. style dot-table, and Spence put on his blue and red glasses. YES! We had a model!

Spence started to level up the model. Suddenly, a flood of mildly un-Christianlike expressions came tumbling from the darkness surrounding the table. The sucker would not level up. Try and try again, but nothing Spence could do would level it. Then, he sat back with a cunning smile of satisfaction. “Bert!” he exclaimed, “That fancy maple table’s not flat!” A quick check with a straightedge proved him right! We laid out a 4 inch grid over the entire table. Then, setting the Zeiss level up out in the hall (its minimum focusing distance was eleven feet), and using the 60-scale on a triangular draftsman’s scale as a rod, we ran levels over the whole works. Using the highest point on the table as a base, we calculated the amount by which every other point had to be filled to level the table. (Actually, to make it a plane, not necessarily perpendicular to the direction of gravity.)

A couple of days later, Spence showed up with a thin sheet of firm plastic and a tabletop-size sheet of ⅜-thick plate glass. We chopped the plastic into one-inch squares and calculated how many pieces were required to bring each grid intersection up to grade. With all of the little stacks of plastic in place, the aid of several passing students was employed to wrestle that huge piece of glass into position, where it was taped securely in place. A recheck proved we had a surface as flat as a quiet pond. We reinstalled the Multiplex, and Spence was in business—or so he thought! The feeble light from the projectors was insufficient to permit him to view the darker areas of the models.

One evening, he worked late into the night to finish a model. About 10 PM he noticed that the model was clear and easy to view; he could see all portions with ease. What happened? Then he noted that all of the professors and grad students, who usually worked long after normal class hours, had secured and left the building. The electrical system in that ancient building, where the School of Electrical Engineering was located, was insufficient to carry the load of a few dozen extra light bulbs. This suited Spence just fine—he was not a morning person. He much preferred working from 8 PM-3 AM; his normal working day.

He finished his project a few days later and left for Portland, a close friend of mine for the rest of his life. I remained on retainer with K. B. Wood Engineers at $20 per month for the rest of the school year. •
December 11, 2008
Chapter President: Brian Reeves
Location: Bend Brewing Company
Called to Order: 7:00 pm  Adjourn: 8:00 pm
Attendance: 7 members

PLSO Board Minutes
A brief of the last PLSO Board of Directors meeting was distributed and discussed. A discussion was also held regarding the need for balance between quality/price of facilities for PLSO conferences. It was suggested that PLSO might be able to get more vendors to attend with more advance notice. Some also felt the date change of the conference should have a positive impact.

Special attention was brought to the existing proposal for Jeff Lucas to write an Oregon specific surveying book. Shelby Griggs wondered if it would be possible to have the book published in an electronic format.

Discussion of the upcoming PLSO conference led to a suggestion from Dan Wobbe to have a seminar at the conference to outline any changes to ORS that affect land surveyors. It was also stated by some present that early December is still the best time to hold the annual conference.

The latest OSBEELS report led to a suggestion from Gary Johnston that we have an OSBEELS representative speak at the next Central Chapter meeting regarding disciplinary actions by the board.

Old Business
Minutes from the October 16, 2008 meeting were approved.

New Business
Jack Burris’ idea about producing a show for OPB featuring surveyors was discussed.

TrigStar program for this year will be forthcoming. Brian Reeves is going to conduct the program at Mountain View High School. Shelby Griggs mentioned that he has experienced a lack of interest from teachers when he approached them in the past about the TrigStar program.

It was determined by general consensus that we would not host a workshop (previously discussed inviting J.B. Stahl) as Central Chapter of PLSO this year.

中央 #1

By Kevin Samuel, Secretary/Treasurer

The Oregon Surveyor
28
December 11, 2008
Chapter President: Brian Reeves
Location: Bend Brewing Company
Called to Order: 7:00 pm  Adjourn: 8:00 pm
Attendance: 7 members

Rogue #4
By Stephan Barott, Secretary/Treasurer

January 19, 2009
Chapter President: Herb Farber
Location: Elmer’s Restaurant, Grants Pass
Called to Order: 7:00 pm  Adjourn: 9:26 pm
Attendance: 14 members
PDH credits: 1 hour

New Business
- Assign chapter committee chairs
- Review PLSO “Benefits of Membership” brochure

Committee Reports
Workshop: Shawn Kampman
TrigStar: Jim Hibbs
Legislative: Pat Barott, Craig Claassen
Strategic Planning: Jim Hibbs

New meeting place for 2009: Mazatlan in Central Point and Elmer’s in Grants Pass.

Chapter meeting topics for 2009:
- Banker financial planner
- New BLM manual—March meeting
- Gary Johnston
- Real estate lawyer from City of Grants Pass

State Board Reports
- Executive Secretary’s report shows PLSO finances down.
- PLSO has a new centralized checking system—We can ask for a check, pay out-of-pocket (reimburse), or limited credit card.
- Anniversaries in 2009—50 year for PLSO, 150 year for Oregon, and 100 year for water resources.
- State Casebook or laws—Gary Johnston and Ed Henricks looking into doing our own book (Tim Jackel is a contact for boundary and other rights).
- Oran Abbott asked each chapter to write one article of 500–1,000 words for The Oregon Surveyor each year.
- Must use PLSO address for all correspondence (esp. for ethics reports or complaints).

Local Jurisdictional/Government Reports
Jackson County: Kerry Bradshaw is the new County Surveyor. Kerry will bring some of the original Ives & Hyde books to a future meeting.

City of Grants Pass: LDP coordinates are being used by the City with good results. Craig Claassen will provide coordinates of City control if requested.
City of Medford: Jon Proud. Scanned monument locations with notes are available online. Lazy Creek flood study is being completed by the city.

Other New Business

Scholarship Auction: Donations were taken for a Jet Boat trip (or other items as determined by Herb Farber).

Thank you gift: The Chapter gave a gift to Roger Roberts for his many years of service and support to PLSO as the Jackson County Surveyor.

Program: History of O&C Lands by Herb Farber

**February 16, 2009**

Chapter President: Herb Farber
Location: Mazatlan Grill, Central Point
Called to Order: 7:00 pm  Adjourn: 9:00 pm
Attendance: 13 members
PDH credits: 1 hour

Committee Reports

Workshop: Shawn Kampman. OHW discussion. The next meeting is February 27 at The Brick in Central Point.

TrigStar: Jim Hibbs has the current test and is ready to distribute the State test on May 9. The Local test must be completed and graded prior to the State test.

Legislative: Discussion on SB 344.

Strategic Planning: Tammy Roberts will have phase II of the report finished soon.

State Board Reports

OSBEELS: Spring Exam is coming soon

Local Jurisdictional/Government Reports

Jackson County: Kerry Bradshaw. Business is down. County will focus on re-establishment of corners.

* Still working on scanned maps online.
* Post monumentation subdivisions will be funded by County. Turn them in and receive funding for completion.
* 38SIW Cadastral—scaled back somewhat.
* Requesting project photos for County office.

City of Grants Pass: Craig Claassen. Work is slow in the City. Focus is on public safety.

BLM/USFS: Stimulus funding may be coming. Pat Barott will coordinate with Government agencies for local contracts.

Other New Business

PLSO booth/display: Gary Johnston. PLSO is trying to get another display. If you want to use the booth, check the schedule on the PLSO calendar or contact Mary Louise VanNatta.

Membership: Shawn Fidler. New PLSO shirts and hats are available for purchase.

Program: Discussion on how and when to hold survey corners.

Good of the Order

Send strategic plan items (TrigStar, meetings, schools, SAR, etc. to Jim Hibbs)

**March 16, 2009**

Chapter President: Herb Farber
Location: Elmer’s Restaurant, Grants Pass
Called to Order: 7:00 pm  Adjourn: 9:00 pm
Attendance: 12 members
PDH credits: 1 hour

Committee Reports

Workshop: Shawn Kampman. OHW discussion. The committee met February 27 at The Brick in Central Point.

Legislative: Discussion on SB 344, HB 2737, SB 955.

Strategic Planning: Updated report by next Board meeting

Chapter meeting topics for 2009:

* FEMA
* New BLM manual
* OIT senior projects

State Board Reports

BOD Report: Herb Farber.

* The TwiST program will continue
* OSU presentation—Leica & DEA partnership
* Hofland is selling Willamette Stone monuments
* Right of entry—personal attempt
* There is a CD with NSPS recruitment packet program information available from Craig via Gary Anderson
* Willamette Stone maintenance for the PLSO 50/150

Local Jurisdictional/Government Reports

Jackson County: Report from Herb via email from Kerry Josephine County: Peter Allen. Budget process starting.

City of Grants Pass: Craig Claassen. Two layoffs—one LS and one Civil. Public safety levy failure will result in 33% reduction.

BLM/USFS: USFS will fill one LS in Medford soon

Other New Business

Credit cards for Chapter discussion

Program: “What can the Chapter and PLSO do for you?”

Good of the Order

Check all evidence—Peter Allen “two quarter corner example”
Chapter President Dave Beedle asked for old business to begin the meeting. The chapter began with a discussion on the “Right-of-Entry” (ROE). Ron Quimby brought up that ROE was being talked about at the annual conference. Ken Hoffine said that any prosecution dealing with ROE should be for actual damages. President Beedle said that PLSO should contact the lobbyist regarding the change of the current ROE policies and laws.

Mark Smalley mentioned the joint Umpqua Community College/PLSO workshop with speakers Tim Moore from the BLM and Brent Knapp from Umpqua Community College.

Beedle moved into new business asking about opinions of the annual conference. Quimby gave this year’s event a lot of praise. He stated that there were many choices for classes, but that the price was high. The members from the Umpqua chapter in attendance all agreed with Quimby that, although there were many educational benefits, the price did seem high.

Beedle then asked about the PLSO board meeting. Ron Quimby and Brent Knapp attended and gave reports. Dues were mentioned as one of the Board’s highest priorities.

Romey Ware mentioned the annual Harold Stockhoff Memorial Golf Tournament. Ware contacted Nancy Stockhoff and said she was questioning having the tournament this year due to the economic situation. Ware said the tournament should continue as a tribute to Harold. In order to help Mrs. Stockhoff, Ware suggested a committee be formed. Leonard Herzstein brought up that the Engineering Club at UCC could help. Everyone agreed. It was stated that the scholarship is for the students and their involvement is important.

MOTION: Ware made a motion to create a committee consisting of Ryan Palmer, Brent Knapp, Litahni Harlow and Nancy Stockhoff. The motion carried.

Ware praised the tournament reinforcing its importance.

Leonard Herzstein then moved into discussion of the TrigStar program. Herzstein said that volunteers should contact their respective school to schedule a time. Once a time has been scheduled, he will get volunteers the needed information. All local tests need to be performed by the first week in May.

Litahni Harlow, UCC Engineering Club president mentioned the Engineering Club T-shirt drive. She gave a handout to the Chapter and mentioned the cost and deadlines.

The chapter was very lucky to have Ron Singh, Chief of Surveys and head of the Geometronics section for the Oregon Department of Transportation, on hand to give a presentation on Digital Signatures and the Oregon real-time GPS network. Singh introduced himself and explained what the Chief of Surveys is and the work that is performed. He talked about the opportunities that there are for colleges in terms of presentations and the procurement of older equipment. Ware inquired about hiring opportunities at ODOT. As the current surveyors age and retire, there will be opportunities. Singh gave an explanation of Geometronics for the benefit of the Chapter.

Singh wrote a document for ODOT called “Engineering Automation: Key Concepts for a 25-year Time Horizon.” In this document he discusses digital signatures. Singh discussed the difference between “wet” signatures and digital signatures. He presented a very nice PowerPoint on the subject. He noted that we are already very dependent on computers and it is only a matter of time before Land Surveyors are digitally stamping all of their work. To reinforce the presented ideas, Singh gave a humorous account of a presentation he made to the PLSO board where he “doctored” a board members survey in order to prove his point that “wet” signatures could be falsified.

Singh stated that anything could be digitally signed. Even the smallest portions of a project could be signed digitally and thus be “owned” by the person that created it. Digital signatures can be accepted by County Surveyors. Ken Hoffine asked what the price of getting into using digital signatures was. The answer was, as expected, that the price is high. It is approximately $200 initially then 20% of that every year after. Tim Moore asked what will happen if technology moves beyond digital signatures. Singh replied that technology has learned from its mistakes and will evolve. Singh ended his presentation on digital signatures with some very interesting examples of the technology of PDFs and the Adobe Reader program.
Chapter President Dave Beedle asked for old business to begin the meeting. Ken Hoffine brought up term limits of the County Surveyor, referencing Dan Linshield’s recent email to the board. Currently there is no term limit for the County Surveyor in Douglas County. Beedle brought to the floor Senate Bill 344—the position of County Surveyor being an appointed position unless county charter provides otherwise. The argument for appointment is that most people don’t know what a county surveyor does. Kris Degroot said that he does not support the appointing of a County Surveyor and went on to explain “home rule” and its application. Degroot also stated that the home rule has been in place and that counties can and should make their own decisions. Romey Ware, Douglas County Surveyor, noted that there are approximately 13 appointed County Surveyors, but is has historically been an elected position in Douglas County. He went on to discuss both positives and negatives for the home rule. Ron Quimby produced a copy of SB 344 and read it aloud. Chair-elect Randy Smith asked if the lobbyist and PLSO were involved. Beedle called for the chapter’s opinion of SB 344.

**MOTION:** Quimby made a motion that the Umpqua Chapter oppose Senate Bill 344. Degroot seconded. Motion carried.

House Bill 2737—Public land corner preservation fee—was discussed. It was mentioned that Lincoln and Clackamas Counties supported the bill. PLSO did not endorse the bill.

The discussion of HB 2737 lead to the topic of the future of the County Surveyor’s Office and their budget situation. Ware said that only 23% of the general fund is supporting next years proposed Surveyor’s Office budget. The Surveyor’s Office will have to look to the corner preservation fund. Smith stated that there has only been a 10% increase in the budget over the last nine years. Tim Moore questioned whether the raising of the cap for the corner preservation fund will go to the Surveyor’s Office. Beedle asked the Chapter if they supported HB 2737.

**MOTION:** Degroot motioned for the Chapter to support HB 2737. Quimby seconded. Motion carried.

The discussion moved to the Harold Stockhoff Memorial Golf Tournament and the progress that is being made by Mrs. Stockhoff and the UCC Engineering Club. It was noted that the tee sponsorships have dropped from $100 to $50. The future management of the tournament was also discussed. The Chapter will most likely take over the tournament next year. Quimby asked for the Chapter to sponsor two tees for this year’s tournament. All were in favor of the $100 donation.

Litahni Harlow, UCC Engineering Club President, reminded the Chapter of the T-shirt drive that the club is holding.

**MOTION:** Moore motioned that the Chapter support the T-shirt drive and donate $100 to the club. The motion carried.

Ron Quimby will take over as the Chapter’s legislative representative.

**Presentation**

A short presentation was given on the Oregon Real-Time GPS network. A status update was shown of the areas that are currently “on-line” and areas that will be running in the near future. Singh gave a brief history of the network as well as some interesting facts regarding data collection and the speed with which it is expedited. The future of surveying will require only a rover and a cell phone in order to perform high-level GPS work. Information regarding the network can be found at www.theORGN.net
The Lost Surveyor

From the back cover

Question: Can you name the falls or the creek it is on?

Answer: This is the middle falls on Bridal Veil Creek in the Columbia River Gorge. There is no trail or road to this falls or the upper falls. The upper falls is rated second only to Multnomah Falls so if you happen to see this one you haven’t seen the upper yet. It is very difficult to go up creek but possible for us well-traveled surveyors.
A New Way to Scan!

Topcon’s IS combines the best of two worlds, advanced imaging and high accuracy surveying, incorporating real-time field imagery with spatial data. The IS’s powerful functionality is controlled using Topcon’s exclusive ImageMaster software that produces "photography with dimension", a revolutionary and cost effective alternative to laser scanning. Fully Robotic capability with a Reflectance measuring range of 6,600 feet.

Full-color, graphical Windows Mobile instrument & field controller interface. Images are gathered using two digital cameras and stream video up to 10 frames per second. WiFi connection. Imaged-based monitoring can be done continuously and remotely.

The PPI Group, your locally owned Topcon dealer, is ready to show you the future of Robotic Total Stations! Call or email us to set up your free demonstration today.

EMAIL: info@thePPIgroup.com
OREGON: 503.231.1576 OR 800.247.1937
www.thePPIgroup.com
Can you name these falls or the creek it is on?

Lat 45° 33' 00" N
Long 122° 10' 30" W