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THE
OREGON SURVEYOR

A publication of the Professional Land Surveyors of Oregon



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On the Cover

Upper McCord Creek Falls, in the Columbia River Gorge. The falls are hidden away above mighty Elowah Falls on the John B. Yeon Trail.

—Photo by Lisa Joy Switalla

The Lost Surveyor, from the back cover

Answer

LAT 45° 36' 42.36" N

LONG 122° 00'07.24" W

This marker is a Quarter Section corner on the line between two Townships. It can be found on the John B. Yeon Trail in the Columbia River Gorge. While you're there, check out the Upper McCord Creek Falls a little further up the trail.





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From your Chair

■ *Mason Marker, PLS; 2012 PLSO Chair*

For medical reasons, Mason Marker is unable to write to you this issue. We wish Mason a relaxing recovery and look forward to reading his thoughtful message in our next issue.



March 22, 2012

Gary -
I want to thank you and the PLSO organizing committee for the invitation to attend the 2012 PLSO annual conference held at the Red Lion in Portland. Your hospitality and that of the leadership of PLSO will never be forgotten! It was a wonderful experience seeing the generosity given to your neighboring organization and feeling the emphasis being placed on the "P" of PLS during your conference. THANKS AGAIN,
THE
President USAW 2012

Registry of Stolen Surveying Instruments

Need help finding stolen survey equipment? List your information on the NSPS website and your equipment may be found!

Please provide the following information by email to trisha.milburn@acsm.net

- Description of instrument including serial number
- Location where equipment was stolen; include nearest town and state
- Date stolen
- Contact person to provide information; include phone and/or email

PLSO membership renewal

If you have not renewed your PLSO membership through June 30, 2013, this will be the last *Oregon Surveyor* issue you will receive. Renew your membership online at www.plso.org or download the form and mail it in with a check.

Editor's Note

■ Oran Abbott, PLS; oranabbott@gmail.com



You have already seen the front cover and probably the Lost Surveyor photo before you read this article. I did not take either picture, but I know where they are located. You have to get out of your car, or off of your bike, and hike a trail to find where the Lost Surveyor photo was taken, and you might as well continue a little further to view the front cover location. It can be easy to find a second location, such as the front cover, with the information from the survey markers at the first location.

Surveying seems to apply to numerous things we do not even think about. Both of my sons have surveyed in the field. One son is now living in Indiana and is helping a landowner by learning how to harvest honey from beehives. Did you know that bees have one of the best internal GPS systems—without using satellites, computers or training to operate it?

When a bee comes across some nectar, it takes a sample and then flies in all directions to return to the hive. It may have had to wait under the

eaves of a house for a thunderstorm to pass over, since they cannot fly in heavy rain. Once they return to their hive, they will perform a wiggle dance with their tail pointing in the direction of the nectar, and the speed of the dance will tell the other bees how far away it is, and how much is there. The bee also carries a sample to show the quality of the nectar. Our GPS does not tell us this much information. Some bee species actually go back and find the exact same source of the nectar up to a mile away. Of course, they can find their way back to the correct hive even when there are several identical hives in one area.

Look at this issue of the *Oregon Surveyor* and the next few issues to determine whether you would like to receive a printed version or an online (electronic) version? If we move to an online version, will anyone pay attention to the photos, such as, on the job pictures, the front cover, the Lost Surveyor, and so on? Are you going to keep back issues that your grandchildren can read, or can they get those off of the Internet?

When I was learning the field of surveying we were taught how to measure distances and angles on the earth accurately, but never perfectly. As long as we did it to the best information available, it was considered the best in the world. When I started out, 1 in 10,000 was considered accurate enough for a land surveyor, and the surveyor had to do a lot to achieve that level of accuracy. Now 1 in 4,000 is recognized as acceptable, but we have equipment that will attain an accuracy level of one in a million. Even though that is excellent, it is never perfect. When it comes to surveying we are not perfect, but very few people know how good we really are.

Keep up the good work! Have a great summer! ◉

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

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

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

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■ Mary Louise VanNatta, CAE; PLSO Executive Secretary

A Land Surveyor Superhero's Guide to Understanding Collaboration



In the world of Good vs. Evil, although widely misunderstood, **collaboration** should definitely, fall on the side of “good.” It’s popular to be able to say you’re collaborating with colleagues or you might even have “collaborative workplace” as one of your company’s guiding principles, but do you really know if you’re working collaboratively? How can collaboration help you as a land surveyor?

In researching the true meaning of collaboration, it was helpful for me to look at how our comic superheroes use collaboration as a tool to defeat various societal villains. Through working together, problems are identified, rooted out and vanquished (or solved) using the individual strengths of each party.

First, we have to agree on what collaboration is *not*. The word doesn’t always bring up positive images. In World War II, the term referred to people who helped foreign occupiers (like the Nazis), so it might need a little reputation resuscitation. You cannot truly collaborate if you are not equal in position or power (parent/child, employee/employer, experienced/inexperienced, owner/lease). A collaboration is not a casual arrangement or one that requires strict supervision. For example, Batman and

Robin would be more of a mentor/mentee relationship and Captain America is essentially “owned” by the U.S. Government, making his work fighting HYDRA, the criminal organization seeking world domination or the Axis Powers in WWII, less of a collaboration and more of an employee/employer situation.

Collaboration would be more accurately represented by the Justice League. The original line-up of Superman, Batman, Wonder Woman, Flash, Green Lantern, Aquaman and Martian Manhunter, while it changed over the years, demonstrated how independent entities work together to defeat common enemies. Their nemesis’ also collaborated to create coalitions (such as the Secret Society of Super Villains, Anti-Justice League,

Super Foes and the more recognizable, Legion of Doom) to challenge the Justice League and of course, try to take over the world.

We know we can’t keep the world safe all alone, so let’s look at how we can properly use collaboration to at least help our organizations thrive:

Collaboration is a philosophy and is carefully and highly structured.

It’s a new way of thinking about a relationship with other groups. It is based on shared ownership and expertise in one part of a process. It requires incredible trust in your partner. The work of the parties has been jointly determined and decision-making protocols are



spelled out in advance. To cite our superhero example, everyone in the Justice League had to be willing to fight and sacrifice for justice and while Superman is the most powerful, he didn't "own" the Justice League. That means you can't continually check your partner's math.

Collaboration is a relationship between interdependent partners. Each group has a special role in reaching a joint goal. They know and openly admit they do not have the skills, experience or tools to complete the job; so they have agreed to work together to achieve one specific purpose. You may find this important if you can work on a project that is larger and more complicated and you need to bring in someone with special skills. It's very helpful that Wonder Woman has an invisible plane and Batman has tons of disposable income.

Collaboration has an element of autonomy. Collaborators know that each participant brings unique skills, abilities, technology, equipment or education to the table. While surveyors "love to work in groups" and they "always agree," you might find a rare situation where that wouldn't always be the case. In a collaboration, however, when issues arise that pertain to their area of expertise, the group trusts and accepts the specialist's guidance. When it came to dealing with the ocean, it's best to consult Aquaman (he can breathe underwater).

Collaboration is mutually beneficial and all share the recognition and reward. All parties benefit from achieving the goal. When one villain is out of the way, it's easier for the superheroes to do their job. When a foe is defeated, the whole Justice League takes the credit.

Finally, **collaborations end when the project concludes or the foe is defeated.** A signature characteristic of a true collaboration is that when the goal has been accomplished, the parties return to "business as usual." If and when the Legion of Doom is put to rest, never to reform again, it would be expected that each member of the Justice League would go back to fighting his or her own particular antagonist.

Now that you understand how collaboration can be used as a tool to meet challenges, be a surveying superhero. Seek out other PLSO members to work together and complement your skills. Conquer problems, seize opportunities and create your own collaborative partnerships.



You can find names of surveyors in the PLSO member directory or under "Finding a Surveyor" on the "for the public" link on the PLSO website at www.plso.org.

An advertisement for SURV-KAP surveying products. The top half features the text "The MEASURE OF EXCELLENCE" in a large, bold, blue font. Below this, there is a collection of various surveying tools including yellow, red, and purple surveying caps, a silver surveying level, and a silver surveying marker. The bottom half of the ad has a white background with the text "EASY ORDERING ONLINE!" in red, followed by "SURV-KAP.com" in large blue letters. Below that, it says "SURVEY MARKERS, CAPS AND ACCESSORIES • 800-445-5320". There is also a gold seal that says "100% GUARANTEE".

PLSO Board of Directors Meeting Minutes

Attendees

Officers

CHAIR Mason Marker

CHAIR-ELECT Lee Spurgeon

PAST CHAIR Gary Anderson

EXEC. SECRETARY Mary Louise VanNatta, CAE

Board Members

CENTRAL (1) David Williams, President-Elect

MID-WEST (2) Ryan Erickson, President-Elect

PIONEER (3) John Thatcher, President

ROGUE RIVER (4) Stephan (Pat) Barott, President | Fred Frantz, President-Elect

SOUTH CENTRAL (5) Tom Del Santo, President

SOUTHWEST (6) Mike Dado, President-Elect

UMPQUA (7) Carl Sweeden, President | David Edwards, President-Elect

WILLAMETTE (8) Jamey Montoya, President | Nathan Magness, President-Elect

BLUE MOUNTAIN (9) Rod Lewis, President | Tom Battey, President-Elect

Committees

FINANCE Gary Johnston | LEGISLATIVE Dan Linscheid | WEBMASTER Wendell Harness

SCHOLARSHIP Steve Haddock | CONFERENCE Jered McGrath, Secretary-Treasurer, Pioneer Chapter

DRAFT MINUTES.
To be approved at
July board meeting.

attended. Thatcher added that Pioneer Chapter has been busy and hoping to get a workshop put together by next fall. McGrath discussed the Career Expo that takes place at the Oregon Convention Center.

Rogue (Barott)—A workshop about Elevation Certifications will be held on June 16 in Grants Pass. Using the workshop to increase membership is a good idea.

Umpqua (Sweeden)—The chapter had a meeting with 18 members. Dr. Bob Zybach spoke on his work in survey records research. Sweeden recommended him highly.

Willamette (Montoya)—The chapter planned a student appreciation dinner at OSU on May 21. PLSO will be represented at the Corvallis DaVinci Days in July.

Blue Mountain (Lewis)—The college is looking for a surveying instructor. They would like to present a fall seminar and there are people in their chapter that have expertise and they are hopeful they can present their own seminar with various topics.

Old Business

Budget—Spurgeon opened the discussion on budget and finance. The conference did not make what is expected, coming in very short of expectations and the board needs to consider how to cut proposed budgeted expenses for activities. Johnston said that the big shortfall is that revenues/registrations from the conference were way below expectations. There is hope that the membership drive will be successful and chapters can help PLSO gain dues revenue. The main recommended reduction of activities will include cutting out one issue of the *Oregon Surveyor*, limit travel, cut back

Call to Order

The meeting was called to order by Chair Mason Marker at 10:04 am. Minutes from the March 13, 2012, Board Meeting were reviewed.

MOTION: It was moved by Erickson that the minutes of the March 13, 2012 Board Meeting be approved as submitted. Motion seconded by Dado. Motion passed.

Report FROM THE Executive Secretary

VanNatta reported that PLSO has \$213,129.29 in the bank, but large bills (including the hotel bill from the conference) have not been paid. Membership total is 646, with 472 corporate, 75 associates, 29 special, 39 students and 31 life members. There are 106 members who paid for six months and will be contacted for renewal. VanNatta detailed the recruitment work that will be done to recruit non-members.

She presented the taxes to the Board per IRS recommendations and alerted the board to the fact that there were still policies, recommended by the IRS, that

PLSO board did not have in place, such as Conflict of Interest and Whistleblower. She shared the insurance policies that PLSO has purchased, which include conference cancellation, liability and D&O (director and officer insurance).

Much work had been done on the finances since the last board meeting

Report FROM THE Chair

Marker thanked the conference committee for its work. He thanked Harness for his work on the website. He reported that NSPS and ACSM have merged as of May 4. The American Association of Geodetic Surveyors will also join that group. There will be a request from NSPS to have chapters add \$40 to dues to become NSPS members. TwiST is scheduled June 25–29. Marker said they need to talk about what they will be doing with the budget.

Chapter Activities

Pioneer (Spurgeon)—The April chapter meeting presentation was “FEMA: Friend or Foe?” Over 30 members

the EGAC budget and hold off hiring a lobbyist for the rest of the year.

There was discussion about various reasons for the conference not meeting budgeted income. A discussion about the cost of the *Oregon Surveyor* was held. Del Santo suggested quarterly *Oregon Surveyor*. There was a suggestion to improve the quality of the magazine with better content. Haddock asked a question about how scholarship was accounted for in the revised budget. Some clarifications were made. The proposal from Johnston would still leave us at a \$30,599 more expenses than income. Marker shared various ways people can still cut in small ways. Anderson reminded that recruiting new members will be a primary issue. VanNatta said staff will also be affected by the belt tightening. Williams said it might be time to raise dues. He is discouraged by non-members who undervalue the work that surveyors do.

MOTION: It was moved by Williams and seconded by Lewis that the revised budget be adopted as proposed by Johnston. Motion passed unanimously.

Membership—Anderson reported on the efforts of the membership committee. They are meeting monthly via conference calls. The office is building a strong prospect list. Anderson discussed how PLSO is looking into affiliate benefits as member benefits. Raising dues is a discussion item. It will be a discussion in the fall for 2013–2014. Montoya had done a dues survey of surrounding states. Oregon is one of the lowest in the Western U.S. Frantz asked what we are doing to make the organization more attractive. Students want opportunities to network and socialize with other surveyors along with educational opportunities. Frantz said that we need to know what people value about the association.

McGrath reminded the board that we need to have many answers to “why PLSO?” He encouraged bullet points and appeal to people’s needs for business.

Anderson recapped the goals of the committee and asked for chapter input on successful ideas. Calling has alerted some people to delinquent dues.

Linscheid reported that OSBEELS will be evaluating registration fees for licensing. There is a possibility that fees could be reduced.

Website—Wendell Harness from Harness Technologies gave a presentation on the website. His points included:

- No one at the office or HarnessTech knows your password
- You can reset your password at any time. The office will help you if necessary.
- Soon Chapter President’s will be able to find all the members in their chapters and download lists.
- The lists will only be available to elected officials and staff to be used for sanctioned PLSO purposes.
- Notifications for information will be sent to members, they can choose to opt-out of the notices if they want.
- Membership renewals will be easier.

New Business

Travel and Reimbursement Policy—Spurgeon presented an updated travel and reimbursement policy. It included a provision that only elected board officials or others who were “specially requested to attend a meeting,” would receive reimbursements if requested. Edwards said he felt that most of the committee reports can be made electronically and we don’t need everyone to come to the board meeting and be reimbursed. Questions were posed about what a “request” for

committee chairs to attend might look like. The request would be via email or writing.

McGrath proposed the words “or other specifically invited or requested to attend” be added to the policy after the word “designee” in line 2 for clarification.

MOTION: Edwards moved the travel policy be approved with changes recommended by McGrath. Motion seconded by Rice.

Discussion. The policy may still need some clarification. Edwards suggested the board pass it “as is” and deal with any other problems as they arise.

Motion passed unanimously.

Machine Control—Lewis discussed issues around Machine Control and definitions in ORS 672. There are concerns about contractors doing their own layout work. Linscheid said that there never has been a case where this issue came up. There is an issue on “responsible party” on the design portion. There is a concern by Lewis that the management was out of his control and he is concerned about who is considered “the responsible party.” Discussion ensued. Lewis encouraged people to talk about the issue at the Chapter level. McGrath suggested that he put it up on the forum.

Election of WestFed Representative—Marker reviewed the qualifications of four candidates who expressed interest in serving as WestFed Representative. Secret ballots were distributed and there was a tie, so a second vote was taken between the two candidates who were tied. John Thatcher was selected as WestFed representative.

Continues on page 10 ►

Committee Reports

Conference—McGrath reported on the conference committee's status. The committee considered a number of venues. They also talked about ways to save money, such as not scanning

attendees at each session and mailing individual documentation of attendance. There will not be a joint conference with LSAW in 2013. The current plan is to schedule the conference January 23–25 at the Salem Conference Center.

Scholarship—Haddock reported that the fund balance market value in Oregon Community Fund is \$220,602, the fund lost \$7000 over the year. Management fees of \$3271 were assessed to the fund in 2011. The PLSO scholarship fund awarded \$10,500 in scholarships. Available funds are \$9809 for scholarships this year. The committee expects to receive scholarship packets at the end of May. Two members have resigned from the committee so new members, Brady McGarry and Paul Ejgird, will be on the committee this year. Haddock asked if people saw the email he sent to the board regarding an email from the Conference Committee chair.

OSBEELS—Linscheid reported that the new Standards and Practice potential language, that has been widely discussed, will not be instituted at this time.

Legislative—Sweden reported that the Legislative Committee met with four candidates and selected Darrell Fuller to serve as the organization's lobbyist. He will be retained when the time is right. There was little other business conducted.

EGAC—Anderson reported for Ferguson and thanked everyone for participation in Trig-Star. OIT is planning to develop a geomatics program at a satellite campus at Wilsonville.

Good of the Order

Being no further business, Marker asked for a motion to adjourn.

Motion to adjourn. Motion passed.

The meeting ended at 3:08 pm.

Next meeting will be September 8 at the Valley River Inn in Eugene. ◉



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New internship options for OSU Surveying Students

■ *Niki Schulz, P.E. Instructor, Oregon State University, School of Civil and Construction Engineering*

Oregon State University's School of Civil and Construction Engineering (CCE) provides a comprehensive, state-of-the-art education to prepare students for professional and responsible engineering and constructor positions with business, industry, consulting firms or government (*OSU CCE Mission Statement*). At the bachelor degree level, students may choose to major in either Civil Engineering (CE) or Construction Engineering Management (CEM). Students wishing to pursue a career in land surveying may take additional coursework to meet the requirements of the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS) to take the Fundamentals of Surveying (FS) examination for enrollment as a Land Surveying Intern (LSI). The requirement for both programs is graduation and 16 quarter-hours of surveying instruction, including a course in surveying law (OAR 820-010-0226). Thus, upon graduation OSU CCE students are eligible to pursue a path leading towards professional registration in both civil engineering and land surveying.

The Civil Engineering Co-op Program (CECOP) is a business/education partnership working with Oregon universities to provide student internships in engineering and business. Through the CECOP program, a student completes two, six-month internships (one with a public agency, the other with a private firm) while completing his or her BS degree. Placement into CECOP is a highly competitive process. This year, approximately 50% of qualified applicants will gain admission to the program (students are competitively screened through a written application and personal interview). Due to the extended duration of the two internships, the student's time to graduation is extended by two terms. The internships have stringent regulations to ensure that the students are gaining practical experience rather than given simple office tasks. Due to this assurance, CECOP internships are the only internship program allowed by OSBEELS to qualify as part of the four years of required work experience toward professional registration in civil engineering or land surveying. The time spent out of the classroom is time actively spent working toward the student's professional goals.



Through CECOP, CCE students may complete either two surveying internships, or one surveying and one civil engineering internship (only CE students are eligible for the CE internship). When the internships are combined with completion of a CE or CEM BS degree and the required geomatics and surveying coursework, students are qualified to sit for the FS and FE exams. The six or twelve months of time spent in surveying internship may be applied toward the application to sit for either the PLS or PE (civil engineering) exam.

OSU CCE and the CECOP program provide excellent opportunities for Oregon students to gain valuable education and professional experience in geomatics and land surveying, exposing a whole new generation to the career possibilities in this important and dynamic field. ◉

For more information:

- The CECOP program, or if your company is interested in joining: www.mecop.osu.edu
- OSU's geomatics program: cce.oregonstate.edu

Surveying and the Oregon Utility Notification Center

■ Ron Singh, PLS, Chief of Surveys/Geometronics Manager

SUBJECT

Survey activities that require notifying the Oregon Utility Notification Center

EFFECTIVE DATE

3/19/2012

PURPOSE

To establish a survey policy relating to activities that requires notifying the Oregon Utility Notification Center (OUNC).

GUIDANCE

All Oregon Department of Transportation (ODOT) surveyors will comply with the *Oregon Utilities Coordinating Council (OUCC)—Standards Manual*, except as clarified below:

1. The setting of wooden stakes, lath, or hubs no longer than 12 inches would not require notifying OUNC.
2. Careful hand excavation while searching for survey monuments would not require notifying OUNC. Employ hand tools or other such noninvasive methods to locate the survey monument.

If in doubt, always contact the One Call Center and request utility locates for the area.

DEFINITIONS

Refer to the *Oregon Utilities Coordinating Council (OUCC)—Standards Manual*.

BACKGROUND/REFERENCE

A literal interpretation of OAR 952-001-0010(7) which defines “excavation” as “... any operation in which earth, rock or other material on or below the ground is moved or otherwise displaced by any means ...,” would consider many of the routine and benign activities of a survey crew as excavation, requiring notifying OUNC and waiting for the marking of all underground utilities in the area before proceeding. This interpretation defies logic as it would include kicking the dirt or the setting of a tripod (where significant force is applied to the pointed metal feet driving them into the soil to some degree of refusal) as excavation.

This bulletin provides reasonable procedures to comply with the OAR’s intent of preventing injury to persons and damage to underground facilities.

The guidance contained in this bulletin is based on:

Guidance 1 The ODOT Chief of Surveys conversation with the OUNC Board of Directors on April 13, 2011, where the Board agreed that the setting of wooden stakes, lath, or hubs no longer than 12 inches would not require notifying OUNC.

OAR 952-001-0010(11) allows setting stakes to mark the location of an underground facility.

Guidance 2 OAR 952-001-0090(2)(c) allows the use of hand tools or other noninvasive methods to determine the exact location of the underground facility when excavating within the reasonable accuracy zone of the marked utility. When searching for survey monuments, proceed in the same manner as you would if a utility was marked in your search zone.

RESPONSIBILITIES

Region Survey Managers—Ensure all survey personnel are familiar with the requirements of this bulletin.

ODOT Surveyors—Read and comply with the requirements of this bulletin.

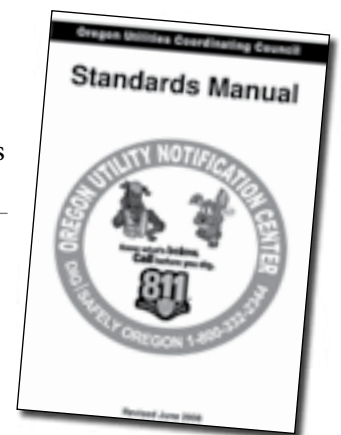
ACTION REQUIRED

Acquire and become familiar with the *Oregon Utilities Coordinating Council Standards Manual*.

SPECIAL INSTRUCTIONS

The release of the *2012 Survey Policy and Procedure Manual* will contain the information in this bulletin, at which point this bulletin will be cancelled. ◊

Ron Singh, PLS is the Chief of Surveys/Geometronics Manager Technical Services/Traffic-Roadway/ Geometronics at the Oregon Department of Transportation. He can be reached at 503-986-3033 or ranvir.singh@odot.state.or.us.





Public Land Survey Plats

October 2011–April 2012

■ *Mary Hartel, Chief, BLM Branch of Geographic Sciences*

The following public land survey plats for Oregon were approved and/or filed during the period of October 2011 through April 2012. This list is also available electronically by contacting the BLM office at khensley@blm.gov.

Oregon, Willamette Meridian

T. 20 S., R. 4 W.	Dependent Resurvey & Subdivision of Section 5	T. 38 S., R. 4 E.	Dependent Resurvey & Subdivision of Section 30
T. 29 S., R. 6 W.	Dependent Resurvey & Subdivision of Section 19	T. 25 S., R. 2 W.	Dependent Resurvey & Subdivision of Section 26
T. 29 S., R. 7 W.	Dependent Resurvey & Subdivision of Section 15	T. 21 S., R. 4 W.	Dependent Resurvey
T. 4 S., R. 2 E.	Dependent Resurvey & Subdivision of Section 11	T. 40 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 15
T. 9 S., R. 2 E.	Retracement	T. 41 S., R. 7 E.	Dependent Resurvey & Subdivision of Section 15
T. 4 N., R. 3 W.	Dependent Resurvey & Subdivision of Section 29	T. 22 S., R. 6 W.	Retracement
T. 16 S., R. 1 W.	Retracement	T. 25 S., R. 1 W.	Retracement
T. 27 S., R. 12 W.	Dependent Resurvey & Subdivision of Sections	T. 16 S., R. 7 W.	Retracement
T. 38 S., R. 1 W.	Dependent Resurvey & Subdivision of Section 30	T. 10 S., R. 2 E.	Dependent Resurvey & Subdivision of Section 13
T. 18 S., R. 8 W.	Retracement	T. 39 S., R. 8 W.	Dependent Resurvey & Subdivision of Sections
T. 17 S., R. 7 W.	Retracement	T. 18 S., R. 6 W.	Dependent Resurvey & Subdivision of Section 21
T. 23 S., R. 5 W.	Dependent Resurvey & Subdivision of Section 19	T. 27 S., R. 10 W.	Dependent Resurvey & Subdivision of Section 30
T. 31 S., R. 9 W.	Dependent Resurvey & Subdivision of Section 35	T. 21 S., R. 29 E.	Dependent Resurvey & Subdivision of Sections 3 & 4
T. 18 S., R. 1 E.	Dependent Resurvey & Subdivision of Section 19	T. 20 S., R. 29 E.	Dependent Resurvey
T. 11 S., R. 3 E.	Dependent Resurvey	T. 23 S., R. 6 W.	Dependent Resurvey & Subdivision of Section 14
T. 11 S., R. 2 E.	Dependent Resurvey	T. 33 S., R. 5 W.	Dependent Resurvey & Subdivision of Sections
T. 19 S., R. 7 W.	Dependent Resurvey	T. 4 S., R. 3 E.	Dependent Resurvey
T. 18 S., R. 8 W.	Dependent Resurvey	T. 11 S., R. 44 E.	Dependent Resurvey & Subdivision of Sections
T. 2 S., R. 6 E.	Dependent Resurvey	T. 18 S., R. 34 E.	Dependent Resurvey
T. 26 S., R. 7 W.	Dependent Resurvey	T. 12 S., R. 2 E.	Dependent Resurvey
T. 18 S., R. 6 W.	Dependent Resurvey	T. 27 S., R. 12 W.	Dependent Resurvey & Subdivision of Section
T. 7 S., R. 7 W.	Dependent Resurvey	T. 39 S., R. 3 E.	Dependent Resurvey, Subdivision of Section, & Survey
T. 19 S., R. 7 W.	Dependent Resurvey	T. 28 S., R. 11 W.	Dependent Resurvey & Subdivision of Section
T. 10 S., R. 1 E.	Dependent Resurvey	T. 15 S., R. 2 W.	Retracement
T. 14 S., R. 1 W.	Dependent Resurvey & Subdivision of Section 25	T. 24 S., R. 6 W.	Dependent Resurvey
T. 6 S., R. 7 W.	Dependent Resurvey & Survey		
T. 37 S., R. 1 E.	Dependent Resurvey & Subdivision of Section 27		

TrigStar 2012



■ *Joe Ferguson*

The Professional Land Surveyors of Oregon had another good year of Trig-Star testing.

I would like to thank those of you that gave your time and energy again this year. Without you and your efforts, we could not possibly get this done. I would especially like to thank those of you who stepped out of your comfort zone and took on either a presentation and/or a test. It is not easy, but it is very rewarding.

We had a few high schools this year that could not find time for either the presentation or the test.

It seems like this has been very challenging for some schools this year. I think the key for us as an organization is to get into the schools in September, even before school starts, and make contact with the math teachers or department heads. I will make up some handout material and get it to you in August.

Please contact me if you would like to join this very prestigious group of fine professionals who give back to the community through the giving of their time and talents.

The State Winner this year is Wilfrid Gao of Valley Catholic High School in Beaverton, Oregon. His teacher was Kipp Johnson. Al Hertel from the Pioneer Chapter was the proctor.

CONGRATULATIONS Wilfrid, Kipp and Al! ◊

Sprague High School TrigStar Competition

March 20, 2012



Hosted by the Willamette Chapter
Proctored by Daren Cone



Scott Kent, Ph.D., P.E., from AFI Associates in Corvallis performs an accident reconstruction survey on Highway 6 near Gales Creek. Scott is on a one man crew shooting the tire tracks without going out there and possibly creating a second accident.

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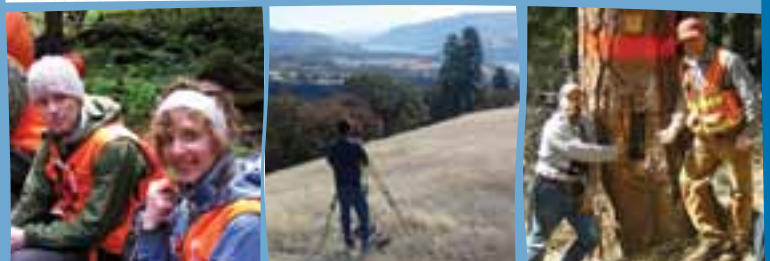
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What we can learn from planners

■ Renee Clough

Shortly after I passed my PLS exam, Lloyd Tolbert made a half-joking comment to me that I was now a “double threat” (referring to my having both survey and engineering licenses), but if I got a planning certification I would be a “triple threat.” I have never been one to pass up a challenge, so I decided to take the American Planning Association’s exam to become an accredited planner. In studying for the exam, reading the APA’s monthly magazine and performing certification maintenance I learned a lot about planners that I didn’t know before.

One thing that has struck me is how much influence they have gained in a relatively short time. Surveyors can trace their profession back at least as far as the Egyptian pyramids. The tools to perform surveying have changed significantly since then, but for the most part the profession hasn’t really changed much. Planners often try to trace their profession back to a variety of historical points—the ancient Romans, the laying out of Washington D.C., the 1850s expansion of Barcelona, etc. However, none of these “roots” have much in common with planning as we know it today. As far as I am concerned, planners can realistically trace their profession back to the Advocacy Planning movement in the 1960s and 1970s, but on a generous day, I would give them back to the 1926 Euclid zoning court case.

As much of an unnecessary pain as many surveyors see planners to be, there is no denying that they have managed to achieve exponential growth in their profession. While surveyors have been complaining

about the market share being “stolen” by GIS, machine control, etc., planners have been successfully convincing the government and private citizens to give them more market share (some might say power) every year. Is there anything surveyors can learn from planners to help regain/maintain market share?

I believe there are several things planners are doing correctly that surveyors either aren’t doing, or aren’t doing as well. The first, and probably most significant thing is creating a sense that they fulfill a vital role. It is hard to say “no” to someone when they say their profession is responsible for making your city a healthy, comfortable place to live. Some might argue that planners aren’t really responsible for a new business coming to town or pedestrian safety improvements to an arterial road, but planners believe this is true. This is one of those situations where saying something enough times makes people believe it, which leads to it actually becoming true. Planners are being consulted by, or even hired by, industries and government agencies for technical work that is only loosely, or not at all, related to what they were doing only ten years ago (such as traffic safety studies or analysis of soil suitability for farming).

Another thing planners have that is relevant to the ACSM/NSPS changes: a strong national organization. The American Planning Association (APA) is the national association and each state has a chapter. The organization’s structure gives it a lot of cohesiveness which leads to a lot of influence. In addition, it concentrates the finances and activities at the national level so

that efforts they undertake can be more unified and better funded.

The APA is extremely active politically and judicially. They are very active when it comes to lobbying at both the state and national levels. If legislation, a budget decision or any other political decision is being made about a topic that is even mildly related to planning (environmental restrictions, light rail funding, etc.), they are there expressing their opinion multiple times to all that will listen, and often even to those who won’t listen. They also keep a close eye on all court cases remotely related to planning and often file *amicus curiae* (also known as “friend of the court”). *Amicus curiae* are filed at the appeals level by parties not directly involved in the case, but who have additional information or an opinion they feel should be heard.

Planners love performing outreach. Their job relies on obtaining public input on many of their plans and policies—which is an easy avenue for also educating the public about their profession. They often go far beyond this though. I recently read an article about a planning-oriented high school. The students learn about math by performing statistical calculations to project the future population of their community, they learn English by writing neighborhood plans, etc. They set aside a month at the national level to “celebrate” planning and give awards to those communities that perform the most impressive/visible activities.

Lastly, planners are comfortable voicing their opinions publicly. Human nature tends to follow those who can

Continues on page 17 ►

AICP: Is it worth it?

■ Renee Clough

AICP is an acronym for the American Institute of Certified Planners which is a branch of the American Planning Association.

As I mentioned in the article, “What we can learn from planners,” I am a certified planner. It certainly has its pros and cons, but I believe it is a good career move for me and could be for others as well. Sure, surveyors love to bash planners (and I admit, it is often for good reason), but that doesn’t mean there isn’t something to be gained from becoming one.

I spend most of my days on projects related to land development—property line adjustments, site plan reviews, partitions, etc. Most of my projects involve submitting at least one application to the planning department. I’m in the early stages of my career and expect a lot of things to change between now and retirement. This includes the expectation that planners will continue to become increasingly involved in the land development process. I will not be the least bit surprised if there is a requirement for a planner to be involved in the application preparation for partitions and property line adjustments. I also will not be the

least bit surprised if planners become a licensed profession in Oregon.

I haven’t actively utilized my certification and don’t expect to in the near future. However, with these two visions of the future in mind, I see my AICP as being an insurance policy. Invariably as professions get more influence, it becomes harder to “join up.” I figure that by getting my AICP now I don’t have to worry about changes in the certification process; and I expect that I will qualify for grandfathering when a license is required.

Planners are very proud of their AICP exam and believe it to be quite challenging. By comparison with the FE, PE, FLS and PLS exams, I found it to be easy (especially compared to the PLS). One of the best things I learned from the prep class was that it is a membership exam, *not* a license exam. AICP is a semi-exclusive club that wants its members to espouse their beliefs and values and assumes that you know how to plan if you qualified to take the exam. My studying consisted of reading one

reference book and all the material on the APA website. I finished the exam in a little more than half the allowed time and passed with a higher score than the average AICP.

One thing to keep in mind is that the AICP credential is largely targeted at directors of public planning departments. The majority of the material I studied was still relevant to lower level staff in a public planning department or a private practitioner, but there is a need to learn (or at least, remember long enough for the exam) things like how to budget a department in a public agency.

Unless I need to cash in on my insurance policy by getting a license, the greatest benefit I have seen from obtaining the AICP is a greater insight into planners and their priorities. By understanding their priorities, I can better explain how a project meets the code criteria or why it should be granted an exception. I can also better explain to a client why the city created certain code criteria; while this may not make the client like

Continues on page 19 ►

What we can learn from planners, *continued*

talk to people without exhibiting discomfort. If a person is able to comfortably, clearly and concisely describe their job and why it is important to a stranger, that person will be much more convincing than if they were nervous and rambling.

I don’t have any good action plans for how surveyors can start practicing these things themselves. One thing that

seems clear to me is that, while some of these could be used to make our current efforts more effective, we will likely continue to lose market share until we make some rather significant changes as a profession. We need to start embracing and integrating related industries instead of fighting them. Rather than complaining about GIS and machine control taking work

from us, we need to find ways to make them part of the survey profession instead of a separate profession. I believe we would also benefit from a stronger national organization to which we all belong and of which PLSO is a subordinate branch (and, yes, I know some of you will accuse me of treason for saying that). ◉

Cache, Muggle, FTF and GPSr?

■ Ryan Godsey

Are these the latest text messaging code words used to summarize our classified conversations? No, it is much more exciting than that. These are a handful of the many acronyms and terms used in the treasure hunting world known as geocaching. You may be asking yourself “Geowhat?” or you may already be punching in the web address I’ve provided at the end of this article to check out the list of geocaches placed by “PLSO Oregon Surveyor.”

For all of you geowhaters, geocaching is a real-world, outdoor treasure hunting game using GPS-enabled devices. Participants navigate to a specific set of GPS coordinates and then attempt to find the geocache (container) hidden at that location. Containers range in size from smaller than a pencil eraser to larger than a 5 gallon bucket; commonly the size of a lunch box or an ammunition can. All caches should include a logbook, the rest is up to your imagination. When you find a cache, simply sign the logbook and exchange items if you wish.

The first documented geocache was placed May 3, 2000, near Beavercreek, Oregon and has grown to be an

international hobby; an obsession for some. These days, there are over 1.5 million active geocaches with over 5 million geocachers looking for them.

The game of geocaching has evolved over the years. For many, just finding the cache was not enough, they wanted to share their finds with everyone. Then came trackables, small items or coins with unique numbers that can be logged in and followed as they travel around the world, or disappear if they are unique or collectible. There are currently over a dozen “cache types” and countless trackable items.

You may have seen geocachers in action and wondered what that person is doing waving a handheld device around in the air or looking through the bushes in your favorite park. Either way, they probably attempted to act normal when they realized that you were watching them. Experienced geocachers know to keep an eye out for the non-geocaching “muggles.”

With summer in full swing and the fall recreation season right around the corner, I encourage you to get out and experience geocaching. In Oregon, we are fortunate to live amongst one of the most beautiful and diverse landscapes

in the world. You will find a geocache in virtually every area that you choose to play, whether it is on the water or at the top of a mountain. There are no age limits for this distraction from the daily grind. Geocaches are rated with their difficulty to find as well as the surrounding terrain so you know what to expect and can plan your adventures accordingly. On one trip, I had four generations of our family participating—including my 2-year-old daughter, my mother and my 98-year-old grandmother. Who doesn’t like finding treasure?

PLSO, together with the Oregon Association of County Engineers and Surveyors, the Oregon GPS Users Group and the NSPS, established a geocache program which has a goal of promoting the surveying profession at national and state levels. Several PLSO members have placed and maintain geocaches throughout Oregon. If you are interested in participating, please contact the PLSO office.

The PLSO geocaching page can be found at www.geocaching.com/seek/default.aspx then enter “PLSO Oregon Surveyor” in the “hidden by username” field. ☺



Examples of geocache coins

AICP: Is it worth it?, continued

the criteria any better, I have found that it reduces their frustration. I have also noticed that planners reviewing my work tend to defer more to my judgement when it comes to grey areas of the code; although I don't have any concrete evidence or examples so it may just be in my head.

I have found two downsides to the AICP credential: clients viewing me as competition, and the expense of obtaining and maintaining the credential. Roughly half the projects I work on are headed up by a company that markets themselves as planners. If I used my AICP credential to draw work away from them, I would likely be successful at getting some projects, but would lose referrals from them on future projects. I am not anxious enough to reinvent myself as a planner to go this route. Instead, I have made a point of explaining to those clients that I obtained the certification so I can better understand how they approach a project and as an insurance policy against the day when it is needed for land division work.

Like all insurance policies, I am paying an expense now for an eventuality that may not happen. Obtaining the AICP certification was certainly not cheap and maintaining it isn't cheap either. To apply for the exam you must be an APA member (\$250/year) plus pay an exam fee (\$500). In addition, I chose to take an exam prep class (\$125) and buy the most common reference book for planners (\$107). Once you have passed the exam and have the certification, you must obtain 32 Certification Maintenance credits (similar to PDH credits for surveyors) every two years. There are some free options for the credits, but not enough to get all of them free and the ones that aren't free tend to have a higher unit cost than surveying

credits. Lastly there are yearly membership fees that must be paid to both APA and AICP (total \$350/year).

In the end, I believe the AICP has been, and will continue to be, beneficial for me. I believe that it would be of benefit to other surveyors who also prepare a lot of planning applications or who interact frequently with planners for any other reason

(such as a city surveyor). It is certainly possible to obtain nearly the same benefits by reading planning books and websites. However, I believe that if you, or your employer, can afford the expense it is best to obtain the AICP as an insurance policy against a future when a planning license is required to prepare planning applications. ☺

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Off by a Hare

An old land surveyor's story

■ Kerry Bradshaw

This is a true story; well at least to the extent my aged memory can remember the story. I am attempting to relay events that lived their moment in history over 30 years ago. Of course, three decades ago, land surveying was much different. Technology was just hinting at some exciting changes, which eventually evolved into a firestorm of amazing innovations. Computers were very slow, limited and cumbersome. Field survey equipment was still “clunky” in comparison to today’s high tech flashiness.

I was employed by a private survey firm located in a beautiful area of far northern California. We were based out of a small town called Fall River Mills, but our work range covered a hundred or more miles in any direction. This was country-style surveying at its best, and I liked it. I had procured living quarters directly

My employer furnished the survey crew with modern field equipment, which at that time was a standard Wild T-16 theodolite and top mount EDM, which is short for “Electronic Distance Measuring device.” For you younger surveyors, a theodolite is the precursor to today’s total station and boy was it a workhorse. It served the same basic function as the total station, measuring accurate vertical and horizontal angles. The angle measurement data was not collected in a data collector, but read directly from the instrument and neatly (or sometimes illegibly) recorded in a field book. The theodolite had no distance measuring capability. Distance measurement was accomplished with the “top mount EDM.” The EDM was mounted directly atop the theodolite with precise fittings and could measure distances with near the same precision as today’s total stations.

unwittingly wise beyond his years. We called him “Riggins” and he had more tricks related to field surveying than anyone I have ever worked with.

I remember one instance when we were trying to shoot a distance across a canyon, basically from one ridge to the other. There was literally only one usable point from which you could see the reflecting prism, but any chance of a clean distance shot was obscured by a fir branch hanging 50' up a 36" fir tree. Riggins suggested I attempt to climb the tree and remove the branch. I said “NO,” my tone indicating more like “HELL NO!” He seemed to accept that decision and commented that we would take care of it in the morning. And the next morning we did. A few well placed shots from a Remington 300 Winchester Magnum hunting rifle promptly eliminated the obstruction and the measurement was taken, saving hours of additional field work. One of the major projects we were assigned that spring and summer was the field control work for a proposed 12-lot subdivision. This development was designed with larger tracts of two to five acres, so it required a lengthy, circuitous field traverse using our trusty T-16 and top mount EDM. The terrain in this northern part of the state offered plenty of rugged ground, but our work was pretty much confined to lower elevations and relatively level ground. The area was abundant with water and supported very large acreage farming. I have fond

A few well placed shots from a Remington 300 Winchester Magnum hunting rifle promptly eliminated the obstruction and the measurement was taken, saving hours of additional field work.

above a busy pizza parlor and I liked that as well. I was young, single, had few thoughts that were not about “me” and the concept of mortality was as foreign as “New York City.” Thus, the pizza parlor’s constant stream of young lady customers and the abundance of accessible cold beer had me pretty convinced I was living the good life!

Those of us who surveyed with a top mount EDM will always remember the “clinkity, clinkity” noise the old MAC II or the RED 1 would make as it dutifully computed a distance measurement.

The chief of our survey crew was a real character and although being not many years older than myself, was

memories of endless fields of strawberries. Of course, because of their utter abundance, they were justifiably stolen and eaten with very little guilt by local surveyors working in the area. The vast farm acreage was skirted by ample, undeveloped and virtually untouched land. There were minor scars from cattle grazing, but basically this was virgin landscape and very pleasant.

It was inhabited by scattered groves of evergreens, conifers and numerous unknown varieties of deciduous trees. There was some brush, but also open meadows, which proudly boasted tall wild grasses and were frequently dotted with patches of colorful wild flowers. Riggins explained that most of what I called wildflowers were actually weeds. I was never too sure about that. I trusted Riggins on anything related to surveying, but one of the first surveyors I ever worked for, "Old Charlie," had told me years ago, "You can't trust a man who drinks Oly!" Oly, of course refers to Olympia beer and there was no question Riggins did drink Oly. Some would say he drank more of the world's supply of Oly than was legitimately his share. I learned for a fact that he could drink more Oly than me; that is not a story I want in print.

We tied controlling corner monuments as we extended the traverse through the countryside. I was the point man and was usually roving out ahead of Riggins and the third crew member, "Slow Frank." Frank was the chainman, and he *was* slow; slow moving and slow talking. But he was almost as experienced as Riggins and an excellent instrument man as well. Slow Frank liked being the chainman. The owner liked *Slow Frank* best and verbalized it often, saying "Frank may be slow, but whatever he does, you can be darn sure it is right, and he doesn't drink." According to Frank, anytime there was a problem with a survey, the owner immediately blamed Riggins,

assigning the cause to excessive consumption of Oly the previous night. He did not like Riggins' fondness for drink, but nonetheless, there was an obvious camaraderie and respect shared between the three of them. I liked them all.

My responsibility as the rover was to layout and set up the traverse as we advanced. I would determine the best location for the next instrument set up, drive a 60 penny spike flush with

His reaction truly surprised me. I had been employed by of a number of private surveyors and they all demanded hard work, accurate results and not one of them was afraid to openly exhibit displeasure, either verbally or by facial expression, and most often, with both.

existing ground for the control point and identify the point with a number inked onto a lath firmly driven in near the spike. Riggins demanded ample lengths of fluorescent pink ribbon on both the spike and the lath, saying "You can't use it, if you can't find it." I had set many nails and spikes before, but found these particular spikes to be somewhat unique. They appeared larger than I had seen previously and the broad head was stamped with a raised grid pattern. We commonly described them as "waffle head spikes" in the notes. I always surmised the rough grid pattern on the spike head was intended to keep a hammer from sliding during the hammering process, although that was never verified. Anyway, when completed, our traverse had compiled a length of over three miles, started and ended at the same point, had 18 setup stations and "*did not close worth a damn,*" as Riggins put it.

Frank was visibly surprised at this unexpected and unacceptable misclosure outcome, as was the owner who astounded everyone when he mildly stated, "Well boys, in the morning you better go find it."

I detected no anger or disappointment in his voice or eyes, but more of an amused and knowing expression that suggested maybe he had been here before and understood the pressure this put on Riggins, Frank and myself; as we were responsible for the field work. His reaction truly surprised me. I had been employed of a number of private surveyors and they all demanded hard work, accurate results and *not one* of them was afraid to

openly exhibit displeasure, either verbally or by facial expression and, most often, with both. Despite the fact that no one got chewed out, I was selfishly relieved and comforted, knowing it was very unlikely that "I" had done anything wrong.

The following morning I learned our traverse distance error amounted to 0.63 feet. I also learned that Riggins and Frank had spent the previous evening in the office analyzing our notes and traverse data. They had decided there was no way to pinpoint the problem field measurement or even the general proximity of the error. The plan was to perform a quick rerun of the 18 leg traverse.

We were an experienced field crew and worked well together, so the retracement moved along swiftly. We set up quick, took only one check angle and distance reading, broke down the set up and moved on. I manned the backsight prism and Frank held sight on the ahead station. As we broke down the set up at the number 18 position, we were all once again completely and utterly mystified!

Continues on page 22 ►

Off by a Hare, *continued*

We had found no appreciable error in any of the original measurements. The T-16 and EDM had been calibrated, practically nullifying potential for a systematic error. The field re-measure procedure said there was no error, but numbers do not lie and a closed traverse must close. The thoroughly checked closure math said there is a 0.63 foot error in distance or angle or a combination of both.

Riggins did not say a word, instead methodically moved ahead to point number 1 and began to set up the instrument. Frank followed without comment as well. I started to question the wisdom of their direction, but intuitively knew this was a good time to keep it to myself. As he finished with the set up, Riggins turned and handed the field book to Frank. No words were exchanged, it was just understood that Frank would be running instrument this time. When Riggins ambled off toward the back station, I assumed correctly that I was to be the point man. Frank began to review Riggins' instrument set up and adjust it to his liking. I then realized the logic; we had each crew member doing a different function this time.

I was just approaching my assigned foresight station when I was startled by an unusually loud laughter emanating from the area of the instrument. I looked back to see Frank, squatting down and inspecting the ground beneath the T-16. The odd laughter was definitely generated by Frank. I remember being amused, as I noted that Frank even laughed *slow*. My confusion was heightened further when Frank slowly fell backward from his squatting position, landing face up and prone on the ground. The unsettling laughter, although in spurts, continued. I looked across at Riggins, who was leaning on his prism pole looking even more perplexed than I did. Genuinely concerned, we both half ran back to Frank's location.

Frank finally regained control and as he sat back up, he simply pointed at the ground beneath the instrument and said, "it's a turd." Riggins and I both focused on the area below the T-16. It took a moment of analysis, but we both grasped it at the same time and broke into laughter.

We had discovered the cause of the 0.63 foot misclosure in our traverse. Riggins had, in the original traverse and again a second time in our re-check traverse, positioned the instrument over something other than the spike I had driven in the ground at station #1. When you looked closely, the instrument had been set up (twice) on an object that looked amazingly similar in shape, size and texture to the head of the "waffle head spikes" we were using. The laughter was especially warranted because the incorrect set up point was a weathered and somewhat flattened hare or rabbit pellet (technically, a rabbit turd when one is in the woods). When you looked closely, the long lengths of ribbon, that Riggins had adamantly demanded, looked like they were hooked to the suspect rabbit turd.

On our return to the office, we recanted our findings to the owner. It was the only time I ever heard the "old guy" laugh. I also noted just a

glimmer of youthful sparkle in his eyes. Perhaps he was shuffling through all the stored memories of his younger surveying days—maybe to a time when the profession was not just a stressful business, but still had the feel of an adventure, full of learning experiences; some even humorous like being fooled by a random rabbit dropping. It must have spurred some strange emotions, because he took us down to the Silver Saddle Tavern and bought us a beer—even Riggins. The Silver Saddle was way out of character for an old surveyor as conservative and "church-going" as he was. I was fascinated by the tavern. Heck, it still had bullet holes in the walls from a (not too) historically rowdy past. I was disappointed we only stayed for one beer; I truly enjoyed those guys.

Well, with the mystery solved, it was time to reflect on lessons learned. For myself, even though I was young and inexperienced, I learned that mistakes and blunders happen to everyone. Riggins was without question the best all around field person I have ever worked with, yet still human. In the years that followed my escapades with Riggins and Slow Frank, I have had numerous "slip ups," some of them more serious and costly than being fooled by a rabbit turd. I have often relied on this very experience to avoid being too hard on myself and others when mistakes occurred.

I have tried to hang onto that youthful wonder and appreciation of all the challenges in land surveying. I know I have no regrets and as a whole, look back fondly on the years of what I call "fun, struggles and growth." But alas, I do believe that the technologically advantaged youth coming up behind me, probably view me as a grumpy "old guy." That perception will probably never change in the generations to follow either and that is "okay." ◊





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Acquiescence

■ *Knud E. Hermansen and Robert A. Liimakka*

Acquiescence, similar to the doctrines of estoppel and practical location, is an equitable doctrine that will fix the location of a common boundary in a location that may differ from the location where a surveyor would place the common boundary based on the rules of construction.

The doctrine of acquiescence is known in some jurisdiction as a consentable boundary. Some states have equated it to a boundary by implied agreement. The motivation for a court recognizing a boundary different from the record is to let boundaries that appear to have been settled to be settled. A person that sleeps on their rights should not be allowed to demand with passion what they have for so long ignored with indifference.

The doctrine of acquiescence generally requires three conditions exist. First, the record boundary must be vague or unknown. The purpose for this element is to prevent persons from usurping the legal requirement that parties alter the location of their record boundaries by written instrument. By requiring the boundaries be vague or unknown, the legal fiction is created that the parties-in-interest have not altered the location of their deed boundaries. Rather, the parties-in-interest have fixed a definite location for the boundaries described in their respective deeds. This fiction survives even though a surveyor would place the boundary with some confidence in a different location than where the boundary location has been historically recognized.

A second condition requires one party act by fixing the boundary in a location by definite monumentation or occupation that appears and is accepted as marking the boundary. The boundary so fixed by the one party cannot be based on fraud or deceit. In other words, the party in placing the monuments or barriers must have reasonably believed the objects are placed on the common boundary.

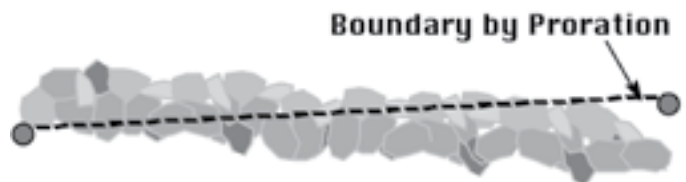
The third condition requires that the non-acting party recognize the barriers or monuments as marking the boundary. Recognition is sufficient if the individual does not contest the location.

The fourth and final condition is that the three conditions exist for some length of time that a reasonable person would have been expected to object or act had they disagreed. A long length of time is not crucial if the location of the record boundary is otherwise vague or

difficult to locate and the location of the monuments or barrier is reasonable to the location of the record boundary.

The following situation may give rise to a boundary by acquiescence:

Bill and Jane live next to each other in an old subdivision. Bill does his best to locate the common boundary he shares with Jane in order to build a rock wall. He makes measurements and sets stakes, eventually building the rock wall along a line between the stakes. Jane watches Bill make the measurements to locate the boundary and observes Bill construct the wall. For many years thereafter, Jane and Bill respect the wall as marking the common boundary. Twelve years later, Jane needs a survey of her property in order to build a garage. In performing the survey for Jane, the surveyor gathers considerable site and record information. Most of the original monuments have disappeared. The surveyor prorates the distances between found monuments that are located several hundred feet away with the following results shown in the diagram:



In the above situation, the court would be reluctant to adopt the boundary established by prorated distances over the location of the stone wall that has been accepted as the boundary for some length of time. The wall is located within reason to the record boundary. It has been accepted as the boundary for over 12 years. The upheaval and disruption in the neighborhood that would result with adopting lines that differ from the long standing occupation flies in the face of equity.

It is reasonable for a surveyor to adopt an occupation line as the boundary where the record boundary location is vague, difficult to fix, or a reasonable location of the record boundary is on or near the occupation line. Justice Cooley remarked on this very situation in the late 19th century using these words.

Occupation, especially if long continued, often affords very satisfactory evidence of the original boundary when no other is attainable; and the surveyor should inquire when it originated, how, and why the lines were then located as they were, and whether a claim of title has always accompanied the possession, and give all the facts due force as evidence. Unfortunately, it is known that surveyors sometimes, in supposed obedience to the state statute, disregard all evidences of occupation and claim of title, and plunge whole neighborhoods into quarrels and litigation by assuming to establish corners at points with which the previous occupation cannot harmonize. It is often the case when one or more corners are found to be extinct, all parties concerned have acquiesced in lines which were traced by the guidance of some other corner or landmark, which may or may not have been trustworthy; but to bring these lines into discredit when the people concerned do not question them not only breeds trouble in the neighborhood, but it must often subject the surveyor himself to annoyance and perhaps discredit, since in a legal controversy the law as well as common sense must declare that a supposed boundary long acquiesced in is better evidence of where the real line should be than any survey made after the original monuments have disappeared. Thomas M. Cooley, Chief Justice, Supreme Court of Michigan, 1864–1885 in *The Judicial Functions Of Surveyors*

Where the surveyor is convinced the location established for the record boundary is different from the markers or barriers acquiesced to by neighbors, the surveyor should report both locations to the client. In reporting both locations, the surveyor would be wise to inform the client that the acquiesced boundary may in fact be determined to be the ownership boundary based on the doctrine of acquiescence.

The surveyor may want to consider wording such as the following in a letter or report to the client when accepting monuments or barriers by the doctrine of acquiescence:

I have established your common boundary to coincide with a stone wall that exists between you and your neighbor. While the stone wall does not coincide with the measurements that were proportioned between existing monuments found beyond your common boundary, it is my opinion that the small difference between the measurements prorated and the measurements made to the wall is insufficient to overcome the equity that courts often find compelling when recognizing occupation lines that were allowed to exist for some time. The courts are often persuaded to leave things settled when it was believed by the parties to have been settled some time ago. You are, of course, at liberty to reject my opinion and advocate that your boundary be the

prorated line. Your neighbor may do so as well. In each case, I will be willing to explain both the proration method I used and my belief that the stone wall is ultimately the monument to the common boundary.

Where the surveyor has come to the conclusion that the location of the record boundary is different from monuments or boundaries that were believed to be the boundary, the following example may be used to illustrate the surveyor's opinion as communicated to the client:

I have determined the common boundary to be a line fixed between two monuments. The line was established by dividing the excess distance measured between the two nearby monuments in proportion to the distances shown on the original subdivision plan between the two monuments. It is not unusual to discover that the actual distance measuring in the field is different from the distance shown on the plan, especially given the age of the original survey. The current surveying technology and education of the surveyor far exceed those of the earlier surveyors.

My opinion places the common boundary in a location different from the wall that exists near this boundary. Although the method I have used to reestablish the common boundary was established by the court as a rule of construction, I feel compelled to warn you that the same court will often adopt occupation lines such as the wall to be the ownership boundary contrary to the record measurements. While I am confident in the methods I have employed in fixing your boundary, I would be foolish to predetermine where a court would place the boundary if asked to choose between the boundary I have established and the existing stone wall. I believe you would be wise to consult with legal counsel before taking any action in regard to moving the wall or asking the neighbor to do so.

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

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Making your summer vacation—and your life—count

■ Ron Kelemen, CFP, The H Group, Inc.

For many of us, life can best be described as hectic. Unfortunately, we can get so distracted by the pace and intensity of day-to-day living that we lose sight of what life is all about. If you're not careful, this leads to burn out and unhappiness. So here's my antidote, called *The Second Half Focuser*.™ It's all about goal setting.

First, **quickly write down the age you're going to die.** (I'm serious!) We all have some idea in our minds, based on family history and health. Whether it is 55 or 105, it doesn't matter. Just write it down.

Second—and most important—**write down how you would like to be the year you die in the following categories:**

- Relationships (spouse, family, friends)
- Physical (health, vitality, physical activity)
- Financial (net worth, income, security, legacy)
- Mental
- Spiritual
- Self-Assessment
- Accomplishments (travel, cultural, artistic, career, volunteer, etc.).

Don't censor your ideas at this point—just list as many as possible. This is what Stephen Covey calls “starting with the end in mind.” And by the way, if you have your health, wealth, relationships, and interests, the chances are good that you'll live much longer than the first number you wrote down.

These ends won't just happen the year you die. It may be too late to get started on some of them even at retirement. You need to get started on them now. Sounds daunting, but it is really easy if you break it down into small pieces. So, **for each goal, write down benchmarks of your progress for each of them for the following time periods:**

- 10 years
- 5 years
- 3 years
- 1 year
- 3 months
- 1 month
- 1 week

You may not be able to list your dream vacation between this week and a year from now, but perhaps you could start planning it. In terms of relationships, you can say or do

something meaningful for your spouse or children as soon as today. For health and other categories, you could get some exercise, read a book, or do something with friends. The point is to get started, then review your progress at least quarterly.

What's this got to do with wealth planning and money management? Plenty! Many of life's great goals often involve money, goal setting and prioritization. The most difficult cases we deal with are those clients without a sense of direction and purpose. Goals do four things for us by forcing us to:

- Focus on the most important factors in our lives
- Choose the best opportunities for our financial resources for what little time we have available
- Communicate and take action
- Be accountable

So, try this on a day off or on vacation. In fact, I challenge you to do so. Good luck with it, and have fun thinking about these things! ◉

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



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The Lost (future?) Surveyor

Photo by Lisa Joy Switalla

We found a marker indicating
a Quarter Section corner on the
line between two Townships
Do you know where it is located?



Lat. $45^{\circ} 36' 42.36''$ N Long. $122^{\circ} 00'07.24''$ W

Answer on page 1