The OREGON Surveyor

A publication of the Professional Land Surveyors of Oregon

Vol. 38, No. 3

2015 PLSO Board & Committee Chairs

CHAIR **JOHN THATCHER**
johnsue648@gmail.com

CHAIR-ELECT **LEE MYERS**
leemyers@oregontrail.net

PAST CHAIR **LEE SPURGEON**
503-656-4915 | lee@townshipsurveys.com

EXECUTIVE SECRETARY **AIMEE McAULIFFE**
503-303-1472 | execdirector@plso.org
www.linkedin.com/in/amcauliffe

PLSO OFFICE
PO Box 230548
Tigard, OR 97281
PHONE 503-303-1472
TOLL FREE 844-284-5496
FAX 503-303-1472
EMAIL office@plso.org
WEB www.plso.org

CHAPTER OFFICERS

Central 1	President	Dave Williams	davew@hwa-inc.org
	President-elect	Brian Reeves	breeves@surveyingunlimited.com
	Secretary/Treasurer	Kevin Samuel	kevin_r_samuel@yahoo.com
Mid-west 2	President	Dan Nelson	dann@branchengineering.com
	President-elect	Donn Rowe	donnrowe@msn.com
	Secretary/Treasurer	Brent Bacon	brent.bacon@eweb.org
Pioneer 3	President	Jim Greenman	jimg@hrs-engrs.com
	President-elect	Mike Rademacher	miker@compass-landsurveyors.com
	Secretary/Treasurer	Al Hertel	info@chsurvey6150.com
Rogue River 4	President	Herb Farber	herb@farbersurveying.com
	President-elect	John Voorheis	johnvoorheis@grantspass.com
	Secretary/Treasurer	Shawn Kampmann	shawn@polarissurvey.com
South Central 5	President	Mason Marker	mason.marker@oit.edu
	President-elect	TBD	
	Secretary/Treasurer	Rhonda Costin	costin.rhonda@gmail.com
Southwest 6	President	Derek Windham	emap@northbendcity.org
	President-elect	John Minor	johnminor@stuntzner.com
	Secretary/Treasurer	Jerry Estabrook	estabrooklandsurveying@yahoo.com
Umpqua 7	President	Kris DeGroot	kdegroot@co.douglas.or.us
	President-elect	Brent Knapp	knapp@ieengineering.com
	Secretary/Treasurer	Dan Saily	dan.saily@lrtco.com
Willamette 8	President	Colter Hessel	colterh@msn.com
	President-elect	Daren Cone	daren.l.cone@oregon.gov
	Secretary/Treasurer	Kyle Latimer	latimerky@gmail.com
Blue Mountain 9	President	Rod Lewis	lewis.survey@frontier.com
	President-elect	TBD	
	Secretary/Treasurer	Lance King	lance@ck3llc.net

AFFILIATED WITH NSPS WFPS

facebook Join us on Facebook: Professional Land Surveyors of Oregon

LinkedIn Join the PLSO group: www.linkedin.com

twitter Follow us at: www.twitter.com/ORLandSurveyors

COMMITTEE CHAIRS

ARCHIVES
Roger Galles, finditsol@aol.com

AWARDS
John Thatcher, johnsue648@gmail.com

BYLAWS/CONSTITUTION
Brent Bacon, brent.bacon@eweb.org

CONFERENCE (CO-CHAIRS)
Jered McGrath
mcgrathjered@hotmail.com
Jason Martin
jason@tothepointls.com

EDUCATIONAL GOALS & ACTIONS (EGAC)
Lee Spurgeon, lee@townshipsurveys.com

FINANCIALS
Gary Johnston, garyjohn@wildblue.net

GEOCACHE
Ryan Godsey, rgodsey@cesnw.com

GPS USERS GROUP
Dave Wellman
dave@wellmansurveying.com

HISTORIAN
Paul Galli, gallip@co.cowlitz.wa.us

LEGISLATIVE
Carl Sweeden
cslandsurveying@douglasfast.net

MEMBERSHIP
Gary Anderson
ganderson@westlakeconsultants.com

NSPS, OREGON GOVERNOR
Bob Neathamer, bob@neathamer.com

OACES LIAISON
Scott Freshwaters
sfreshwaters@chamberscable.com

THE OREGON SURVEYOR
Greg Crites, gac@deainc.com

PROFESSIONAL PRACTICES
Bob Neathamer, bob@neathamer.com

SCHOLARSHIP
Ben Stacy, bstacy001@hotmail.com

STRATEGIC PLAN
Gary Johnston, garyjohn@wildblue.net

TRIG-STAR
Joe Ferguson, joe@flspdx.com

TWIST
Tim Kent, takent@comcast.net

WESTFED
John Thatcher, johnsue648@gmail.com

Vol. 38, No. 3
May/June 2015

The OREGON Surveyor

A publication of the
Professional Land Surveyors of Oregon

Professional Land Surveyors of Oregon

Executive Secretary
Aimee McAuliffe
PO Box 230548
Tigard, OR 97281
503-303-1472
Toll-free: 844-284-5496
execdirector@plso.org
www.plso.org

Professional Land Surveyors of Oregon
Professional Land Surveyors of Oregon
@ORLandSurveyors

Published by
LLM Publications, Inc.
PO Box 91099
Portland, OR 97291
503-445-2220 • 800-647-1511
www.AssociationPublications.com

President
Linda L. Pope, linda@llm.com

Advertising
Dan Hartzog, danh@llm.com

Design
Lisa J. Switalla, lisa@llm.com

LLM PUBLICATIONS INC
Where Publishing Comes To Life

Editor's note: Susan Elizabeth Newstetter, 60, died May 1 at her Mt. Vernon home, with her husband and friends by her side.

A memorial service is scheduled for June 27 at 11AM, at Clyde Holliday State Park in Mt. Vernon, Ore. The memorial will include a potluck with outdoor cooking in Dutch ovens or solar ovens, encouraged in Sue's memory.

Camping at Clyde Holliday State Park is available on a first come, first served basis. Some rooms are available in John Day and Prairie City. If the State Park fills up there will be RV and tent camping available on private property, but there may not be hookups available at those locations.

Memorial contributions may be made to the PLSO Scholarship Fund, the John Day Community Garden, the Mt. Vernon Community Center, or the Grant County Library Foundation.

Photos, articles and a special "Lost Surveyor" will honor Sue in our July/August issue.

Contents

Cover photo

St. John's Bridge, Portland, Oregon—by Pat Gaylord

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

Address changes & business All notifications for changes of address, membership inquiries and PLSO business correspondence should be directed to Aimee McAuliffe, PO Box 230548, Tigard, OR 97281; 503-303-1472; *execdirector@plso.org.*

Editorial matters & contributions of material
The Oregon Surveyor welcomes your articles, comments and photos for publication. PLSO assumes no responsibility for statements expressed in this publication. Editorial matters should be directed to Greg Crites, *gac@deainc.com.*

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

For advertising, contact: Dan Hartzog, *danh@llm.com*; 503-445-2229, 800-647-1511 x2229.

To send display ads to *ads@llm.com.*
For submission guidelines, email *ads@llm.com.*

Knowledge

■ *Greg Crites, PLS*

Keeping with the thread that weaves through this issue, I'm going to repeat myself. Our younger members and our associates have probably heard this tune many times…our profession is top heavy with professionals over the age of 50. I'm not saying that's a bad thing, just that this is how the game has played itself out. I have some idea about how this happened but looking for reasons doesn't change the situation. In the face of this, I see the need for professional surveyors growing, not shrinking, as some would have you believe. We're not a bunch of marginalized old guys who have fallen victim to the Internet and its ability to disseminate knowledge to anyone with access. It's been said that a little knowledge in the wrong hands can be a dangerous thing. I'm reminded on a regular basis where our value lies. It's knowledge—and with all these senior citizens in our membership, there's a lot of it. Knowledge is needed to turn aside false assumptions, lack of context and outright ignorance of our industry and its complexities.

I have several "junior" surveyors working for me. I'm regularly confronted with questions that simply hinge on evidence. What's good? What's bad? I remember having those same questions when I was getting my start and frankly, there's a few surveys out there that I worked on that give me pause to wonder about. Did I make the right decision or did I miss something? In many of those instances, it was only through counsel with my mentors (far older than I) that we arrived at a solution that I could be confident in. Even then, uncertainty creeps in when faced with a complex boundary resolution, especially when you're confronted with a situation that pushes the boundaries of your competence. It helps to be able to network with your peers/mentors to talk about these situations and work through your anxieties.

Digressing a moment, yesterday an attorney called who is handling a boundary dispute between a former client and his neighbor. I remembered the client as soon as his name was brought up, so the next words out of my mouth were, "Which property are you talking about and when was my survey recorded?" It turns out that it had been 24 years since I did the work. Asking a 64-year-old person to remember a job done that long ago is a bit of a stretch, but surprisingly, I could still picture the location of the property and, though I didn't have the benefit of a copy of my survey in front of me, I also recalled that it wasn't a particularly difficult job.

I consider attorneys to be reasonably intelligent people, but I can't tell you the number of times I've been struck dumb at their ignorance of our work and the jargon surrounding it (do you recognize an opportunity here?). Trying his best to jog my foggy memory, he was reading information to me directly off my record of survey. He stated that the boundary in dispute (which wasn't one that I'd resolved) commenced at "a F D one divided by two inch I P from which a dashed line extended to one corner" (of my former client's property). I translated for him, "that's a found one-half inch iron pipe." Seemingly taken by surprise, he immediately remarked, "Oh, so that's not a property corner you set?" Of course you know that this fellow was clearly practicing outside his area of expertise and I think he knew I'd found him out. I asked him to email me a copy of my survey, but I haven't heard back. It may have something to do with the fact that I told him I'd destroyed all the records from the years I had my own survey practice. A little knowledge can be a dangerous thing!

Getting back to the value of our knowledge, experiences like these can't be found in text books. It's not a simple algorithm to be found in some computer software. That's the easy part. These are the episodes that build one of our strongest qualities, that of professional judgment. My premise is, therein is where our value lies. Taking opportunities to share the experiences that formed our judgment with the younger members of our profession is invaluable. Whether this is through workshops, networking, mentoring, or socializing over beers after a conference session, it doesn't matter. What we need to do is create opportunities for such sharing to occur. That's the purpose of our magazine, that's why we have conferences and workshops, and fundamentally, that's why we group together as a professional society. We could do better, and articles in this issue are exploring ways to get our arms around that. I encourage you to give some thought to how you can help open lines of communication about our skill sets and not just within our membership. There is a dire need to share with others whose work causes them to interface with us in the geospatial community. Certainly, there's a few attorneys out there who could benefit from dialogues with us in venues other than the courtroom. We've done a poor job of selling ourselves with them, with realtors, with right-of-way agents, with construction contractors, and so on. We need to fix that. What part can you play? ◦

The views expressed herein are mine and mine alone and in no way should be construed as representing ANY opinions shared by our membership or a stance on political issues by this organization.

INTRODUCING VRS NOW, WITH xFILL, IN OREGON

Now available in the Willamette Valley, Trimble VRS Now™ offers instant access to real-time, centimeter-level RTK corrections with no base station setup or maintenance. Start working immediately, and experience the increased reliability that GPS and GLONASS satellites offer. Pair your VRS Now subscription with Trimble xFill on your R10 to continue working through potential cellular coverage issues, avoiding downtime and increasing productivity. Delivered by satellite, xFill kicks in automatically so you're always on, even when your cellular network may not be.*

To purchase: Contact your Trimble Authorized Partner, GeoLine at 800-523-6408 // sales@geoline.com

For more information on VRS Now Service: Trimble.com/positioning-services

Trimble VRS Now service is now available in your backyard!

GeoLine | Trimble.

*Performance and coverage may vary pending conditions

Busy, Busy, Busy

■ *John Thatcher, PLS; 2015 State Chair*

If you have any qualms about PLSO paying for a lobbyist to watch out for us in Salem, I hope to ease your mind in this small space. It was our lobbyist, Darrell Fuller, who alerted us to the BOLI Prevailing Wage issue, even though that issue is not one of legislation. It was our lobbyist who provided critical information about SB297-A and hydrographers' attempt to register with OSBEELS, advising our legislative committee to reconsider its opposition and lay low for now. It is our lobbyist who attends Legislative Committee meetings, communicates regularly with PLSO (see his recent report on plso.org, "It's Halftime at the Capitol in Salem"), and presents a legislative workshop at the annual conference. Any legislative committee consisting of professionals who volunteer their time while working full time would find it very difficult, if not impossible, to do the critical work of a lobbyist. I was on the committee to choose a lobbyist for PLSO a couple of years ago. The committee vetted three candidates and chose Darrell Fuller. It was a very good decision. Before I leave the subject of the legislative committee, I express my deep gratitude to and admiration for Dave Williams of the Central Chapter for stepping up to be committee chair. Williams has already shown engagement and leadership. The committee is in good hands with Williams at the helm and Fuller watching our backs.

The PLSO board conducted a good meeting on April 18 in Eugene. One of the highlights for me was the report by Tim Brown on the Young Surveyors Network of Oregon (YSNO). If you remember, Amanda Askren of LSAW gave the keynote address at the PLSO conference on the subject of the Young Surveyors Network. And here we are, with YSNO already organized in Oregon! The group is chaired by Christopher Glantz of the Willamette Chapter, who also serves as the Oregon representative to the NSPS Young Surveyors program. At their first meeting on March 27, YSNO decided to meet quarterly. The group's action items include having a liaison from each chapter, creating mentorship and outreach programs, coordinating with other associations' programs, marketing, and of course, social media. Our executive secretary, Aimee McAuliffe, offered to create a YSNO page on the PLSO website that YSNO can control. If this group really takes off, maybe I can retire a little earlier than planned! Seriously, I am keenly interested in how surveying in Oregon and PLSO will evolve in the hands of the upcoming generation. A comment made by Tim Kent after Tim Brown's report really hit home, however. College survey programs are dying, and they can't be revived once they are dead. If we don't funnel students into the last remaining programs, and soon, those programs will be gone for good.

I saved this subject for last, but it is time to turn up the heat. I have kept the PLSO membership informed of the changes the board has made over the last couple of years in how the conference auction proceeds are being disbursed, and why those changes were made. This is a very touchy subject to some members, including former scholarship committee chairs. Traditionally, all the auction proceeds went toward scholarships—straight to the scholarship fund and sometimes straight to scholarships. In addition, the expenses related to the auctions were not deducted from the auction proceeds. That has changed. Starting with the 2014 conference, the auction was renamed the Scholarship and Outreach Auction. Other fundraising activities have been added, such as the bag-of-cash raffle and the 50-50 auction. Now, a system has been set up whereby members can designate where their donated auction dollars go, and all undesignated auction proceeds are split between scholarships and outreach in a proportion approved by the board at the next board meeting. The board also decides whether the expenses come out of the auction proceeds or out of the conference budget.

The motivation for this change is the ever-growing need to recruit young people into our profession, and hence the need for a robust outreach program, which requires a budget. One of the justifications for the change is the healthy condition of the scholarship fund (over $260,000 in principle and counting). In 2014 the earnings from that fund allowed the Scholarship Committee to award $14,500 in scholarships. The board is often reminded by PLSO members who teach in college survey programs that if there are no students, there will be no need for scholarships.

The Education Goals & Action Committee is tasked with coming up with a creative and effective outreach program. I believe we have a committee chair equal to that task in PLSO Past Chair Lee Spurgeon. Spurgeon visualizes a comprehensive program that will provide a complete path into the Geomatics profession—a step by step journey. Currently, when a student at a job fair wanders by the PLSO booth, he/she has a brief conversation with a member, sees some hardware and picks up a brochure or two…it ends there. The idea behind Spurgeon's vision is to create a

» continues on page 6 »

Time to Renew Your Membership…

So, Why Be a Part of a Professional Organization?

■ *Aimee McAuliffe, PLSO Exec. Secretary*

People don't just *want* to connect with others, they *need* to. In today's world it's pretty easy to get in the habit of waking up, going to work, coming home and repeating it over and over; something like the movie *Groundhog Day*. It can be hard to create your own network—personal or professional. That's where you can really benefit from a professional organization. Not only is it a pre-made network of professionals that inevitably become your friends because they share many of the same interests, but it can also be the connection to your future. Members can help you solve a problem, hear about the prefect job opening, or simply laugh over the crazy homeowner you had to deal with last week. Joining a group affords you security by granting a bigger voice. After all, a crowd is louder than one voice. It can also be called a party.

Since you are receiving this copy of *The Oregon Surveyor*, you've already made the decision to be a member of PLSO. We hope it's been a productive year. The association has worked to promote the profession to future students, update the website for better usability, sponsor teachers to attend the TwiST program, advocate for our interests in the legislature, provide interesting PDH opportunities, send leads from the "Find a Surveyor" directory, and introduce our newest member benefit—discount pricing from Office Depot and OfficeMax. That, of course, requires countless hours of dedication by your fellow member volunteers to make our organization work for you. Chapter meeting coordination, conference and auction planning, budget auditing and job fair attending folks that care about how our professional community is presented and where it's going in the future.

We are now entering renewal season—PLSO membership for the next year starts July 1. Not only does membership support your career, but dues go towards fostering a positive professional organization that works for you. We have long term goals for the future. Things like the Young Surveyors Network of Oregon, mentorship and ride-along programs, promoting surveying to the public and more. None of this can happen without your support.

Is there a project you wish PLSO would take on? Let us know about it. Join a committee and help make it happen. PLSO's voice is heard because of its active members. If you want a voice at the table, you need to get involved. There are plenty of committees that meet at different locations as well as teleconference. Committees such as Awards, Membership, Conference, Education & Outreach and Legislative can use fresh perspectives. Contact me at the PLSO office or find the Committee Chair listed under "About" on www.plso.org and get started.

Please help us by renewing as soon as possible. You can renew happen via mail or online at www.plso.org. Dues have not changed from last year, allowing you to budget accordingly. The savings you may utilize will also pay for your membership (SEE IMAGE BELOW).

Membership pays for itself. You matter to PLSO. Stay connected. Renew your membership today.

Membership cost

Corporate membership	$ 170.00
NSPS membership	$ 40.00
Total to PLSO	$ **210.00**

(PLSO pays NSPS discounted dues in bulk)

Possible savings

NSPS Membership		
PLSO member	$ 40.00	+$200.00
Non-member	$ 240.00	
Non-member PLSO conference registration for PDH hours		
PLSO member	$ 495.00	+$130.00
Non-member	$ 625.00	
Medical prescription		
PLSO member	$ 42.50	+$7.50
Non-member	$ 50.00	
Ink cartridge at Office Depot		
PLSO member	$ 56.99	+$3.00
Non-member	$ 59.99	

Building Our Associate Membership

■ *Mason Marker, PLS*

The PLSO membership committee has been exploring new ways to encourage membership in the organization and make membership more meaningful to current members. Recently, the conversation turned to asking what we're doing to encourage associate members in the organization. For many years, we have focused on how to recruit new members into our profession and PLSO. Much time and effort has been given to attending recruiting events, acquiring media presentations and supporting events such as TrigStar and TwiST. All of these efforts have been worthwhile and produced results, but have focused on attaining new blood into our profession.

What about the individuals who are already in the profession, but not professionally licensed? Every survey office has technicians that may (or may not) be working toward professional licensure. As a professional society, what can we do to encourage the unlicensed members of our profession to become more active and engaged in determining the future of land surveying? What can we do to make associate members feel that the PLSO is not an organization that they should join years down the road when they become licensed, but one that they should join now? The Membership Committee has identified three principle areas where the PLSO can help to better engage associate membership. These areas include mentoring, education, and social networking.

» continues »

» FROM THE PLSO CHAIR, from page 4

means to hold that student once you have grabbed his/her interest, to illuminate a complete pathway the student can clearly see that leads to a rewarding career.

There is a lot going on in our profession, and survey work has picked up. I suspect most of us are pretty busy these days. But please, take the time to let us know how you feel about issues. PLSO is here to serve the members. Your chapter officers represent you on the Board of Directors. Give them a piece of your mind. A good example of this is a motion coming soon to your nearest chapter to amend the bylaws by changing the qualifications for becoming a life member. Stay tuned, and stay busy, busy, busy.

Mentoring

Past PLSO Chair, Lee Spurgeon, lobbied hard during his time as Chair to formalize a mentoring program for associate members. A strong mentoring program could be beneficial for encouraging associate members to pursue professional licensure.

As an educator, I have the unique opportunity to speak with many OIT alumni who passed their Fundamentals of Surveying exam and are now working. A common perception among many of them is a sense of being "on their own" until they become licensed. Many individuals working through this midway point would appreciate the opportunity to discuss professional development, training, and work-related problems outside of the work environment. Spurgeon has suggested that as a professional organization, we could fill this need.

The PLSO could act as a liaison, connecting corporate members who are willing to act as mentors with associate members—helping to guide them through the years between the Fundamentals Exam and the Professional Exam. A mentoring program could also bolster skillsets for technicians who do not plan on becoming licensed. Mentors could also provide a source of encouragement for becoming licensed! It is highly likely that relationships built through a mentoring program would continue on through entire careers.

Education

A second way that the PLSO and its corporate membership can help encourage associate members is by providing educational opportunities. Many of our current training programs at both the chapter level and at the state conference target providing professional development hours for corporate members. While effort has been made to offer technician level courses during the last two conferences, many of our associate members are not aware of the opportunity. To better facilitate the education and advancement of our associate members, we need to make a concentrated effort to offer training opportunities and make sure that they know of their existence. Training at the associate level might focus on areas such as professional exam preparation, field calculations, advanced computer aided drafting and design, and basic business functions. Additional training in these areas would help those seeking professional licensure prepare for their exams and allow those wanting to remain on a technician track the opportunity to better develop their portfolio of job skills. Courses designed specifically for associate members could also have the added benefit of providing a gathering place for networking.

Social Networking

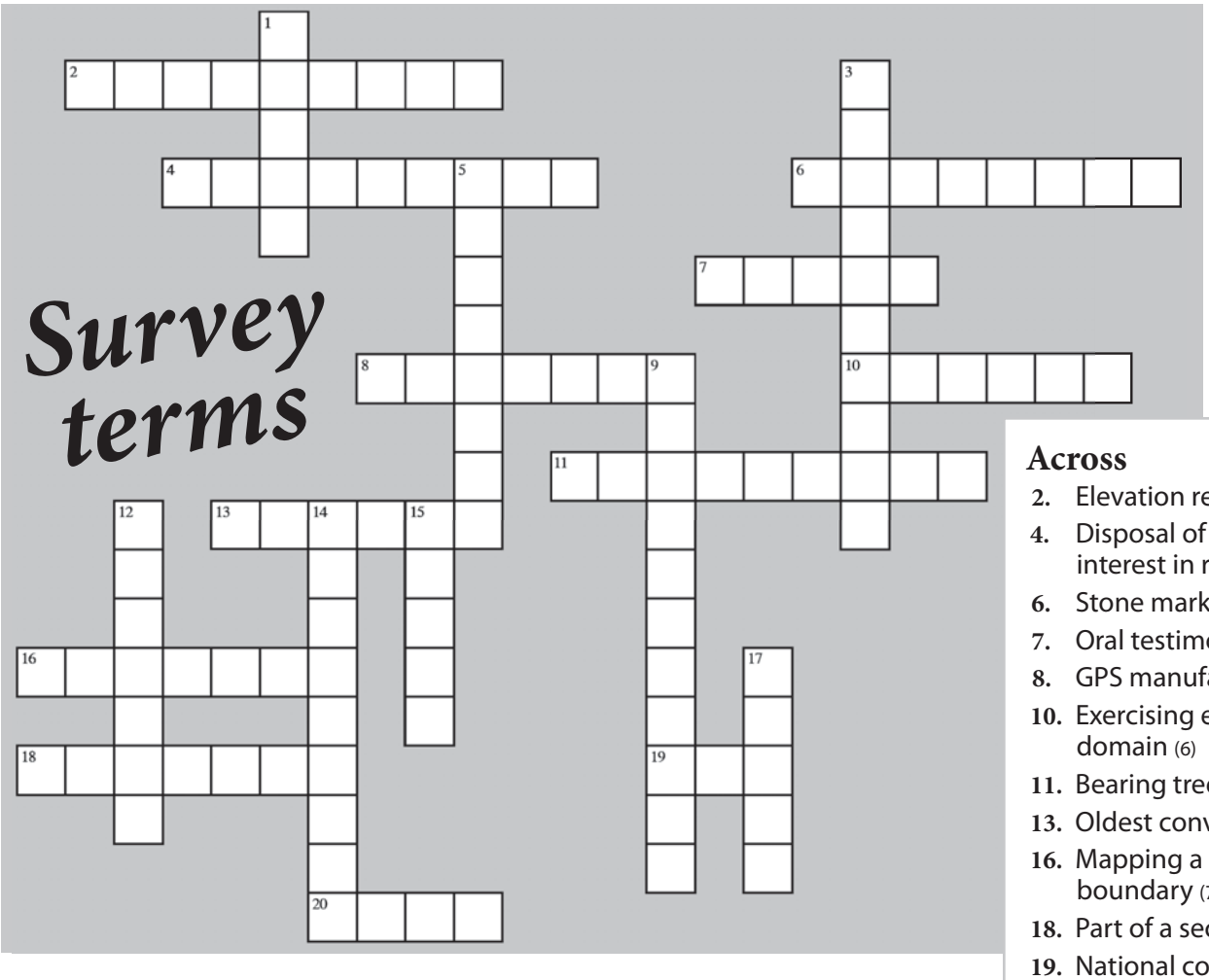
Social networking is another area we can use to encourage growth in associate membership. There are two things that we can do right now to improve networking opportunities. First, at the chapter level, we can dedicate at least one meeting each year that is focused on associate members. Corporate members should be encouraged to bring associate members from their office. The program for the meeting should include a presentation of interest to associate members. Topics might include preparing for the professional exam, latest technologies in surveying, tips and tricks for preparing plats in CAD, etc. Meetings that encourage attendance by associate members and provide them with information that is useful to them will encourage greater participation.

Second, the PLSO can help encourage associate member networking by supporting the emerging Young Surveyor's Network here in our state. The Young Surveyor's network is an effort by the International Federation of Surveyors (FIG) to provide support for young professionals starting their career in surveying and to, according to FIG, "create connections between "older" and "younger" surveyors." The hope is that this organization will be less formal than professional societies and provide an entry point for many potential associate members that might be less intimidating than the local chapter meeting. Chris Glantz has taken the lead in helping to promote the Young Surveyor's Network here in the Pacific Northwest and visited the Oregon Tech campus last month to encourage students to join the organization. While starting an initial recruiting effort at a school is a good beginning, it is important to remember that this program is primarily designed for young professionals. Individuals that are working in the field and meet the definition of a PLSO associate member may be overlooked in this effort unless PLSO strongly supports this program and develops mechanisms to build networks and foster connections that we need to make with the younger generation of surveyors, we'll continue the sense of isolation young professionals and associate members share.

The PLSO membership committee is asking for your help in promoting our organization to potential associate members. Right now we have a total of 55 associate members which make up only about 10% of our organization. Associate members are potentially our greatest reservoir of recruits for conversion to corporate membership. Think about how you can help increase our associate membership! ⊙

The return of the PLSO Crossword Puzzle

■ *Greg Crites, PLS*



Answers on the inside back cover.

Across

2. Elevation reference (9)
4. Disposal of right, title or interest in real property (9)
6. Stone marked with an X (8)
7. Oral testimony (5)
8. GPS manufacturer (7)
10. Exercising eminent domain (6)
11. Bearing tree (9)
13. Oldest conveyance (6)
16. Mapping a water boundary (7)
18. Part of a section (7)
19. National coordinate system (3)
20. Spherical coordinate system centered on our planet (4)

Down

1. Measuring tool used by GLO (5)
3. Distribution of errors relative to record values (10)
5. Neighboring owner (8)
9. Possessory interest in real property (11)
12. The North Star (7)
14. Description of means and methods for performing a boundary survey (9)
15. Constellation where the North Star resides (5)
17. Center of aerial photograph (5)

This crossword puzzle was created with EclipseCrossword. Try it today—it's free!

Last issue's PLSO PUZZLER solution

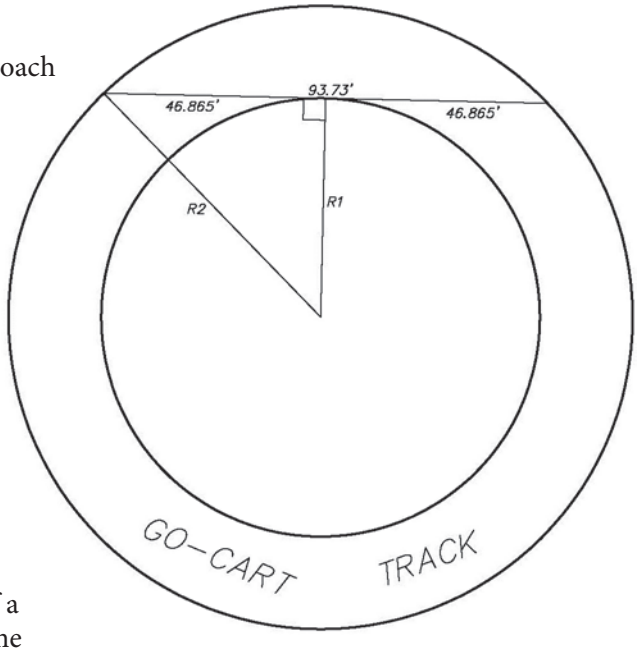
■ *John Thatcher, PLS*

Here are two ways you can approach the solution:

Trial and error. Pick a random R1, compute R2, then compute and subtract the two circle areas. Do it again with different numbers. Do you get the same difference in area?

Treat it as a limit problem. Imagine the inner circle getting smaller and smaller. What is the limit of R2 as R1 approaches zero? Why, it's 46.865! The chord becomes the diameter of the big circle: 93.73. What a coincidence. The area of a circle of radius 46.865 is the same as the difference in No. 1 above.

Isn't math perfectly beautiful?



$$R2^2 = R1^2 + 46.865^2$$

Defining the true title status of railroad right-of-way in the American West

A review of the California position announced November 5, 2014

■ *Brian Portwood, PLS*

Reprinted with permission of the author

Early in 2014, the problematic nature of railroad right-of-way (RR R/W) from a title perspective was vividly displayed in the case of *Brandt Revocable Trust v United States* (US) (134 S. Ct. 1257) and the potential impact of that decision upon certain very popular yet highly controversial surface uses of former RR R/W has been well documented. In reaching the High Court, the Brandt case focused the attention of land rights professionals around the nation upon the fate of RR R/W that is no longer in use for its originally intended purpose, which of course is not an uncommon scenario, since extensive railroad abandonment has occurred in recent decades. Near the close of 2014 however, the California Court of Appeals (CCOA) addressed another case involving RR R/W, which appears to be well positioned to unleash an even more powerful legal shock wave, with truly enormous consequences for participants in the utility industry, as this time the controversy relates to subsurface land use of both former RR R/W and currently active RR R/W. While both the Brandt case and the one reviewed herein are, at their core, controversies implicating title to land, this latter battle, which is now awaiting attention from the California Supreme Court, could ultimately produce the most explicit and detailed clarification of the legal status of vast portions of the existing network of RR R/W traversing the American West that has ever been handed down.

The historical developments underlying and leading up to the case of *Union Pacific Railroad (UP) v Santa Fe Pacific Pipelines* (SF) (231 Cal. App. 4th 134) superficially appear to present an example of typical commercial and industrial collaboration and progress, of a mutually beneficial nature, with respect to both the collaborators and the public. As we shall see however, serious adverse consequences can arise from unfounded and unwise assumptions regarding land rights, even after the relevant legal issues have effectively remained dormant for several decades, only to be subsequently exposed when friction between partners over financial matters brings those latent issues finally to the forefront. As is typically true, proper legal interpretation of granting language is the straw that stirs the drink, and in this instance the use of highly general language, characteristic of early grants made by the US, necessitates judicial analysis of certain very basic words, the full or exact meaning of which we may rarely pause to ponder. It could certainly be suggested, with the benefit of hindsight after the passage of a century and a half, that the original language employed in many US grants was chosen unwisely or without sufficient foresight, but our courts today recognize, as they must, the futility of such protests, and proceed to address the legal implications of the selected language with stern objectivity.

The panoramic scope of this powerful case, covering an incredible number of miles of RR R/W passing through six of our largest states[1] is especially well outlined by Judge Kussman of Los Angeles, making this 81 page opinion one of the most lucid and penetrating statements of the law to appear within the realm of land rights in recent years. This CCOA opinion, lengthy as it must necessarily be, in order to thoroughly cover the relevant issues, is a model of well conceived thought organization, which advances through an entirely logical progression, making it highly understandable, even for those who may be novices at reading the law, and it is in no sense tedious or overblown. Herein, we will initially trace the key points specified in the judicial narrative outlining the essential events that comprise the backstory, before examining the vital legal analysis and conclusions leading to the decision itself, and ultimately we will take note of the potentially major ramifications this battle may hold within the arena of title law. As is always the case, the reader is advised to strive to maintain an objective perspective, discarding any personal biases, inclinations or preferences, while recognizing the particular parties for what they are, mere players on a stage, in whose shoes as litigants a myriad of others have stood before.

As the Civil War drew to a close, a renewed national focus upon populating the west, and fully utilizing the valuable resources therein, lifted the national expansion effort to a position of elevated priority. Many of our western states were not yet formed of course, and the west was substantially comprised of public domain, land which was subject to use or disposal by the federal government. Railroads, representing a still relatively new form of technology at that time, were poised to aid mightily in the opening of the west, and this was recognized by all, leading to legislation which was

» continues on page 10 »

» RAILROAD RIGHT-OF-WAY IN THE AMERICAN WEST, from page 9

intended to exploit that technology in the subjugation of the vast and remote expanses stretching to the Pacific Ocean. Even before and during the Civil War the value of the rapid new form of transportation provided by railroads, for both military and national expansion purposes, became clear to leaders at the federal level. During the 1850s and 1860s the US Congress issued various railroad grants, most notably the Pacific Railroad Act of 1862, amended in 1864, under which the creation of RR R/W upon the public domain was authorized, and which also bestowed title to countless sections of that land, although much of it was as yet unsurveyed, upon numerous railroads. In hindsight, the wisdom of such grants may be questionable, and certainly as we now know, their lack of linguistic specificity was destined to precipitate untold numbers of controversies, but the grants were clearly not absolute in nature, and quite significantly, as noted by the CCOA, mineral rights were expressly excluded and reserved unto the US.

Even at the time of the earliest grants, the true or exact nature of the legal interest embodied and conveyed in those grants was at least somewhat unclear, and there is scant if any evidence that any deep thought or concern was given to that matter. National urgency was present and seemingly boundless opportunities beckoned, so legal technicalities were definitely not the foremost considerations of the day, thus the railroad work went furiously forward, based at least in part upon the unsound notion that the railroads had been legally endowed with full control over all RR R/W. During the 1870s however, serious concerns relating to the land rights associated with RR R/W began to arise, in effect the tremendous power of the railroads became clear to all, and settlers began to realize that they were effectively competing with the railroads for valuable lands, so many of them came to view the railroads as enemies. The political impetus generated by this swing in the public perception of railroads motivated the General Right-of-Way Act of 1875, widely regarded as the most important nineteenth century Act of it's kind, which was enacted with the objective of limiting such grants going forward. Aside from less relevant matters, the Act of 1875, as well as many subsequent Acts which were modeled upon it and were enacted in the same spirit, clarified that all RR R/W created thereafter upon the public domain was to be granted to the railroads only as an easement interest, while the fee interest in the lands bearing the railroads was retained by the US, for subsequent disposal to settlers.

Reams have been devoted to railroad title controversies set in every western state, and the resultant litigation and legislation that came to pass during the late 1800s and early 1900s, yet much more still could be written on that subject, particularly on the matter of railroad abandonment and it's legal consequences, but that separate pathway leads to the aforementioned Brandt case. For the sake of brevity here, we will observe only, as did the CCOA, that during the first century of railroad construction and development in this country the US Congress "passed laws governing subsurface oil and gas pipelines through federal lands, providing for annual rental payments to the government"[2] while pointing out that such federal action was fully consistent with the federal retention of existing subsurface interests such as mineral rights, under all prior federal laws pertaining to RR R/W. As all experienced land rights professionals know, the intent of a grantor always represents a powerful factor, whenever disputes over land rights arise, and as this case richly demonstrates, when the US is the grantor that rule is only amplified in significance. Having thus set the stage for the players, we next turn to the portion of this saga outlining the acts of the parties themselves, commencing with the relevant acts of their predecessors, in whose shoes the present litigants stand.

In the relevant areas, Southern Pacific was a predecessor of UP, and was evidently the holder of the RR R/W at issue, operating trains thereupon, during the 1950s. SF already had an existing corporate relationship with Southern Pacific, the two entities were legally sisters, subsidiaries or branches of the same organization, functioning as partners, and presumably some SF facilities already existed within the relevant RR R/W, so their relationship was genuinely close and mutually beneficial at the time of it's advent. With the national economy humming along during the post war boom, and the need for further development of rail and pipeline delivery services plain to see, the original pipeline easement and rental agreement, which would later prove to be so problematic, was forged. Also during the 1950s however, trouble was already brewing elsewhere for UP, as a federal case originating in Wyoming, and quite ironically involving UP itself, played out (*US v UP* - 353 US 112) in which the Supreme Court of the United States (SCOTUS) clarified that the land rights held by railroads under all federal grants were limited in scope to those uses which could be properly characterized as serving railroad purposes. As of that date, it appears at least possible that no issues or violations had arisen as a consequence of the land use being made by SF in California within the RR R/W, since the two entities were in legal effect unified, so the operations of either one were closely tied in a mutually contributory manner to the operations of the other. The seeds of future difficulty for UP had already been judicially planted however, as the myth that RR R/W typically constitutes a fee interest had just been conclusively exploded.

The ensuing period of three decades, starting in the early 1950s, apparently saw a continuation of the primarily amicable and harmonious relationship between the pipeline operations and the rail operations, and presumably both expansion of services and mutual profitability marked this period, leading to an unspecified number of additional easements being granted to SF. Through a series of corporate machinations however, the close relationship of the rail and

pipeline companies ended in 1983, and henceforward the two entities were thus compelled to deal with each other at arms length, as typical separate and distinct corporate operations. The initial action in this regard was a new master agreement pertaining to the presence of the pipeline within the rail corridor, and the rental payments were obviously a major aspect of this agreement. This 1983 agreement apparently proved to be workable for at least a few years, but in 1988 Rio Grande acquired the railroad interest, and for unknown reasons things evidently began to turn sour. In 1991 corporate attorneys first engaged, in an unspecified California courtroom, setting in motion the extensive chain of litigation which has persisted to this day. As noted by the CCOA, the motivating factor at that point in time was the desire of the railroad executives to raise the rent being paid by the pipeline company, and with that objective counsel for the railroad made the fateful decision to file an action against SF, seeking to have the 1983 agreement judicially rescinded, for the purpose of revising the agreed rental rate.

The 1991 litigation proceeded for a few years, evidently without resolution, until a settlement agreement was entered by the combatants in 1994. This settlement dealt with the issue of past rent and anticipated a new rental rate, which was to apply for a 10 year period, perpetuating this corporate collaboration at least to that extent. Some level of financial discontent with their relationship evidently persisted however, and thus matters apparently stood, with the parties embroiled in a smoldering dispute, when UP acquired the railroad interest in 1996. By that time, each side had already invested millions of dollars in resolving their issues, but even more millions of dollars were at stake under the rental agreement, so they continued to pour funds into litigation focused exclusively on the financial component of their arrangement. Questions regarding the validity and scope of the land rights interest actually held by the railroad were raised at some point, but they were summarily dismissed at the trial court level, and they continued to be treated as an ancillary or peripheral matter at the appellate level, during the remainder of the 1990s and on through the first decade of this century. Thus the proverbial elephant figuratively occupied the courtroom for several years, silently watching as exorbitant expenses were piled up by both opponents, during the potentially pointless proceedings, in the absence of judicial recognition that the land rights component of the controversy posed a genuine threshold issue.

Early in 2014 UP emerged victorious from a Los Angeles County Superior Court, in the context of the rental dispute, having obtained a $100 million dollar award, leading to the present appeal brought by SF. At this point in time, the pipeline system occupies more than 1800 miles of RR R/W, all of which was at issue for rental purposes, apparently classified or designated by the parties as comprising over 1000 unspecified "pipeline segments."[3] An unknown amount of that RR R/W exists solely by virtue of federal grants, and is located either upon land which remains public domain today, or upon land which was patented out of the public domain subject to the RR R/W, and thus now represents some form of privately held title. Portions of the RR R/W have evidently been either sold or abandoned over the years, but no details pertaining to any such locations are provided in the text of the CCOA opinion, since the core title issue to be addressed and resolved is the original nature of the land rights that were acquired to create the RR R/W, rather than the subsequent fate of those rights. As Judge Kussman very poignantly, and very ominously for UP, stated at the outset: "A recurrent, yet heretofore unresolved, theme permeating this and prior cases between the parties is the nature of the Railroad's interest in the property through which the pipelines run…The absence of a determination on this issue undermines the judgment."[4] Reversal was coming, the only question was how intensively the CCOA would examine the frail platform upon which the alleged property rights of UP were perched.

The immense potential gravity of the inadequately addressed title factor in this complex legal equation would soon become quite apparent, as the primary legal question, which had naturally been repeatedly suppressed by UP, and had been judicially treated as a "third rail" until 2014, finally became the focal point of this conflict. That question of course was very simply whether or not the land being utilized by SF for pipeline purposes was really ever property of UP or not. Thus were the parties notified by the CCOA that arguably at least, none of their prior agreements are ripe for financial enforcement, since those agreements may have no valid legal basis in the context of title, making their ceaseless debate over financial valuation entirely useless and meaningless, with respect to a large portion of the RR R/W at issue, if not all of it. Of course it is quite possible, and probably even likely, that some portions of the contested RR R/W were acquired by UP or it's predecessors in fee simple, presumably by means of a typical deed from John Doe or any other fee land owner, independent of the aforementioned federal grants. In such locations, a perfectly legitimate relationship may exist between UP and SF, as fee land holder and easement holder respectively, so the current land use and rental agreement between these parties is presumably applicable to some locations, in which the federal land grant issue is irrelevant, thus their current agreement could not simply be entirely set aside, the CCOA determined, it required judicial scrutiny.

Moving on from the historical scenario, related above, to the legal analysis performed by the CCOA with reference to title, the first pivotal issue addressed by the CCOA is highly elementary in nature, establishing the definition and meaning of the word "property" in the relevant context. This was necessary because the location of the rights acquired by SF from UP and it's predecessors were expressly described in

» continues on page 12 »

» RAILROAD RIGHT-OF-WAY IN THE AMERICAN WEST, from page 11

their agreement as being on or within the "property" of UP, suggesting that when they composed the contractual language the parties simply presumed that all RR R/W is comprised of the land upon which it rests, thereby acting upon a very common misconception. In the course of addressing this issue, the CCOA initially clarified that "land is not property"[5] highlighting the fact that the terms "land" and "property" are not synonymous, so they cannot properly be used as if they were identical in meaning, since property rights are most definitely not limited to land and can consist of many intangible things, such as a R/W easement, which is a right that blankets land, but is clearly not equivalent to land itself. Thus the CCOA had taken judicial notice of a key flaw in the contractual language that had been either employed by UP or agreed to by UP, which held the potential to devastate the landlord position taken by UP, and the CCOA set out to ascertain and define the legal consequences of that major linguistic defect.

In electing to focus upon this issue, relating to the manner in which the location of the relevant SF facilities had been described by the parties in their agreement, the CCOA declined to take the shortcut that was taken during all prior judicial efforts to resolve this rental dispute, and pass directly to the rent valuation issue. Instead, the CCOA treated the locational issue raised by the use of the word "property" in a descriptive manner as a threshold issue, which had to be dealt with before moving on to tackle the valuation issue, in order to determine which SF facilities were really within the scope of the existing contractual agreement. It was obviously unnecessary to engage in any valuation assessment, the CCOA understood, with reference to any locations in which UP had no valid basis upon which to control the activities of SF, so an enormous portion of the pipeline mileage at issue, perhaps the vast majority of it, stood to be dismissed from consideration, if the scope of the agreement were to be limited to SF facilities that actually utilized property of UP. For the past 20 years, throughout all of the prior litigation, the CCOA pointed out, those charged with reviewing this controversy had "essentially decided not to decide"[6] the property rights issue, perhaps deliberately steering a course around it on the grounds that it was an issue of such complexity as to be unfathomable. In addition, judicial attention had evidently been wrongly diverted from the title issue, the CCOA noted, by expert witnesses who misleadingly treated, or even expressly identified, the RR R/W as land held in fee by UP, which the CCOA naturally deemed to be wholly unsatisfactory, since that position is clearly unsupportable under the law.

Undoubtedly, the CCOA knew and acknowledged, UP holds some form of property right associated with each portion of the RR R/W, the core issue however is the physical extent of that right in the vertical dimension, because unless the rights of UP extend below the surface, those rights bear no direct relationship to the subsurface land use being made by SF in all typical locations. In other words, the litigants may be merely holders of vertically parallel rights, which do not physically intersect at all, in those locations where the pipe is below the surface, and that in turn obviously calls the alleged right of UP to issue subsurface easements or charge SF any amount of money, based solely upon the presence of an underground pipeline, into serious question. Fee simple title extends earthward and skyward indefinitely, but the same is definitely not true of easements, since they are all axiomatically limited to a specific purpose or set of purposes, which can operate to define the easement's physical extent and limitations, in a manner that allows the easement to fully serve the intended purpose, yet pose no greater burden than is truly necessary upon the servient land. While the rights of UP to the surface within the RR R/W are undeniable, and may even be properly classified as exclusive, that fact is legally insufficient to justify UP, the CCOA found, in exerting control over all subsurface land use. Thus the distinction between fee and easement interests was truly critical, the CCOA well realized, to the determination of the relative rights of the parties to occupy vertically separated corridors with their respective facilities, and the judicial failure to fully address that issue in the prior proceedings was potentially fatal to the monetary triumph of UP.

On the crucial property definition issue, the CCOA held that the parties must be bound by the full legal implications of the language which they selected for use in their contractual agreement, thus there can be no justification for any financial transactions, such as the disputed rental payments, with respect to any locations where it can be shown that the SF facilities are not spatially situated upon or within the property of UP. Under this holding, the easement and rental agreement may be largely if not wholly void, which would mean that SF holds no valid easement grants protecting substantial portions it's pipeline, and no such easements can be granted by UP, if in fact UP holds no interest in the land itself. Moreover, since only a fee title holder can create a valid easement upon or within his land by means of a grant, and no party can grant an easement in land owned by others, the litigants are effectively powerless to rectify the fallacious premise upon which their agreement is founded without the participation of untold numbers of other parties, at least one of those necessary parties being the US itself. The rights of UP, as viewed by the CCOA, in accord with the relevant decisions of SCOTUS, may very well be limited to the surface, and amount to nothing more than a blanket covering the R/W, with no element of depth, unless it can be proven that fee title to land itself is truly necessary to accomplish the specific mission for which the RR R/W was created. It is noteworthy that if the agreement document had been written to cover all pipelines "within and/or below the R/W", using purely locational terminology, no title issue would have arisen, but because the agreement employed the word

"property" the presence or absence of title was inescapably implicated, presenting a classic example of the fact that every word used in a contract must be very thoughtfully chosen.

To all appearances, the reality of the situation is that the word "property" was improperly used by the parties, in a poorly considered and shorthand manner, when documenting their agreement, they really meant that SF was agreeing to pay UP rent for any SF line or lines that were situated under the RR R/W, which in the misguided view of both parties were thus protectively blanketed by the RR R/W. Such an agreement could of course be characterized as a very foolish one on the part of SF on one hand, at least at first glance, since it would arguably appear that SF thereby voluntarily and unnecessarily subjugated itself to UP. On the other hand however, the agreement had the practical effect of shielding SF from the need to deal with any other parties, specifically the fee owners of the land in which the SF lines were installed, as long as those parties remained ignorant of their land rights, so in that respect it was a distinctly beneficial arrangement for SF as well as UP. In addition, the implicit deception regarding the title status of the land occupied by the RR R/W, which was manifest in the agreement, could have been attacked at any point in time on the grounds that it amounted to a conspiracy between UP and SF, to defraud the owners of the lands underlying the RR R/W, or at least to leverage their ignorance of their land rights, as a way of unjustly excluding them from any financial benefit derived from the combined industrial venture. The truth of the matter however, is far more likely to be that the entire land use agreement was simply a product of plain ignorance on the part of both UP and SF, as to the true nature and extent of the title held by UP constituting the RR R/W, in which event it was a monumental but innocent blunder.

Quite interestingly in this same vein, as noted above, the problematic agreement originated in the 1950s, when the railroad and pipeline interests were in legal effect unified through close partnership, so it was definitely a mutually beneficial arrangement serving a genuinely common purpose at that time. That close relationship had been severed however, also as previously noted, which had a dual effect, not only turning the parties into adversaries, but also importantly placing them upon distinctly separate corporate platforms, with distinctly different objectives, which meant that they were no longer working in unison, as one entity with a common purpose, the great legal significance of which we will soon observe. Throughout the prior litigation, UP had maintained that the title issue was irrelevant, because there was never any controversy over which SF line or lines were subject to the contested agreement, and SF had contractually agreed to pay rent to UP in all of the relevant locations, without any regard to the title held by UP, so there was no need to embark upon an investigation of the nature or quality of any of the title held by UP. In addition, UP could have built a reasonable argument that the use of the word "property" in the agreement was simply a mutual mistake, and thus sought reformation of the agreement to eliminate and replace that word with words which better defined the location of the SF facilities, in accord with the true intent of the parties. Finding no justification for bypassing the title issue however, the CCOA deemed it necessary to squarely address that issue and proceeded to do so, potentially awakening the many sleeping servient land owners to their opportunity to assault SF for making unauthorized use of their land.

One exceedingly important element in this legal resolution process, at least, was abundantly clear, and that was the fact that all RR R/W created by means of the federal RR R/W grants was intended solely to serve railroad purposes. Defining the full or proper meaning of the phrase "railroad purpose" therefore logically became the second issue of controlling significance to be addressed by the CCOA. Mindful that the federal grants in contention were not merely typical conveyances, they were federal laws, the CCOA reminded the litigants that like all other laws the meaning of such granting language is dictated solely by the will and the intent of Congress at the time the enactment was made. The well documented Congressional intent clearly demonstrated that the Act of 1875, and all of the relevant subsequent Acts, provided the railroads with only an exclusive easement running no deeper than the surface, the CCOA found, while observing that the Congressional intent regarding the land rights or property rights conveyed by the earlier Acts were not as clearly defined. Nonetheless, the CCOA concluded, there can be no question that UP held no fee interest in any portions of the RR R/W descending unto UP from the 1875 Act or any later Acts, because "the 1875 Act granted the railroad substantial rights to the surface…but it did not make the subsurface the property of the railroad"[7] since granting fee title to the subsurface to any railroad company was clearly deemed to be both unnecessary and inappropriate by Congress in formulating those Acts.

Having thus specified that any RR R/W acquisitions made after 1875, by virtue of federal grants, were not within the scope of the land use agreement between the litigants, and therefore required no valuation, the CCOA moved on to evaluate the rights of UP under the earlier federal grants, which contain no stipulation that the granted RR R/W consists of an easement. Once again, the decisive factor in ascertaining the scope of the title which vested in the railroads under those early Acts was the intent of Congress in using the phrase "railroad purpose", the CCOA emphasized. If any profitable endeavor in which any railroad might engage qualifies as an activity serving a railroad purpose, then UP could prevail, but approving such a policy would in legal effect give all railroads the capacity to define what constitutes a railroad

» continues on page 14 »

purpose on their own terms, leaving that phrase virtually meaningless, and entirely useless as a limitation mechanism, the CCOA recognized. At this key juncture, the CCOA opted to view the restrictive nature of the 1875 Act in the manner of a clarification issued by Congress, rather than a complete reversal of intent on the part of Congress. Since every action taken by Congress since 1875 had been restrictive toward railroad rights, the CCOA logically viewed this as a strong indication that Congress had in fact never intended to grant any title in fee simple absolute to the railroads. This position appears to be quite sound, given the fact that it fully accords with the long line of RR R/W cases decided by SCOTUS, leading up to the Brandt decision of 2014, all of which deny the proposition that railroads were ever endowed, by means of any federal grants, with any authority to extract value of any kind from the subsurface beneath any RR R/W.

The ultimate question then, to be answered in resolving the title component of this case, is exactly how to define the title held by UP under the early federal Acts, in terms of physical extent in the vertical plane, in a manner which accords with the intended scope of the land use that was envisioned or embodied in the early federal RR R/W grants. The CCOA has answered that question by balancing the apparent intent of Congress to endow the railroads with a title sufficient to carry out their basic mission, as a mode of transportation, with the equally apparent federal intent to reserve all land rights not truly needed by the railroad companies unto the people of the US. The property rights obtained by the railroads for RR R/W use under the early federal grants, the CCOA held, were more than an easement but less than a grant in fee simple, and in fact it is well settled that a fee title which is less than absolute in many respects can be legally created and conveyed. The railroads acquired a distinctly limited fee interest in the relevant portions of the RR R/W, under the early federal grants, the CCOA surmised, noting in so doing that SCOTUS has long approved the limited fee concept, in the specific context of RR R/W, and that the rights thus acquired were also limited in duration, being subject to reversion upon falling into a state of permanent disuse, with respect to the specified RR R/W purpose. Such an acquisition, made for any purpose requiring only surface use, carries no rights to make use of the subsurface for profit, the CCOA decided, it carries no more than a right to prevent any subsurface activity that would render otherwise useful ground useless by physically undermining the surface.

Citing numerous respected federal decisions relevant to the matter at hand, the CCOA poignantly illustrated the weakness inherent in the position espoused by UP, that any land use beneficial to a railroad company qualifies as a legitimate "railroad purpose". As Judge Kussman expressed it "rights-of-way must be used for railroad purposes…the right-of-way… must be used to construct and operate a railroad…The rental agreement between the parties is a private arrangement that serves each company's own interest, not the public interest for which the Railroad's rights-of-way were granted…Renting out the subsurface to a third party from a different industry for private gain cannot reasonably be considered a railroad purpose."[8] Thus the CCOA informed the parties that the only right held by UP extending below the surface of the RR R/W is the well known and time honored right of subsurface support, in other words, the right to preserve the surface in a useful state or condition by barring any underground activities that would damage the surface. Rarely has the legal significance of putting land to use for it's intended purpose, being cognizant of the precise legal limitations upon that use, and understanding the principle that an expressly specified purpose can control the physical extent of title, been so clearly displayed. Under this ruling of the CCOA, UP does have subsurface rights, but they are narrowly limited to support for the surface, thus only underground activities that harm the surface in a manner which leaves it unsuitable or unsafe for railroad tracks can be prohibited by UP, under the authority vested by any of the federal RR R/W grants.

The seemingly insignificant fact that the combatants were once corporate sisters in legal contemplation, as previously outlined herein, when their agreement was initiated, but are now strangers for all legal and contractual purposes, proved to be quite relevant, as can now readily be seen. If there were ever any validity in the premise that the pipeline operation was fundamentally part of the railroad operation, because the railroad drew fuel directly from it during the early decades of the arrangement, that premise was no longer of any assistance to UP, in the eyes of the CCOA. The SF facilities could not be successfully characterized as a "railroad purpose" Judge Kussman opined, because "one would have to engage in a terrible distortion of law and logic to find that somehow the railroad…obtained the rights to the subsurface underneath it's rights-of-way to do with as it saw fit…there is nothing…suggesting that Congress intended to give the Railroad the right to use the land under it's rights-of-way for non-railroad purposes, like renting it out to third parties."[9] Whether or not it can fairly be said that UP should have known better than to grant easements and charge rent for the use of land to which it held only an ambiguous, speculative or undefined fee title, perhaps really amounting to no more than color of title, if even that, with regard to the underlying land, is an open question. In failing to recognize the physical limits of that title however, UP can be found guilty of no error that has not been made by countless others in completing comparable transactions involving RR R/W, and therein lies the true gravity of the outcome suggested by this CCOA decision.

Having thus clearly communicated their conclusion on the portion of the conflict relating to the title issue, for the edification of both the litigants and the trial court, the members of the CCOA panel went on to address the valuation issue as

well, since that matter would also be relevant upon remand. Quite possibly, portions of the corridor at issue pass through sections of land which are in fact owned in fee simple by UP, and if in fact the tracks cross any such sections then technically no RR R/W exists within those areas, since no party or entity can hold an easement situated upon or within their own fee property. The presence of such lands along the corridor, upon which no RR R/W exists, could well explain why the parties made the fateful decision to describe the lands which they intended to be subject to their agreement using the generic term "property" rather than the more specific phrase "RR R/W." Nevertheless, as a fee simple owner UP has the right to grant easements across any such sections, or any other lands in which UP holds a right of full legal control embracing the subsurface, and if SF facilities exist within such sections, the agreement in contention would be applicable to those sections, so valuation would be relevant in those areas. Pages 43 through 78 of the CCOA opinion are devoted to the monetary issues, and are thus outside the scope of this review, which is focused solely upon title issues, but it is notable that within this valuation discussion the CCOA suggests that the agreement may prove to be applicable to about one third of the land which is now being mutually utilized by the litigants.[10]

The parties were thus left to cogitate upon what their strategy might be going forward, and perhaps to ponder entering yet another settlement agreement, in preference to potentially opening Pandora's Box, by setting out to litigate each problematic portion of the RR R/W as an independent quiet title action. The wide variety of land acquisition methods, which might be leveraged by UP if necessary, enumerated by the CCOA, including prior condemnation actions, prior quiet title actions or other court decrees relevant to title, existing state laws pertaining to marketable title, and potentially even adverse possession, make it clear that the outcome of the present action could precipitate numerous subsequent actions. Yet whether or not UP, as a railroad operator, truly acquired and holds the subsurface in fee in any such areas defined as RR R/W, in addition to the surface, remains very much an open question, and will remain so until fully adjudicated, which could well make it clear to legal counsel for UP and UP executives that any effort to secure such rights unto UP through further litigation could be one which would simply not be cost effective. Were the sum at stake in the present action not so huge, there can be little doubt that rational people would just drop the whole matter, but if the litigation does continue, and it proceeds down the track pointed out here by the CCOA, our nation stands to greatly benefit from this ongoing struggle, provided that it ultimately produces conclusive clarification of the true title status of all existing federally created RR R/W.

As an interesting sidebar item, not vital to the core title issue, which relates to the nature and legal status of the RR R/W as a direct function of the origin of that R/W, yet highly relevant to the overall valuation equation, the CCOA also addressed the assertion made by UP that even some lands which had been sold by UP, through which SF facilities passed, were subject to the contested agreement, even though now owned by various other parties, as grantees of UP. In other words, UP maintained that by virtue of reservation, in numerous conveyances made by UP over the decades, UP had deliberately and expressly retained a right of control over the SF facilities in such locations for rental purposes. Not surprisingly, given it's position on the core title issue previously documented herein, the CCOA was not receptive to this assertion by UP, and proceeded to foreclose it, while pointing out the fallacy embodied in it. "Congress clearly intended that a railroad's interest in it's rights-of-way would terminate once it no longer used or occupied the land. Continuing to have an interest in the land, and to generate revenue from it, would run directly counter to the legislative intent."[11] UP certainly can reserve easements when selling land, just as can any legitimate grantor, but no such reservation can be valid if the grantor had no such land right or property interest to retain. Thus it would appear that a very severe burden of proof, regarding the validity of any such reservations made by UP, will descend upon UP, should UP decide to continue to pursue this element of the overall controversy upon remand, presuming that the CCOA ruling remains in effect. Moreover, should UP either fail in that effort or simply abandon it, the ongoing land use being made by SF will then be exposed to potential legal assault by the grantees of UP or others, potentially adding liability issues, stemming from the creation and recording of invalid easements, to the imposing list of concerns confronting UP.

In producing this truly exhaustive and wonderfully erudite opinion on a highly problematic subject, Judge Kussman and his colleagues elected to emphatically apply the fundamental principle, with reference to the federal land grants at issue, that no land rights which have not been very clearly and expressly stated in conveyance documentation can be successfully asserted by a grantee, specifically UP in this instance. Although there are a multitude of exceptions to this principle, such as the passage of unrecited appurtenant easements for example, the principle of grant limitation based upon purpose is universally recognized as valid, being wisely counterbalanced as it is, at law and in equity, by the equally powerful principle that everything truly essential to the enjoyment of any grant legally passes with it. Most if not all jurisdictions within the US have historically accepted and honored the rule that in the context of any R/W grant, there can be no presumption that a fee simple title was conveyed, and in some states that principle has even been codified, resulting in the broadly applied presumption at law that every R/W represents an easement, unless a contrary intent can be proven. In

» continues on page 16 »

» RAILROAD RIGHT-OF-WAY IN THE AMERICAN WEST, from page 15

addition, the principle of grant limitation has long been upheld with particular reference to grants issued by a sovereign, and often with specific reference to R/W, in a wide variety of forms, so the relevance of that principle to this scenario would appear to be especially strong, making it's application fully justifiable, as the CCOA undoubtedly realized. Thus here all of the pieces were in place to demolish the arcane facade which has so long shielded the allegedly absolute nature of the land rights held by railroads in the context of federal R/W grants, and the CCOA was up to the task of hurling the proverbial hammer of the gods toward that fragile and illusory protective bubble.

The three prongs of the trident upon which UP was impaled, presuming that this decision of the CCOA stands, can be readily identified. The first prong was the ambiguity inherent in the highly general granting language used by Congress when creating land rights, which has made such rights a subject of perpetual controversy and confusion for well over a century. The second prong was the lack of respect historically demonstrated by virtually all railroads for the power of the principle of grant limitation, which is most often exhibited when railroads quitclaim land in which they actually hold no title that can be conveyed to anyone for use as anything other than a RR R/W, since this practice has historically enabled the perpetration of many devious schemes devised by land sharks to extort innocently ignorant land owners. The third and final prong was the ill advised reference to property rights embedded in the disputed land use and rental agreement, since that reference invited intense judicial scrutiny of the unclear title held by UP, with which the CCOA so astutely dismantled that agreement. The predecessors of UP acquired nothing more in the way of land rights for RR R/W purposes by means of their federal grants than was minimally required to create, build and operate a railroad, the CCOA has postulated, and no right to further burden the land through the execution of any other ventures, however profitable or attractive they might be, was incorporated into any such grants. Although the granted RR R/W was apparently adequately defined in terms of horizontal extent, presumably with a simple width dimension, dependent upon the track position, the vertical extent of such RR R/W was established only through case law spanning several decades. Such RR R/W has never been judicially deemed to possess the depth component of a fee simple conveyance, the CCOA has now illustrated, thereby depriving the unwisely created subsurface easements of validity.

All of the easements executed by UP and held by SF, in all of those locations where any federal land grants represent the source of the real property rights held by UP, may very well be void, even after standing upon the public record for decades, due to a lack of authority in UP to grant any such rights in the relevant lands. To that extent, this high profile battle represents nothing more than a greatly magnified repetition of the same fundamental title controversy which has plagued literally thousands upon thousands of innocent citizens, whose lands are traversed, or were once traversed, by railroads, or whose lands adjoin either active railroads or former railroads. American land owners are entitled to complete legal clarity upon this matter, which rather than diminishing in significance over the past century, has risen to a higher level of urgency, due to an increased public desire to utilize former RR R/W for other activities, along with rising property values. In that regard, it is noteworthy that while the direction suggested by the CCOA emphasizes the retention of land rights by the US in making the contested land grants, it does nothing to aid the cause of Rails-to-Trails proponents, since the CCOA position concedes that those rights which were reserved by the US passed to the federal patentees of the relevant lands, as confirmed by SCOTUS in the 2014 Brandt case. Nevertheless, regardless of who eventually wins or loses in the present litigation, the matter of utmost importance is simply obtaining clarity and certainty of title, so that the true status of all title can be readily known to all parties, and for that reason it must be hoped that this conflict ultimately serves the interests of the American people, by producing such finality.

How the parties to this legal action will respond to the outcome of this CCOA decision is unknown of course, all that is known as this article is composed is that the parties have evidently decided to pursue this litigation further. Specifically, the Supreme Court of California will be asked to review the CCOA decision, and that request may be either accepted or denied. If that request is denied, the CCOA decision effectively becomes final, if on the other hand the requested review is performed, then the California Supreme Court will presumably either expressly uphold or expressly reject the detailed position on RR R/W title that has been set forth by the CCOA. In such event, the California position on the relevant title issue will achieve finality in that manner, but even if that point is reached, still further action on this case in California seems inevitable, since it appears certain to require additional attention at the trial court level. Indeed, along with the reversal of the lower court on the title issues, as noted herein, the CCOA remanded the case to the trial court for further proceedings on both the title issues and the financial issues, before the case was redirected to the California Supreme Court as described just above. Nonetheless, presuming that this potent treatise provided by the CCOA stands and is not undone, given the depth to which the core title issue was very adroitly examined by the CCOA, the California position on that issue is quite likely to be gradually recognized and adopted as sound precedent by other western states.

In any event, once the California position on the true nature of the title interest in RR R/W derived through

federal grants is solidified, this controversy appears likely to spread to other states, or to the federal court system, and if it is perceived as rising to the level of a significant national concern, it could conceivably reach SCOTUS at some point in the future. While reaching that point would most likely take several years, and only then would true and complete finality at law be obtained, just how this decision, provided that it stands in some form, will be regarded or leveraged by railroads, pipeline operators and other utilities in the interim will be very interesting to observe. At one extreme, chaotic title conditions could ensue, which would be evidenced by a rash or flurry of title litigation involving RR R/W interests over the next few years. Any such development would of course be very likely to produce a panoply of results all across the legal spectrum, as the matter is addressed in different jurisdictions, by attorneys of varying competence, before judges with varying levels of knowledge regarding title issues. On the other hand however, it is at least equally possible that in most locations throughout the west, where the legal consequences of this decision would be most impactful, the relevant corporate entities may well elect to simply take the "see no evil, hear no evil" approach, and deliberately refrain from embarking upon any litigation that might call unwanted attention to their specific title issues.

As far as the present parties, UP and SF, are concerned, this affair could eventually prove to be equally problematic for both of them. Superficially, this CCOA decision has the obvious appearance of a victory for SF and a defeat for UP, since it has the potential to save SF a great deal of money in the short term, by preventing UP from collecting certain rent from SF, which UP has long expected to get, and has invested very substantial funds in securing. But while the downside for UP, and by extension other railroads finding themselves in a similar position elsewhere, is quite clear, the downside for SF and other comparable utility operators may also prove to be highly significant. Although this decision has the potential to lift an immediate financial burden from SF, it certainly does not indicate that SF has no need to pay anyone to maintain the line or lines which are involved in this case, unless SF proves that it holds adverse or prescriptive rights in each location, which could well be prohibitively costly, even where it may be likely to be successful, and of course no such assertion could shield any SF facilities situated within the boundaries of any federal land. Ultimately, SF and any other utility operators who may find that they owe nothing to the railroads for the use of the land beneath any RR R/W of the relevant type, may learn to their great chagrin that they are now beholding to a landlord, or perhaps even a multitude of landlords, with genuine control over land which bears various fragments of their utility lines. Those parties, based on financial motivation, may be even less inclined to be cooperative with SF than UP has been, and such parties may very well be free to lodge serious demands for compensation upon utility companies, in exchange for the ongoing use of their fee property.[12]

In summary, this case holds the potential to bring about highly beneficial legal clarification of the true status of all RR R/W title of federal origin, which has long been sorely needed and would hold great value for an immense number of parties, both public and private. The fact that all of the parties associated with this case in any manner, the litigants, the attorneys, the judges, the expert witnesses, and even the underlying land owners, have demonstrated that they stand in a state of high uncertainty, if not outright ignorance or confusion, over how to properly regard and handle RR R/W is more than ample evidence of the need for clarity upon this ubiquitous title issue. But of course that will not happen unless either this case or another case spawned from it is eventually placed upon the doorstep of SCOTUS, and accepted as being worthy of the highest judicial attention. That could well occur, particularly if federal courts become engaged upon this issue going forward, but it is unlikely until such time as a clear split in judicial thought on this matter at the appellate level can be pointed out, and broad if not nationwide interest in this matter becomes manifest. In the meantime, if a superb example was needed to demonstrate the monumental importance and great value of exhaustive research into the true origin of any R/W, whether it be public or private in character, and whether it be merely alleged or actively contested, performed by the prudent and diligent professionals populating the land rights industry, this case most certainly fills that need. ⊙

Endnotes

1. The states bearing the RR R/W directly impacted by this specific battle are Arizona, California, Nevada, New Mexico, Oregon and Texas. A CCOA ruling obviously does not control the law outside California, but every other state in which federally granted RR R/W exists will be likely to observe the outcome of this contest in California, and view the California position on this matter with high regard.
2. See page 7 of the published decision, which is available to the public on the web at www.courts.ca.gov/opinions/archive/B242864.PDF.
3. See page 7 of the published decision.
4. See pages 3 and 4.
5. See page 17.
6. See page 20.
7. See page 27.
8. See pages 29 through 34.
9. See pages 38 & 42.
10. See page 57: "32 percent is claimed to be held in fee."
11. See page 65. Full discussion of this issue begins on page 60.
12. "Meet the new boss, same as the old boss…" (Pete Townshend)

The author, Brian Portwood, is a professional land surveyor, historian of land rights law, and a federal employee.

Addendum—Since the composition of this essay, the Supreme Court of California has expressly declined to disturb this decision of the CCOA. Therefore, this ruling is now law in California, at least until such time as the title status of the railroad right-of-way outlined herein is addressed in a federal court.

DLCs and Survey Protests—Oh My!

■ *Tim Kent, PLS*

The annual Oregon Tech workshop was held at the Wilsonville campus with about 50 surveyors in attendance. This was the first time the event was held at the Oregon Tech-W campus and it was a resounding success. The venue was great, parking was free, and the food was ample, but the most important part were the presenters.

Ron Scherler, retired BLM cadastral surveyor and Stan French, the current Chief, Branch of Cadastral Survey in Idaho, made top-notch presentations on "An Inside Look at Donation Land Claims" and "A BLM Cadastral Survey Protest" respectively. They know their material and made the day most interesting for all of the attendees.

Ron Scherler and Stan French

Ron spoke about the administrative process established by the Surveyor General for the filing, survey, and patenting of DLCs. This included the claimant's requirements, notification filing, how the descriptions were sometimes changed, and the Surveyor General's role in resolving disputes. Of most interest was the location problems faced today when retracing the claims that sometimes leave a gap or overlap with an adjacent aliquot part descriptions.

Stan presented a case study of legal principles, evidence, the effect of local surveys in conjunction with the 2009 Manual verbiage and interpretation. The case study revolved around the rejection of certain corner points determined by local surveys in 2011. The fundamental arguments included the local surveyor as an original surveyor; positive evidence of intentional departure from legal principles; and repose as applied to public domain lands.

Both Ron and Stan engaged the attendees in their presentations, which remains one of the best ways to really learn about a subject. Thanks to both of them for a job well done.

One of the best outcomes of the workshop was the ability to provide over $5,000 to the Oregon Tech Geomatics student club. The students, our future surveyors, are the winners thanks to the professional surveyors that attended this event. ⊙

Mark your calendar

Friday, November 6, 2015

Annual Oregon Tech workshop

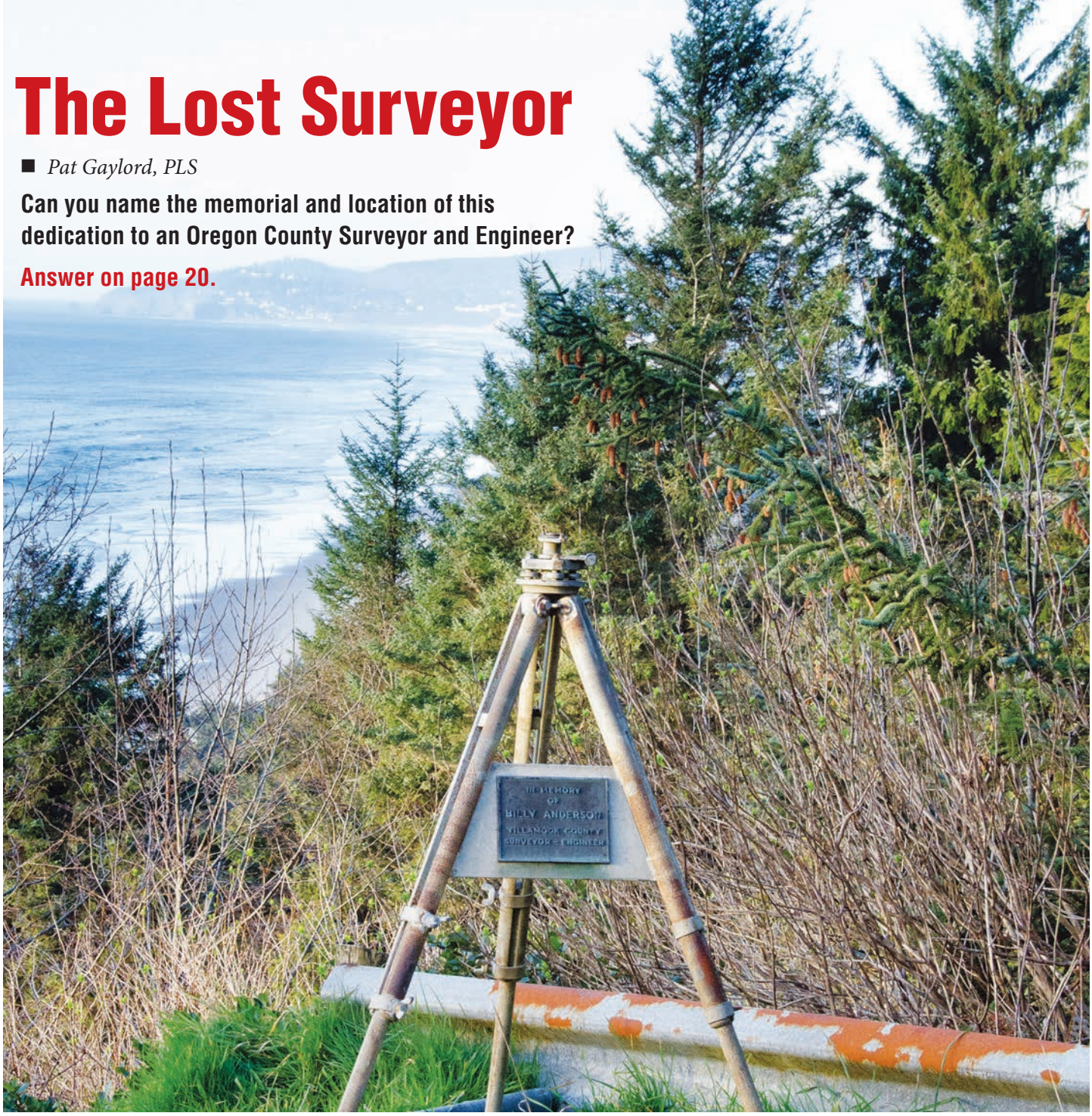
Wilsonville campus

The Lost Surveyor

■ *Pat Gaylord, PLS*

Can you name the memorial and location of this dedication to an Oregon County Surveyor and Engineer?

Answer on page 20.



PROFESSIONAL LISTINGS

» THE LOST SURVEYOR, from page 19

Answer: Anderson Viewpoint located on the north side of Cape Lookout on the Oregon Coast is dedicated to Billy Anderson who was the Tillamook County Surveyor and Engineer from January 1925 to September 1936. Many years ago the tripod held a replica of a transit, however, through conversations with current Tillamook County Surveyor, Danny McNutt, it was revealed that the transit was replaced several times, but regularly disappeared. As a child and later a young adult, I can remember the transit being there, but have not seen it for many years.

Billy Anderson Memorial and Viewpoint looking north towards Cape Meares and Netarts

Billy Anderson was well known in the county and many of his monuments still exist, holding the added distinction of being very reliable. Anderson's notable contributions include one of the first surveys of Highway 6 between Tillamook and Portland (the Wilson River Highway) and the survey of the Cape Lookout Road where his memorial is located.

In 1926 the Coast and Geodetic Survey monumented Station "Bill," presumably to commemorate the new County Surveyor, at the end of Cape Lookout. This station would have been approximately three miles from the pictured memorial, but the history is very interesting. The original description of Station Bill stated the station was located about 2 meters from the edge of the cliff and could be identified by a cut through the trees to the north. The description also noted that reaching the station from the water's edge was not advisable due to the near vertical cliffs and if attempted should only be done in calm weather. If you have ever hiked to the end of Cape Lookout or have ever fished in the ocean off the end of Cape Lookout you can imagine what a daunting task it would have been to attempt recovery from "the water's edge." Clearly this surveyor is not as hearty as those who have preceded us! The 1926 description goes on to note that a blazed trail lead from the head of Netarts Bay to the station, however, a stranger should not attempt to come over the trail and return on the same day. Also noted was that (fresh) water was within 1 mile of the station.

View of Cape Lookout from Camp Meriwether. Are you sure you want to get to that 1926 location from the water?

A 1932 recovery note states the station could be reached from the Camp Meriwether Boy Scout Camp over a fair trail in about three hours. Wagon service to the camp existed from the Allen Ranch near the Sand Lake Post office, but trucks could not reach the camp due to the sand dune. By 1939 erosion on the end of Cape Lookout had destroyed the mark and only a reference monument was recoverable. By 1956, all was lost to erosion.

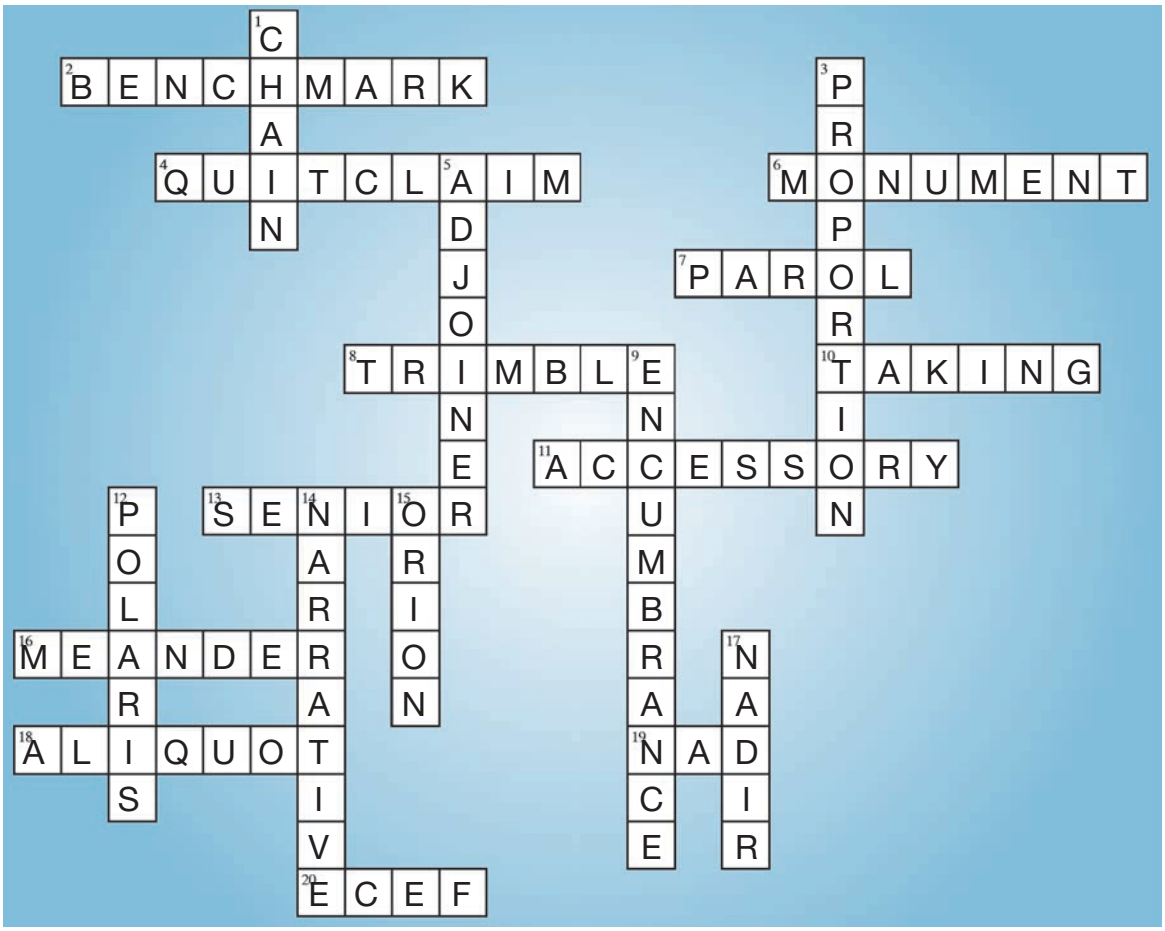
The Oregon Department of Transportation in Survey B-2397, Tillamook County Survey Records established control point "1999 Billy" near the memorial. The mark is located 1.5 meters north of the tripod.

Next time you are traveling the Oregon coast between Netarts and Sand Lake and passing over Cape Lookout, remember to stop and check out the view from this memorial to one of the early, well-respected surveyors of Tillamook County.

Billy Anderson Memorial plaque

» PLSO CROSSWORD PUZZLE, from page 8

Survey terms



The Oregon Surveyor
PO Box 230548
Tigard, OR 97281

PRSRT STD
US POSTAGE
PAID
SALEM OR
PERMIT NO. 526