February 2016

Professional Land Surveyors of Colorado Volume 47, Issue 1



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SIDE SHOTS

FEBRUARY JOURNAL 2016

VOLUME 47	NUMBER 1
President's Letter	4
From the Editor	5
Rocky Mountain Surveyors Summit	7
2016 Colorado Land Surveying Refresher Cou	rse10
PLSC at Boy Scout Council Camporee	10
Control Points No. 31 – What Would You Do?.	11
DORA Update	12
Report of the NSPS Fall Meeting	14
The Colorado State Geodetic Advisor Transitions to the Rocky Mountain Regional Geodetic Advisor	17
Calibration Base Lines Published and Available	ə19
BLMer Andy Senti Dies after Legendary Caree	r19
Statute of the Month: CRS 184-515-, Trespass	20
BLM Cadastral Letter	21
■ WFPS Board Meeting Summary	22
PLSC Treasurer's Report - 2016 Budget	23
Chapter News	24
Sustaining Members	

Side Shots is the official publication of the Professional Land Surveyors of Colorado, Inc. and is published quarterly for the betterment of the surveying profession. Kayce D.W. Keane Todd Reers President Vice President

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Deadlines for editorials, articles, pictures and advertising are January 1, April 1, July 1 and October 1. All material received after the current deadline will appear in the next issue of Side Shots.

We would like to invite anyone who is interested to advertise in Side Shots. Do you have something you want to sell, trade or buy? Why not use Side Shots for your next ad? We can also reproduce business cards for advertising. Ad space reservation must be arranged with Becky Roland, PO Box 441069, Aurora, CO 80044; 303-551-3266. (Deadlines: January 1, April 1, July 1 and October 1).

Current Advertising Rates:

Business card size or less - Member \$25.00; Non-member \$30.00 One-Half Page - Member \$115.00; Non-member \$150.00 Full Page - Member \$225.00; Non-member \$300.00 Color advertisements - add 33 percent



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Dear Fellow Members of PLSC:

ROGER NELSON

PAST PRESIDENT

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com

Roger.nelson@merrick.

At this time we are in the beginning of winter and have had a couple of large snowstorms in the State. Hopefully everyone has been able to continue in their work areas with "inside" work or using appropriate outdoor gear (i.e. snowmobiles, snowshoes and warm clothing!).

The Rocky Mountain Surveyors Summit (RMSS) Executive Planning Committee, chaired by Kayce Keane, is putting the last of the many tasks to rest. If you would like to assist in the conference in any way, please contact Kayce or Becky Roland for possible volunteer tasks. The 6th annual RMSS will be held at the Arvada Center, March 2-4, 2016. Please see additional details inside this publication or visit the PLSC website at www.PLSC.net.

Next year National Surveyors Week will be celebrated from March 21-26, 2016. In years past, PLSC members and the public at large have contributed to the national reference frame data base by recording GPS observations on National Geodetic Survey benchmarks or other marks of interest to the public. Pam Fromhertz, the Colorado NGS advisor (soon to be the Regional advisor) is investigating marks of interest for distribution to persons who would desire to record GPS data. Please look for emails or PLSC web site updates for details of this event.

The annual PLS and LSIT refresher course will be presented from January through March, 2016. By the date of publication the refresher course will have already started. The instructors and class format provide assistance in the quest for the next step in a surveyor's career path – the passing of national and state examinations!

The PLSC Legislative Committee has been active in developing language to address the concerns identified in the defeated County Surveyor elimination bill last year. Also, the Survey Symposium, to be presented at the Rocky Mountain Surveyors Conference in March 2016, will provide a forum for input from the surveying professionals regarding the County Surveyor's role.

It is renewal time for all members of the PLSC. Membership is from January 1 to December 31. Membership includes a number of items of interest such as reduced costs for attending the RMSS 2016 conference, our quarterly publication, *Side Shots*, NSPS membership for 2016, insurance reductions, email updates and voting rights, for voting memberships. We are always looking for sustaining members as well.

continued on page 5

DEDICATED TO THE IMPROVEMENT OF LAND SURVEYING EDUCATION AND PRACTICE.

FROM THE EDITOR



My goal was to get this issue printed and in the mail in plenty of time for our readers to read about, and sign up for, the annual Rocky Mountain Surveyors Summit in Arvada, on March 2nd, 3rd and 4th. Members of this year's faculty are featured on this cover. If you have never before attended, please

take a close look at the course and activity schedule in this issue. It is so much more than just interesting courses, and a source for CE credits if you need them. It is a unique gathering and networking event, where you can meet and discuss surveying subjects with your colleagues.

This is another very full issue, well worth a careful reading. The PLSC Refresher Courses in Golden are going on through March 23rd, and it's not too late to sign up for the remaining ones. Visit <u>www.plsc.net</u> or contact Becky Roland for details. To those who are attending, good luck on your exams.

Also in this issue is another installment of Control Points by Warren Andrews, and a very clear and concise table by Joyce Young of DORA of what is now required in terms of education and experience to sit for the licensing exams. It is much easier to follow than just reading the Bylaws and Rules of the Board. Please share this with your associates who aspire to Colorado licensure.

I have composed a report on the NSPS meeting that I attended as the Colorado Director, in Sandusky,

Ohio last October. The NSPS is gaining strength and influence, as it continues to gain new members, and is involved in many areas that are important to our profession. Pam Fromhertz has written an article about how the National Geodetic Survey (NGS) Colorado State Geodetic Advisor program is changing to a regional advisor system later this year, so that all states will have an advisor to provide support. Pam will be expanding her reach from Colorado to include Wyoming and Montana as well. She also has an important notice about the publication of new calibrated baseline data.

Earl Henderson's Rule of the Month deals with the subject of private property access and trespass, and the proper way to handle those situations. Randy Bloom provided his latest cadastral survey letter. Roger Nelson wrote a detailed report from the October WFPS meeting, including their defined areas of focus. And we have a sad notice of the passing of Andy Senti, who worked at the BLM for an incredible 63 years. Andy helped me decades ago in uncovering important historical evidence that greatly contributed to the quality of those surveys. He was an important and valuable resource to many surveyors in Colorado and will be greatly missed.

Finally, Alan Blair provided a board approved budget for 2016, and each chapter provided their latest news.

I hope to run into a few of you at the Summit in March.

JB Guyton, Editor, Side Shots

From the President from page 4-

In the past year the State of Colorado has lost several of our fellow surveyors. The most recent that I am aware of is Mr. Andy Senti, who spent over 60 years in federal employment with the majority of his time with the BLM. Andy was always willing to assist anyone with questions regarding surveying and his enthusiastic and can-do attitude will be missed by the many people he touched in his long career. Please see the memorial article for Andy in this publication.

Please enjoy the various articles included in this edition of *Side Shots*, and I hope all members have a safe and profitable 2016!

Todd Beers, PLS PLSC President

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ROCKY MOUNTAIN Surveyors Summit

61

Footsteps in the Pasu Eyes to the Future

March 2 – 4, 2016 at the Arvada Center Professional Land Surveyors

Loveland

Professional Land Surveyors of Colorado, Inc.

In conjunction with the Northern, Central, and Southern Chapters of PLSC.

6th Annual Rocky Mountain Surveyors Summit March 2-4, 2016 ~ Arvada Center

PROGRAM:

WEDNESDAY, MARCH 2

Keynote Session

7:30 AM—9:30 AM Footsteps in the past, Eyes to the Future—Dennis Mouland

The start of the Summit begins with Dennis Mouland providing a brief review of the history of our profession in terms of purpose, perception, and technology, with a transition to the future. The presentation will include both good and bad things to come, some of which are already in our midst.



MASTER TRACK

9:45 AM – 11:45 AM	Why Records Research is <u>not</u> an Option Dennis Mouland, PLS
1:00 PM—5:30 PM	To Accept or Not To Accept Dennis Mouland, PLS
PROFESSIONAL TRA	СК

9:45 AM – 11:45 AM	Ethics Course
	Jill Norris
1:00 PM – 3:00 PM	County Surveyor
	Jason Emery, PLS

3:30 PM – 5:30 PM County Surveyor Symposium Panel Discussion

TECHNICAL\GIS RELATED TRACK

- 9:45 AM 11:45 AM Using Photogrammetry in the Field to Create Measureable Photos in the Office Mel Philbrook
- 1:00 PM 5:30 PMMigrating CAD into GIS—Best PracticesWarren Geissler

LUNCH: PLSC Annual Meeting, Introduction of PLSC Board of Directors, Exhibitor Introduction, Raffle

5:30 PM – 7:00 PM EXHIBITOR SOCIAL

THURSDAY, MARCH 3RD

MASTER TRACK

7:30 AM – 5:30 PM Where the Manual is Silent

Dennis Mouland, PLS

PROFESSIONAL TRACK

7:30 AM – 11:45 AM The Importance of Surveyors to Floodplain Management
 Matthew Buddie, Tom Birney and Marsha Hilmes-Robinson
 1:00 PM – 5:30 PM Criteria for Boundary Line Determination
 Dave Pehr, PLS

All abstracts and speaker biographies are posted online at http://www.plsc.net/2016_rocky_mtn_surveyors_summ.php.

6th Annual Rocky Mountain Surveyors Summit March 2-4, 2016 ~ Arvada Center

THURSDAY, MARCH 3RD (continued)

GPS Modernization and GNSS
Jan Van Sickle
Basic Surveying Math
Gaby Neunhertz, PLS
We Want You! How you can help Colorado prepare for new datums (Part I)
Pam Fromhertz
LUNCH: PLSC Awards, Long Standing PLSC Members, Trig Star Winner, Scholarship Winner, Introduction of New PLS & LSIT, Raffle
PLSC CHAPTER SUMMIT MEETING
FRIDAY, MARCH 4TH
Discrepancies in the Official Record (This class is eligible for CFedS CE Credit)
Ron Scherler, CFedS Program Chair
СК
DORA Presentation
Earl Henderson, PLS and Joyce Young
The Surveyor in Court
Dave Pehr, PLS
Errors and Statistics
Jan Van Sickle
Horizontal Curves
Gaby Neunhertz, PLS
We Want You! How you can help Colorado prepare for new datums (Part II)
Pam Fromhertz
LUNCH: Survey Olympics Winners, Raffle

Courses and schedule subject to changes; please go to <u>www.plsc.net</u> for updated information and to register online. Registration opens at 7AM each day.

FEE SCHEDULE 2016	One Day	Two Days	Three Days
PLSC MEMBER:	\$200	\$375	\$550
NON-MEMBER:	\$300	\$475	\$650
STUDENT:	\$ 75	\$125	\$200
EXHIBITORS (PLSC Sustaining Members Only):			\$400

An additional fee will be added to registrations received after January 15, 2016. Catered breakfasts & lunches will be provided on all days. Online registration is available at the PLSC web site (<u>www.plsc.net</u>).





2016 Colorado Land Surveying Refresher Course

The Professional Land Surveyors of Colorado are offering a comprehensive Land Surveying Refresher Course beginning January 6, 2016. This course offers a review and self-study plan for those taking the National Council of Examiners for Engineering and Surveying (NCEES) **Fundamentals of Surveying (FS)** and **Principles and Practice of Surveying (PS)** examinations. The course is designed to aid candidates in developing and expanding exam-taking proficiencies. The Wednesday evening classes will be 3 hours in length, starting promptly at 6:00 PM.

Fundamentals of Surveying

Session	Date	Topic
1	Wed., Jan. 6	Overview of NCEES FS and PS Examination
		Use of calculators and formulas
2	Wed., Jan. 13	Fundamental Survey Calculations I
3	Wed., Jan. 20	Fundamental Survey Calculations II
4	Wed., Jan. 27	GIS, State Plane, Geodesy
5	Wed., Feb. 3	Public Land Survey System I
6	Wed., Feb. 10	Legal Terms and Definitions

Principles and Practice and Colorado Specific

7	Wed., Feb. 17	Boundary Law
8	Wed., Feb. 24	Public Land Survey System II
9	Wed., Mar. 2	Colorado Survey Law I
10	Wed., Mar. 9	Colorado Survey Law II
11	Wed., Mar. 16	Principles and Practice Topics
12	Wed. Mar. 23	Mock PS and FS Examinations

Registration, Fee, Location

The fee for the entire course is \$400, or \$75 per 3-hour block taken individually. Registration is open beginning November 1, 2015. See <u>http://www.plsc.net/</u> for registration information. Classes will be held in one of the conference rooms at the Jefferson County Courts and Administration Building (Taj Mahal), 100 Jefferson County Parkway, Golden, CO. Use the parking lot and main door on the east side of the building.

Signage will lead you to the classroom.

For questions, contact Becky Roland, Executive Director, PLSC, 303-551-3266, <u>broland@plsc.net</u>. Visit the NCEES site at <u>http://ncees.org/exams/</u> to learn more about the FS and PS examinations.

2016 Refresher Course Faculty, from left, Mike Greer, JB Guyton, Lynn Patten, Randy Bloom, Alan Blair, Todd Beers and Roger Nelson.



Control Points – Number 31 What Would You Do?

By Warren Andrews, PLS

If as a competent experienced surveyor you were suddenly dropped in the middle of nowhere with no equipment and no way of getting any, and you were begged to survey for constructing buildings and dividing up land and laying out fortifications, what would you do?

Determining direction might be the easiest start because the standard is relative to the axis of the earth's rotation as a defined northsouth line. You could eyeball sight on Polaris at night for north if you were in the northern hemisphere. If you were in either hemisphere you could determine direction by splitting sunrise and sunset by the sun's shadow at noon over a point (that's

what the ancient obelisks were for) and get either north or south.

But things get a little trickier for lengths and distances. Do you want to try to duplicate a standard length by knowing you pace thirty three steps for one hundred feet? Or do you want to set up an independent standard like the metre bar in France and make everything else relative to it? Do you want to cut and try till you come up with tenths and hundredths and thousandths of your standard for ease of calculation? Or do you want to come up with halves and quarters and eights etc. for ease of splitting your standard?

That brings up another problem on your division of angles. Do you want to divide you quadrants, like the old mariner's compass, in halves and quarters and eighths, etc.? Or do you want to cut and try to divide a quadrant by ninetieths or by tenths and hundredths? (The right angle is easy from the old 3-4-5 triangle or the perpendicular to a line by geometric construction by arcs). Running levels would be simple except for moving and setting up again, with a ten or twenty foot long grooved wooden log with water in the groove. You could tip your sight up or down across the water for whatever grade you wanted to hold. (Some of the old Roman aqueducts constructed with a chorobates (water level) were as flat as 0.02 percent but the water ran downhill!).

Without trigonometric tables the best solution for slope distance correction would be to lay out your distances full scale on a flat "surveyor's field" and measure your unknowns just like the old medieval surveyors used to do before they had tables. Of course this could also work for lengths of sides of right triangles or similar triangles when you were going in a different direction than northsouth or east-west (How you described that direction would be up to you – maybe so many units north and so many units east [just like Cartesian coordinates]?)

On the whole it might not be as bad as it first seemed. To layout and construct the groined arches and flying buttresses like in a medieval cathedral or to direct underground mining might be difficult and take a lot of planning but wouldn't be impossible. The crudity of equipment could be refined and certainly multiple measurements would help. (How many thousands of measurements does a GPS receiver get in one setup for a good average?)

In other words, learn enough while you're at it surveying the easy way so you could back up and do it the hard way if you really had to.

THE CHOROBATES OF VITRUVIUS

DORA Update

By Joyce J. Young Program Director for the Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors ("Board")

Colorado State Specific Exam Update

In the last issue of *Side Shots*, we released information about changes of the administration of the Colorado State Specific examination to computer-based testing. All candidates with a current approval to take or retake this exam have been contacted with updated information and the new candidate handbook. The handbook can be accessed by following the prompts to the *Computer-Administered State Specific PLS Exam* from the Board's homepage at *www.colorado.gov/pacific/dora/AES*. Direct your questions to the Board's email at *dora_aesboard@state.co.us*.

PLSC presentation at PLSC's Annual Summit

Please look for a presentation by PLSC Board Member, Earl F. Henderson, and Program Director, Joyce Young at the PLSC's Annual 2016 Rocky Mountain Surveyors Summit in March. During the presentation, we will be discussing changes to the Board's Rules that impact land surveying, which took effect September 1, 2015. We will also be talking about land surveying subjects the Board has considered.

Education Task Force

At the November 2015 Board meeting, the Board directed that a task force be created to address a method for considering college level education programs through pre-approval *or* through rules, providing parameters for these programs. This is in response to §12-25-214(4), C.R.S. which *repeals* the allowance for licensure as a professional land surveyors with just a high school diploma as noted in the chart below. If you are interested in being involved in this task force, please email the Board office at *dora_aesboard@state.co.us*, noting your interest and contact information.

continued next page

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SUMMARY OF LICENSING REQUIREMENTS • Revised August 2014 LAND SURVEYOR – INTERN

EDUCATION - BASIS OF ENROLLMENT	+	EXPERIENCE REQUIRED	STATUTE
4-year Board-approved surveying degree*	+	0 years for exam and enrollment	12-25-212(2)(b)(l)
Senior status in 4-year Board-approved surveying degree*	+	0 years for exam enrollment upon graduation	12-25-212(2)(b)(II)
4-year Board-approved surveying technology degree*	+	0 years for exam and enrollment	12-25-212(2)(b)(l)
Senior status in 4-year Board-approved surveying technology degree*	+	0 years for exam enrollment upon graduation	12-25-212(2)(b)(II)
2-year Board-approved surveying degree*	+	2 years for exam and enrollment	12-25-212(3)(b)(II)
No degree - high school diploma or equivalent required	+	4 years for exam and enrollment (1 year may be education)	12-25-212(3)(b)(l)
Endorsement from another jurisdiction			
Education and experience must be substantially equivalent to Colorado's current requirements (see above) or have met Colorado requirements at time of licensure			12-25-212(1)(a)

PROFESSIONAL LAND SURVEYOR

EDUCATION – BASIS OF LICENSURE	+	EXPERIENCE REQUIRED	STATUTE
4-year Board-approved surveying degree* + LSI enrollment	+	2 years under PLS	12-25-214(2)(b)(l)
4-year unapproved surveying degree* + LSI enrollment	+	4 years (including 2 years under a PLS)	12-25-214(2)(b)(II)
2-year Board-approved surveying degree* + LSI enrollment	+	6 years (including 4 years under a PLS)	12-25-214 (2)(b)(III)
4-year engineering degree with surveying coursework* + LSI enrollment	+	6 years (including 4 years under a PLS)	12-25-214(2)(b)(III)
4-year unapproved degree with surveying coursework* + LSI	+	6 years (including 4 years under a PLS)	12-25-214(2)(b)(IV)
This path to licensure is repealed July 1, 2020 and will. not be accepted to obtain licensure after that date. No degree - high school diploma or equivalent + LSI enrollment**	+	10 years total including education (including 6 years under a PLS)	12-25-214(4)(b)
Endorsement from another jurisdiction (<u>active</u> license) + 1.5 hr. State Specific Exam Education and experience must be substantially equivalent to Colorado's current requirements (see above) or have met Colorado requirements at time of licensure			12-25-214(1)

* Refer to Board Rule 4.7.2 Surveying Education for information on Board-Approved Surveying, Engineering, Unapproved degrees, and experience credit without a degree.

** Note that this path to licensure is repealed effective July 1, 2020.

RENEWAL UPDATE

If your license still has an expiration date of October 31, 2015 and you still wish to practice, you will be required to submit a *completed* reinstatement application. You can access a reinstatement application and instructions from the Board's **NEW** website at *www.colorado.gov/pacific/dora/AES*.

As of January 5, 2016:

- 1601 Professional Land Surveyors are Active and have either renewed or are newly licensed; and,
- **210** Professional Land Surveyors *have not renewed* and the license will be expired.

For question about any of the information provided here, please email us at dora_AESboard@state.co.us

Report of the NSPS Fall Meeting October 8th & 9th, in Sandusky, Ohio

By John B. Guyton, NSPS Colorado Director

The National Society of Professional Surveyors, with memberships in all but three states, is rapidly changing and evolving to adapt to their new role as the unified voice for land surveyors nationally. This latest meeting provided an excellent view into the activities and initiatives that are underway, and how Colorado surveyors will benefit from our new association with NSPS.

NSPS has redesigned its website and the new site will be launched in early 2016. With the fast pace of change in how NSPS conducts its business due to the success of the national membership program, the site needed a redesign to allow for easier navigation of the extensive resources.

President Jon Warren will be producing a monthly President's Letter, the NSPS finances have greatly improved and the organization is operating in the black. The Board is reorganizing and consolidating the many committees that reported to the former Board of Governors, to improve monitoring and communications, and make initiatives progress more efficiently.

The NSPS is active in government affairs, including future legislation on pipeline safety and UAS (Unmanned Aircraft Systems). Through COFPAES, <u>www.cofpaes.</u> <u>org</u>, NSPS continues to monitor and address Brooks Act violations by government procurement offices, and support surveyors around the country who report violations to them. COFPAES has a nearly 100% success rate in getting professional services contracts reissued that were subjects of complaints.

I attended the meeting of the NSPS Young Surveyor's group. This is NOT a student organization, but rather for young practicing professionals. Most are licensed, or about to be licensed, and many are running their own businesses. They had a productive meeting in Sandusky and started to think about bylaws, subcommittees and addressing tasks that have been identified. There were 28 people in attendance, 14 of whom were Young Surveyors, the balance were NSPS officers or Directors who were there to provide support or to represent the Young Surveyors from their respective states. Currently, there are thirty-six states which have representatives to the Young Surveyors group which represents surveyors under the age of thirty-five, or those recently graduated from college or university. Brian Dennis has already joined this group as the Colorado representative.

Their meeting began with introductions and speeches, which were followed by discussions on bylaws and membership criteria for the Young Surveyors group, both of which are necessary for them to become an affiliate under the umbrella of NSPS. Other items addressed were how to develop Young Surveyor groups locally, the creation of a recruitment toolbox for the surveying profession, and the development of web tools and internet resources to enhance communication within the organization.

Friday, October 9 was the NSPS Business and Directors meetings and the following matters were highlighted by President Jon Warren:

- The ALTA/NSPS Standards have been approved by both organizations and we will have new standards that take effect on February 23, 2016.
- NSPS will prepare a position statement on U.A.S. (unmanned aircraft systems) regulations and operations. We've also signed on with other mapping organizations in crafting a letter to urge the F.A.A. to codify the government's regulations for operating this technology in a more urgent manner.
- We intend to broaden the awareness of the Young Surveyors and our National Society at educational institutions across the country by inviting a student to attend our meetings as our guest and write a short review that will be shared with all surveying programs. The program will be administered by the Young Surveyors and funded through NSPS Board of Director donations. We intend to have a student in attendance at the 2017 spring meeting.
- Our President Jon Warren & President-Elect Tony Cavell have each made a significant effort to re-align our committees and offer specific charges for these committees to work on.
- The Director from Alaska requested support regarding the setting of monuments by the BLM when creating Townships that would be further subdivided and sold by the State of Alaska. As you might have guessed, the number of monuments being set has been drastically reduced. Our Government Affairs Committee will review and comment on the matter
- Certified Survey Technicians (CSTs) at all levels and existing membership can now have their annual certification fee waived by maintaining a membership in NSPS.
- The NSPS Joint Government Affairs Committee shoulders a great deal of responsibility in representing surveyors across the nation on Capitol Hill. Please review their report for the many tasks and/or accomplishments they have had over the last 6 months. Mr. Pat Smith, Chair of the Committee, requested direction from the BoD on the following matters:
 - NSPS will provide a position statement on the PHMSA (Pipeline Hazardous Materials Safety Agency) Proposed Rule which contains a number of references to surveying and mapping – and provide a standardized position to our state affiliates

- NSPS will provide a position statement to the House Financial Services Committee which is considering modifications to the National Flood Insurance Program (NFIP), either to implement an improved working process or privatize the effort.
- Support the addition of the Small Business Administration (SBA) to Federal Acquisition Regulation (FAR) Council – given that many small businesses are effected by FAR regulations.
- We continue to collaborate with NGS and participate in quarterly meetings on various initiatives.
- We are recognized and designated by ABET as the Lead Society among its professional organization members for evaluating Surveying Programs seeking either initial accreditation, or renewed accreditation. Currently, NSPS evaluates 31 such programs.
- Our CST program that has been a monumental success and run by several individuals for many years, and even decades. Their succession plans require them to look for individuals who

are interested in serving on the CST Board and upholding the fine standard which has been set. Please consider this opportunity and contact President Warren if you are interested in this appointment.

- We had previously decided that an At-Large Director(s) would represent those NSPS members who did not belong to a 100% Membership state. Given that we are now down to three states who do not belong, we passed a motion whereby the Past-President will provide representation to those individuals, albeit in a more cost effective manner.
- The NSPS Foundation has been instructed to rename the NSPS Board of Governors Scholarship to the NSPS Board of Directors Scholarship. The Board of Directors has agreed to continue providing personal funds at the conclusion of our meetings, as a means for funding this and the Trig-Star scholarship.

I am honored to be representing Colorado at the NSPS, and will continue to update the PLSC on future progress that they are making that affect members of our profession.



Pat Smith, Past President and Chair of Joint Government Affairs Committee addresses the Board of Directors during his report. JB Guyton, third row on right.



President John Warren addresses the Young Surveyors group. JB Guyton, foreground.

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The Colorado State Geodetic Advisor Transitions to the Rocky Mountain Regional Geodetic Advisor

By Pamela J. Fromhertz

Effective January 1, 2016, the National Geodetic Survey (NGS) Colorado State Geodetic Advisor becomes the Rocky Mountain Regional Geodetic Advisor. The State Geodetic Advisor program has provided an NGS employee as a local liaison to assist with a state's geodetic and surveying programs. The advisor has educated and provided expertise to local surveyors and other interested parties on how to use the National Spatial Reference System (NSRS)-the foundation for position, height, distance, direction, gravity, and shoreline for the United States and its territories. States that follow recommended guidelines and procedures can achieve reliable and accurate local positions (latitude, longitude, and height) while also complying with nationally recognized standards and specifications for geo-referenced data.

The NGS State Advisor program, to be fully-replaced by a regional program by October 2016, has relied upon the cooperation of partnering state agencies. In the case of Colorado, the Colorado Department of Transportation (CDOT) has been the partnering agency, contributing nearly 50% of the cost of the program for well over 25 years. However, many states in the nation have not had Geodetic Advisors over the years. It was determined by NGS, and is stated in the NGS Ten-Year Strategic Plan, that the best way to meet the needs of the entire country in modernizing the NSRS is to transition to a fully NGS-funded regional program where all states have a Geodetic Advisor available to them. The new advisor program will focus on educating constituents about the new datums to be delivered around 2022 and the tools available to the user community to make it easier to connect to the NSRS. (Stay tuned for an article discussing the new datums and the upcoming Colorado Geoid Slope Validation Survey).

Some history of the Colorado State Advisor Program

Richard Cohen was the Colorado State Geodetic Advisor from 1991 (the earliest record found of an agreement with CDOT) until his retirement in 2002. One of Richard's areas of expertise and passion was mark maintenance, which he helped coordinate in many states during his tenure. He was instrumental, along with CDOT, in creating the Colorado High Accuracy Reference Network. Kudos are due to Richard for making sure bench marks were observed with GPS. Richard had the foresight to realize that GPS would be instrumental in gaining access to the NSRS and helped Colorado to be an early adopter. I have been the advisor since January 2004, focusing on training and changing the way business is done in Colorado: there are now three real-time reference networks in Colorado; CDOT



has added addendums to its manual with new procedures allowing for the use of NGS' Online Positioning User Service (OPUS); and critical tools to transition to new datums such as OPUS-share are gaining traction in the state.

The State Geodetic Advisor program, at its maximum extent, had 28 advisors across the country. Participating states were required to provide both funds and other support, such as office space and administrative support. At the time, NGS was limited in both their available positions and funding. So, between NGS limitations and state interest, only slightly more than half of the country was served by the state-centric program.

continued on next page

from page 17

Transition to a Regional Advisor Program

As NGS has begun the process of modernizing the NSRS, primarily through the development of new datums to be delivered around 2022, it was recognized that a new plan was needed to ensure effective outreach to all states. Thus the concept of a regional program was created and has been in transition since 2010. Bill Stone, former New Mexico State Geodetic Advisor and current Southwest Regional Advisor, was the first Regional Advisor. Currently there is a mix of State and Regional Advisors. By October 1, 2016, the entire country will be fully served by14 Regional Advisors (see image, next page). Refer to the link with the current and final region maps at: http://geodesy.noaa.gov/ADVISORS/.

As the Rocky Mountain Regional Advisor, I will support activities in Colorado along with Wyoming and Montana. I will remain based in Denver. The first two years of the new program will be a time of transition and I, along with my management, welcome your input. I will also seek to develop a new distribution list to provide continuous information on the latest pertinent activities. If interested in the list or other geodetic-related matters I can be contacted at pamela.fromhertz@noaa.gov or 240-988-6363. NGS is also encouraging all states to designate a Geodetic Coordinator to provide hands-on support similar to that which current State Advisors provide. The Coordinators will also provide a central contact for advisors to engage at the state level. I have been in discussion with CDOT as well as the Professional Land Surveyors of Colorado on seeking a means to establish a Colorado Geodetic Coordinator. Mike Londe, Bureau of Land Management, has been the Wyoming Coordinator for over ten years and I look forward to working with him. He has already been a great resource. I will explore any interest in Montana.

NGS will be holding a webinar on the transition of the advisor program on February 11 from 12-1 MST. This is part of a new monthly live and recorded webinar series on various topics. Webinar information and notification signup instructions can be found here: http://geodesy. noaa.gov/web/science_edu/webinar_series/.

The Regional Advisor Program's primary benefit to the public will be that all U.S. states and territories will have a Geodetic Advisor to help facilitate effective geodetic capability. This new structure will help broaden the current program, build capability to continue to meet user needs, and ensure efficient and effective program management.



Calibration Base Lines Published and Available

By Pamela Fromhertz

NOAA's National Geodetic Survey (NGS) conducts a cooperative program that provides surveyors with a convenient means to accurately evaluate the performance of their Electronic Distances Measuring Instruments (EDMI). Since 1977, the NGS has established more than 300 EDMI Calibration Base Lines (CBL) throughout the United States in cooperation with various government agencies, universities, professional societies, and others. These highly accurate base lines provide a locally-accessible standard for length measurement. Used properly, a CBL will help identify any shortcomings or weaknesses in a surveyor's equipment AND procedures; something that cannot be done at a repair shop. For each state, NGS provides users with locations, descriptions, and the adjusted results of calibration base line measurements.

Highline and Durango CBLs were re-measured in 2013 because users' measurements were repeatedly and consistently missing the published values. In 2014, the following CBLs were re-measured: Arsenal, Craig, El Paso, Lamar, Limon, New Castle and Pueblo 2. All of these new data have been published at the <u>NGS CBL</u> <u>Program</u> website: <u>http://geodesy.noaa.gov/CBLINES/</u> <u>calibration.html</u>.

The Arsenal CBL was established in 2013 with the assistance of the Professional Land Surveyors of Colorado Central Chapter and the Colorado Department of Transportation. Many thanks to all who assisted in this effort. The Arsenal was measured in 2014 and then again with new equipment in 2015.

Note: Highline has been in a construction zone and will not be useable until it is re-measured.

For various reasons the following CBLs will no longer be maintained:

Meeker (due to construction and a mark being destroyed); Fort Carson (points are no longer intervisible); and Pinon Canyon (due to lack of use).

If you have any comments, please contact Pam Fromhertz, the NGS Rocky Mountain Regional Advisor, at <u>pamela.fromhertz@noaa.gov</u>, 240-988-6363.

BLMer Andy Senti Dies After Legendary Career in Colorado

Colorado State Office realty specialist Andrew J. (Andy) Senti, an iconic BLM figure whose knowledge and advice was sought out by BLM offices across the West, died Sunday, Dec. 20, 2015, in Lakewood, Colorado. He was 90.

With a Federal career spanning more than 67 years, 63 of which were with the BLM, Mr. Senti was highly decorated for both his World War II service and his contributions as a civilian. In 1945, Mr. Senti earned the Asiatic Pacific Service Medal and the World War II Victory Medal; as a civil servant, he received the DOI Meritorious Service Award in 1978, the DOI Distinguished Service Award in 1990, and a DOI Lifetime Achievement Award in 2009.

Born in 1925 in Kline, Colorado, Mr. Senti attended Fort Lewis College in Durango and graduated with a degree in range management from Utah State University in Logan, Utah. Mr. Senti began his BLM career in 1951, when he was hired as a range management assistant in the BLM Regional Office for Utah and Colorado.

After working on tracts of land under homestead application, Mr. Senti joined a number of other employees to form the BLM's Colorado State Office, where he spent the rest of his career. During his tenure, in which he served as a land law examiner, appraiser, staff supervisor, and realty specialist, Mr. Senti became legendary for his dependability, initiative, integrity, and tireless hours on the job. He touched the lives of innumerable BLM employees, including new managers receiving orientation on public land issues.

"Andy Senti was an authentic BLM legend and role model, and our agency was honored to have him in our midst for more than half a century," said Steve Ellis, BLM Deputy Director for Operations. "On behalf of the BLM in Washington and in the field, I send our condolences to Mr. Senti's family and friends as they look back on a marvelous career and life."

(Reprinted with permission of the BLM Daily - Editor)





Statute of the Month C.R.S. 18-4-515, Trespass By Earl Henderson, PLS

As a Professional Land Surveyor it is our responsibility to know the law and to obey the law when it comes to how we complete our boundary surveys. We all hopefully already know that. But it's also our responsibility to know the laws of access to properties that govern how we complete those boundary surveys. And beyond the law, it is our professional responsibility to act in a respectful, polite and professional manner when dealing with the property owners.

C.R.S. 18-4-515 describes what is commonly called our "Right of Reasonable Access". Please take some time to look it up and read it and remind yourselves of the requirements to access properties, especially if you don't deal with this on a regular basis. We do have the right to access, investigate and utilize boundary evidence even if the property owners don't want us there. But let's be clear, we do NOT have the right to trespass on anyone's property at will. There are definite notification requirements and procedures that must be met before we can access that boundary evidence.

Moreover, by acting in a respectful and professional manner with the property owners, we promote an image for our profession worthy of respect. Common courtesy apparently isn't as common as one might think. And often it's very difficult when dealing with an uncooperative property owner to maintain a manner of respect and professionalism. But to do so leaves that property owner with a long lasting impression and does a service to that property owner and our profession. Even if that property owner doesn't want us accessing their property, or acts in a belligerent manner toward us, if we respond politely and with respect, they will remember that experience and hopefully respond differently to the next surveyor that knocks on their door. To act otherwise causes harm to the image of our profession that may never be recoverable. The property owner who is poorly treated is much more likely to pass on that experience to others while possibly exaggerating the actions of the surveyor than the property owner treated courteously. Unfortunately that's human nature. But we as a profession will have to work 10 times as hard for 10 times as long to recover from the word of mouth spread about a bad experience.

I personally don't work on projects which require the notification process as a regular aspect of my work. But I know several PLS's that do. But for my practice it's usually enough to knock on someone's door, introduce myself, describe why I'm there, and ask politely for access through their property (and just a tip here, it helps to be wearing your safety vest as the property owners will realize that you're there on some sort of official business rather than soliciting). In all my years I've only been turned down once and that time I was able to find an alternate route to the evidence I needed. I try to always keep in mind how I would feel and how I would want to be treated if I were the owner of this particular property and to then treat that property owner how I would want to be treated. It's not hard to conceptualize and it's not hard to do. On rare occasion I've even gotten more work out of it.

I recently experienced something related to access that was quite disconcerting. I was contacted by a property owner about a situation that I won't go into too much detail about in order to protect the guilty. But suffice it to say that a survey crew trespassed onto someone's property. In the end it was discovered that the crew, the PLS and the client's representative (an oil and gas company) all conveyed to the property owner, at different times, and in adamant tones no less, that "surveyors have the right to trespass". Not only is this not true, but I realized that this untruth is being passed on to the subordinates under our responsible control and to our clients.

I ended up as a mediator/referee in the situation trying to soothe the property owner and prevent the perps from being arrested. Photos, video and audio were all involved. I was relieved when apologies were offered and accepted and the situation was de-fused. I felt lucky to have accomplished that much. But we as a collective profession may never be able to repair the harm that those actions caused to our professional image. That's done. That story will be told and retold adding to the damage. What's worse is that I found out that a simple knock on the door with a polite request would have been enough to gain allowable access.

It is always so much more difficult to repair a tarnished reputation than to maintain a good one. We are all professionals and so we should all already know that. We will all be working that much harder to repair the damage done to our great profession because of these actions when we shouldn't have to. Please, be professional out there. Act respectfully and politely and treat others as you would want to be treated if it was your property.

Be safe out there.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Colorado State Office 2850 Youngfield Street Lakewood, Colorado 80215 <u>www.co.blm.gov</u>

CO-956 9650

December 16, 2015

Mr. John B. Guyton, Editor Side Shots 3825 Iris Ave. Boulder, Colorado 80301

Dear Mr. Guyton:

This letter is to inform you of official BLM cadastral surveys in Colorado that have been accepted and officially filed from July 20, 2015, through October 27, 2015, and are now available in the Public Room, Bureau of Land Management, Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215. The surveys will also be available at http://www.glorecords.blm.gov.

The accepted surveys are listed below by township, range, meridian, group number, type, approval date and number of plats.

Township	Range	Meridian	Group No.	Туре	Approved	Plats
T. 40 N.	R. 4 W.	NMPM	1623	Plat & Notes	07/20/15	2
T. 48 N.	R. 4 W.	NMPM	1624	Plat Only	08/04/15	2
T. 34 N.	R. 11 W. (SUL)	NMPM	1644	Plat & Notes	08/31/15	1
T. 48 N.	R. 3 W.	NMPM	1624	Plat Only	09/30/15	2
T. 47 N.	R. 4 W.	NMPM	1624	Plat Only	09/30/15	2
T. 47 N.	R. 3 W.	NMPM	1624	Plat Only	09/30/15	3
Tps. 47 N.	Rs. 3,4 W.	NMPM	1624	Plat Only	09/30/15	3
T. 48 N.	R. 1 E.	NMPM	1624	Plat Only	09/30/15	2
T. 47 N.	R. 2 W.	NMPM –	1624	Plat Only	09/30/15	2
T. 49 N.	R. 1 W.	NMPM	1624	Plat Only	09/30/15	3
T. 51 N.	R. 1 W.	NMPM	1624	Plat Only	09/30/15	5
T. 46 N.	R. 2 W.	NMPM	785	Plat &Notes	10/06/15	1
T. 12 S.	R. 103W.	Sixth	1647	Plat Only	10/15/15	-1
T. 2 S.	R. 8 W.	Sixth	1622	Plat &Notes	10/27/15	1

As other surveys are completed, I will advise you of their acceptance. You may circulate this letter among the membership of the Professional Land Surveyors of Colorado.

Sincerely yours,

Randy Bloom / Chief Cadastral Surveyor for Colorado

WFPS Board Meeting Summary

October 10th, 2015 Doubletree Hotel in Seattle, Washington

By Roger Nelson, PLS, CFedS

Notes from the WFPS meeting are as follows:

WFPS areas of focus:

Developing and Maintaining Programs to Promote the Profession

WFPS is committed to promoting the land surveying profession. To that end, WFPS is currently developing the following programs:

• Youth Outreach – Land Surveying as a Career ✓ WFPS has budgeted funds to develop an after school/community program. The program will include 10 hours of curriculum that can be used by state associations and their chapters to promote land surveying as a career. The initial outline of the program is complete. More information will be available regarding this program in January. If you are interested in serving on the committee that is developing this program, please contact the WFPS Executive Office at (707) 578-1130 or admin@wfps.org.

✓ Continuance of the Teaching with Spatial Technology (TwiST) program which provides teachers with resources to promote land surveying within their classroom. All state associations are welcome to participate in this once a year event. The 2016 TwiST program will be held the third week in June. All state associations are welcome to sponsor teachers to this training. Deadline for registration is March 31st.

• Public Awareness – Elevator Pitch Contest

 ✓ An Elevator Pitch is a short summary (no more than 45 seconds) used to spark interest in the profession.

 WFPS is running a contest for the best elevator pitch to engage a member of the public and quickly educate them on "What is a Land Surveyor" and "How a Land Surveyor Serves the Public." Be creative and submit your pitch to admin@wfps.org by April 30, 2015. The winner will receive a \$100 Visa card.
 Yang Alexandrian Alexandrian Surveyor

Providing Resources to Benefit State Associations

WFPS is dedicated to providing resources to state associations. Following are a few of the resources currently being developed:

1. Speakers Bureau

This new resource developed by WFPS will provide state associations the ability to search for a speaker by name, geographic location, or by topic. The database will include a photo of the speaker, a bio, price range, and testimonials. State associations are currently in the process of sending in their recommendations for speakers.

2. Quarterly Book Reviews

Looking for content for your magazine or newsletter? WFPS will be providing a quarterly book review that

state associations can publish.

Serving as a Regional Voice

WFPS serves as a regional voice for the surveying profession. WFPS has a long history of assisting state associations by providing support on legislative issues. This includes letters of support and resolutions for topics such as continuing education, four-year degree, and definition of surveying.

At the October Board of Directors meeting, WFPS took the following action to assist state associations with specific needs:

✓ At the request of Washington delegates, WFPS will write a letter of support to maintain the survey program at Clark College

✓ At the request of Colorado delegates, WFPS will write a letter of support to maintain the position of County Surveyor in Colorado

✓ As some states do not have a recordation law, WFPS Board of Directors adopted a resolution in support of survey recordation requirements.

NALS-WFPS Western Regional Conference

WFPS will co-sponsor a western regional conference with the Nevada Association of Land Surveyors. The conference will be held April 16-19, 2016 at the Golden Nugget in Las Vegas, NV. Featured speakers include: Gary Kent, Jeff Lucas, and Jan VanSickle.

Other news from the October 10th WFPS meeting:

WFPS to provide PLSC County Survey Support Resolution. Arizona and Utah Boards waffling on support of WFPS.

TWIST Candidates require submittal by March 30, 2016 for program scheduled June 20-24, 2016.

WFPS has been running a budget deficit over the past two years and is projecting a \$18K deficit for the 2015-2016 cycle.

At the request of the BLM, WFPS is contemplating administration of the CFedS program as NSPS has declined to administer this program. Roger Nelson & Mark Corbridge were named to co-chair the WFPS Education Committee.

Next Scheduled Meetings:

January 9, 2016 – Ontario, CA April 16-19, 2016 – Las Vegas, NV (Coincide with Nevada Conference)

PLSC Treasurer's Report – 2016 Budget

INCOME		Web Site	4,000.00
Scholarship	5,000.00	Web Site - Don Lambert	1,000.00
Silent Auction	1,500.00	Lobbyist	5,000.00
Summit Income	88,000.00	Travel, Bus	
Refresher Course Income	8,800.00	BOD Travel	3,000.00
Refresher DVD	2,400.00	WFPS Travel	6,000.00
GIS in the Rockies	1,500.00	NSPS Travel	9,500.00
Membership Dues		Credit card/Bank Expense	3,669.36
NSPS Dues	8,440.00	Insurance	600.00
Membership Dues		Miscellaneous, Bus	150.00
Voting	23,210.00	Phoenix AMC	28,000.00
Associate	5,550.00	Postage	500.00
Sustaining	4,140.00	Dues	
Student	60.00	NSPS Dues	8,440.00
Retired	240.00	Chapter Disbursements	5,500.00
Membership Dues Subtotal	33,200.00	RMSS Chapter Distribution	
Total Membership Dues	41,640.00	NCPLSC	3,552.00
Miscellaneous	50.00	SCPLSC	3,900.00
Side Shots Ads	4,000.00	CCPS	6,750.00
Total Income	152,890.00	RMSS Meeting Expense	
		Promotion	2,500.00
EXPENSE		Supplies	750.00
BOD/Chapter Summit Meetings	1,500.00	Copies/Printing	1,000.00
Side Shots	12,000.00	Attendee Food/Beverage	25,000.00
Awards	1,600.00	Speaker Travel/Expense	8,000.00
Scholarship	5,000.00	PLSC Meeting Expense - Other	500.00
Refresher Course	1,500.00	Total PLSC Meeting Expense	37,750.00
Supplies, Bus	150.00		
Storage	600.00	Total Expense	151,661.36
Merchandise			
Tax prep	2,000.00	NET INCOME	1,228.64

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CHAPTER NEWS

CCPS

Greetings everyone. Here we are again; as I write this, Christmas is quickly approaching and another great year is almost in the books! I'd like to start by saying thank you to Technician Trent Waters from the Colorado State Patrol and to those of you who were able to attend the October General meeting at the Table Mountain Inn located in Golden, CO. Technician Waters gave a very interesting and in-depth presentation on crime scene mapping and investigation. I think everyone who attended was surprised at the level of effort that goes into accident investigation, from physically surveying the site, checking CCTV, and even, checking credit card time stamps.

As the CCPS begins to plan our 2016 General Meeting calendar, I would like to remind all of you that we would be very excited to offer you or your company an opportunity to showcase one of your exciting projects to the rest of the surveying community. The CCPS desperately wants to hear your thoughts on how we can best serve our members and provide valuable information while having some fun at the same time. Please feel free to contact any of the CCPS directors if you have any ideas for General Meeting topics.

Currently the CCPS as well as the PLSC and other chapters have been diligently working on planning the upcoming PLSC 2016 Rocky Mountain Surveyors Summit that will be held March 2-4, 2016 at the Arvada Center. The CCPS would especially like to thank Kayce Keane and Todd Beers of the PLSC for keeping us all on track. I'm confident that we are going to have a great conference!

I would also like to take this time to make my usual imploration for directors. As many of you are aware, we are undersized and short three directors. If any of you are reading this and are interested in serving on the CCPS board please feel free to contact me or one of the other members. It's a great way to get to know your fellow surveyors and make friends in the process. I may just have to pick some people out of the crowd this year!

I hope all of you had a wonderful holiday and happy new year!

David Kuxhausen, PLS CCPS President

NC-PLSC

Our presentation for January is on the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys. NSPS has been filling in for ACSM for several years and the title now acknowledges their official role in setting the standards. NSPS recently sent out membership packages and I think many of us were amused (and some were annoyed) to see that our new memberships expired before we received our cards and certificates. Hopefully everyone is now receiving the informative weekly e-newsletters and tuning in to the podcasts. It was a rough start, but with so many states going "all-in" this past year I can see that NSPS had a larger administrative task than they had a work force to do the administering. So even though we did not receive membership packages last April, I do believe we have been receiving the benefits of the efforts of NSPS.

In February we are planning to host a meeting geared towards helping our co-workers with their LS applications. We are hoping to enlist some experts from the Board to discuss the current application process and red flags that need to be addressed. We hope to spend some time working individually with each applicant to review their presentation of their experience to help them hit all the key points and as an extra QC. Depending on feedback from the LS applicants, we may move this to the first Tuesday, rather than our traditional first Wednesday of the month, so that the Refresher course attendees can make it. Please send me an email at Laine.Landau@LRA-Inc.com if you would like to attend but have a conflict with the Refresher course. Please contact Kevin Bowman at kevinebowman@gmail.com if you would like to be added to our mailing list.

March will find a good portion of the Northern Chapter at the Surveyors Summit and we will skip our regular meeting. Contact your Chapter representatives to see what needs are outstanding and consider volunteering to help make the Summit a success. Kayce Keane has done a fantastic job keeping this effort on track and more awesome than ever. Hope to see you all there!

> Laine Landau President, NC-PLSC

NW 1/4 CLS

A near quorum of the NW1/4 decided to take continuing education into another state on November 5th and 6th of 2015. Those were the dates for the PLSW Technical Session in Casper, Wyoming. For years, members of our chapter had been regaled by stories, some true no doubt, of the Technical Sessions hosted by our northern brethren. The main attraction was free beer on Thursday night. Or at least that is the message that got through. And that message was enough to attract four of our members and another local surveyor to take the four hour drive north!

Truthfully, this past fall's session featured Ron Scherler, formerly of the BLM and currently the CFED Chairperson responsible for the day to day management of the CFED program. CFED requires annual CEU's, as does licensure in Wyoming, Utah and New Mexico, so two of our attendees were CFED's and three were licensed in adjoining states with Continuing Education

CHAPTER NEWS

Unit(CEU) requirements. What does it say about our state and its lack of CEU's?

Since Ron Scherler is the current Chairperson, the subject matter was very pertinent to not only CFED's, but also to any surveyor working in the Public Land System. Specifically, the lecture, power point and handouts concerned a number of cases where there are discrepancies in the official survey record. How do you handle differences along the same Township line as shown on the adjacent GLO Maps? What do you do if the plat bearing and distances do not agree with the field notes? How are ambiguous field notes handled?

The simplest answer is that there are rarely hard and fast rules. Each case of ambiguity typically has a different set of facts and thus the courts or the Interior Board of Land Appeals (IBLA) looks at each case individually. What the court cases did seem to have in common was longtime ownership of private property in remote areas where the lines being contested were either hundreds of feet different or in one case, milesdifferent.

Although these court cases may seem to be irrelevant to the average surveyor, in reality they are not. I just completed a 3000 acre ranch survey bordering Rio Blanco and Routt Counties that has had three owners in over a hundred years. It borders National Forest. The fences in many cases are hundreds of feet away from the true lines. We are seeing increasingly common disputes between nearby private landowners and the BLM, Park Service or Forest Service that are now making national news. All of these are in remote areas and with the ageing Public Survey System that has not been recently surveyed, these disputes are only going to become more common. And the answer is not in your data collector!

> Brian T. Kelly, PLS President NW ¼ Chapter

SCPLS

Last fall, the Southern Chapter together with the PLSC set up an activity station at the 50th Annual Denver Area Council Boy Scouts Camporee. There were over 2600 campers at the event and the Professional Surveyors trained at least 250 would-be surveyors in the art of leveling, GNSS/RTK location, navigation and optical-robotics. It was a blast and we encourage every professional to participate in future events. The 2015 annual Christmas Party and white elephant gift exchange, at the Sun Bird Mountain Grill, was the perfect way to end our year. With a few new faces than in previous years, twenty-nine folks dined on mostly filet mignon and sniped Christmas presents from each other. The hottest gifts were a pair of ornamental lanterns, bird dog honey whiskey, and Pam Fromhertz went home with a decorative shrubbery. Our new year is looking bright with our annual meeting scheduled for January, new leadership, and the chapter playing a big role at the Rocky Mountain Surveyor Summit. For more details and to get involved with southern chapter events, check us out at: <u>www.scpls.net</u>.

> Steve Parker, PLS, CFM SCPLS President

SWC-PLSC

The SW Chapter of the PLSC held officer elections at our last meeting on November 17th and the officers elected are as follows: Parker Newby, President, Daryl Crites, Vice-President, Dave Seiler, Secretary/Treasurer. Many thanks go out to Josh Casselberry for his tenure and leadership during the last few years. The Chapter has maintained membership and held a number of successful seminars under his direction and we look forward to continuing the Chapter presence in the Four Corners area.

At our last meeting we had the honor of having Pam Fromhertz speak on the current NGS activities and projects. She also gave a great update on the OPUS tools and resources available to surveyors. We really appreciate her efforts in getting to the meeting through very difficult driving conditions!

We are looking forward to a great 2016 and the upcoming Surveyors Summit. Hope to see everyone there.

Happy New Year!

Parker S. Newby, P.L.S. President – PLSC SW Chapter

WCLS

The November meeting of the WCLS was held on Wednesday the 12th and was heavily attended. Nominations for the election of new officers and directors were the main topic of the evening, thus the low attendance for fear of being nominated. Several topics besides the upcoming election were: Rule 6.5.4.1 regarding the documenting of new and existing monuments, our upcoming spring seminar and a brief discussion of new Trimble equipment by CDOT personnel. Our next scheduled meeting will be Wednesday, January 13th, 2016.

> Peter Krick, PLS President, WCLS

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