

November 2021

SIDE SHOTS

Professional Land Surveyors of Colorado

Volume 52, Issue 4



**Women in
Surveying**
SEE PAGE 16

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SIDE SHOTS

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On the Cover: Marla Mellor McOmer, PLS

*Side Shots is the official publication of the Professional Land Surveyors of Colorado, Inc.
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What's the Point?

Contrary to “what’s the use?”, what’s the point can be a very valid and healthy question. I suspect most of us have asked ourselves some question like this over the years. Maybe you have contemplated this idea several times. I know I have. I have even tried different things over the years. Some in addition to surveying and some in place of surveying.

As surveyors, we understand a point to be a specific place with a northing, easting, and elevation, each with an expected precision. In our lives, both professional and personal, we also have points, or moments, of significance. Both the “life” points and the “survey” points have this thing in common: their significance, or accuracy, can only be measured by their relative position or significance to other known entities. In life we have a few really big moments; marriage, the birth of a child, buying a home, losing a loved one. Professionally, I can think of a handful of particularly memorable projects. But when I ponder why they are memorable, it's not the money I made or the significance of the project or even the raw 1:350,000 closure I achieved. The really memorable parts for me are the unique solutions to the especially challenging boundaries or construction staking where there is no room for permanent control or ... wait a minute. What's the point of this article? What's the point of my job? What's the point of our profession? The point is this: we must stop regularly and take inventory of where we are, how we got here, and where we want to go!

What excites you enough to get up every morning and do it again, and again, and again. The big moments in life are memorable but it's the daily grind that keeps food on the table. It's the mundane that makes payroll. It's the unrelenting commitment to doing what's right, because it's right, that gives us longevity as a professional. It is that same way of thinking that has one generation of surveyors investing in the next. It's what gives sustaining life to a publication like Side Shots. It's what makes PLSC and the chapters meaningful. The organization, at every level, is just a collection of individuals. It's success depends on the commitment and persistence of it's members. Not just board members but everyone in the surveying community. Fortunately, I have met and worked along side many fabulous people of integrity.

When I take inventory of how the PLSC has benefitted me, I go very quickly to the education I have received as a benefit of the gifted and generous people who came before me. The Refresher Course is undoubtedly the only reason I passed my CO exam on the first try. With about twenty years between my CO exam and my original NC exam I was more than a little out of practice. The PLSC Refresher Course was critical for me becoming licensed in Colorado. I also think of the impact each Rocky Mountain Surveyors Summit has had and how much I missed it this past year. Now I think of several of my staff who have taken part in PLSC proctored CST exams to benefit their career and our survey department collectively.

Now it's your turn. What's the point for you? As you reflect on the blessings and growth this thing called life has given you, please ask yourself how you will engage in the PLSC this coming year. You should have, or will shortly receive, your annual membership renewal. Please consider what a difference we can make together for ourselves, our respective businesses, and our profession.

— Ralph Pettit, President, PLSC



FROM THE EDITOR

In this edition of Side Shots we continue our women in surveying series spotlighting the surveying career of Marla McOmber, PLS. She shares stories of her days with her father and Donald Sutherland and Associates. She provides us with a sampling of her amazing career and how she got there by stepping into the footsteps of well know surveyors like Doyle Abramson and Ken Carlson. It's a great read and I thank her for giving us a glimpse of her surveying career.

"The visitation of the Surveyor", by Scott Thompson, is an outstanding article that puts us in the shoes of Judge Cooley, et al., with a great reminder of the professional surveyors' role in the eyes of the public, and just how important it is to engage with each of the interested parties of a land survey, considering how our presence impacts the peace and stability of our respective communities.

Rocky Mountain Surveyors Summit has a featured speaker for next year, John Stahl, PLS, CFedS! Similar to this year, there will be both in-person and virtual elements of the conference, and It's shaping up to be the best one yet. Many thanks to all the hard work the planning committee is doing to make this event grow and improve every year.

All the chapters appear to be working hard on the GPS on benchmarks effort, and I am encouraged to see the return of chapter events like a golf tournament, presenters at membership meetings, in-person meals, public celebrations, local guest speakers, chapter

technical seminars. I believe the PLSC has survived this pandemic season.

When I first joined the PLSC it was because of the review course and exam prep. Please encourage your young and up and coming surveyors to attend the fundamentals courses and the principles and practices courses, they really are the difference between passing the exam(s) and becoming a professional or not...

We celebrate the Trig-star champions and the newest CST recipients. This tells me we are growing as a profession and we need to keep encouraging others to join our ranks.

Without the NGS, where would we be: OPUS Projects 5.0 is more user friendly and now introduces RTK/RTN collected vectors into your adjusted GNSS networks. What's next? a new GNSS Vector Exchange format? Wait GVX what!

The presidents' letter, What's the Point, is well put, as the PLSC refines it's purpose, direction, priorities, and that membership is the key to our growth and future.

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2nd Annual CCPS Golf Tournament

September 25, 2021, at Applewood Golf Course

This year's golf tournament was a huge success. We had a total of 33 players representing different companies such as Aztec Consultants Inc., Falcon Surveying Inc., Harris Kocher Smith, Olsson, Vectors Inc., Westwood Professional Services, and Woolpert Inc.

This year's winning team was Devon Arnold and Jon Dittbenner from Westwood Professional Services, Chuck Hutchins from Vectors Inc., and David Kuxhausen from Woolpert Inc., with a final score of 65. The second-place team consisted of all Aztec Consultants Inc., with Paul Haplin, Collin Myric, Steve Hrica, and Nick Johnston with the same score of 65. However, they missed first place by shooting higher on the harder holes as compared to

the first-place team. Third place was not too far behind with a score of 66, again all from Aztec Consultants Inc. consisting of Dave Vasquez, Brandon Arndt, Jim Lynch, and Brendan.

This year's closest to the hole winner was Jon Thompson giving him a staggering 6-foot putt to finish hole 9 with a birdie.

We would like to thank everyone who made it out and hope that next year's event is even better with a bigger roster.

Best,
Cole Conger
Secretary CCPS

2022 Colorado Land Surveying Refresher Course

Offered Online and In-Person



The Professional Land Surveyors of Colorado, Inc., and the Central Colorado Professional Surveyor Chapter are offering a comprehensive Land Surveying Refresher Course beginning Wednesday, January 5, 2022. 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. Each 3-hour class takes place on **Wednesday** evenings starting promptly at 6:00 pm. Information available on the PLSC website: <http://www.plsc.net/>

<u>Session</u>	<u>Date</u>	<u>Topic</u>
1	Jan. 5	Course Overview, Exam Skills and Testing Basics
<u>Focus on Fundamentals of Surveying</u>		
2	Jan. 12	Survey Computations I
3	Jan. 19	Survey Computations II
4	Jan. 26	GIS, State Plane, Geodesy
5	Feb. 2	Boundary Law/Legal Terms and Definitions
<u>Focus on Principles and Practice of Surveying and Colorado Specific</u>		
6	Feb. 9	Public Land Survey System
7	Feb. 16	Colorado Survey Law I
	Feb. 23-25	Rocky Mountain Surveyors Summit - Marriott Denver West
8	Mar. 2	Colorado Survey Law II
9	Mar. 9	Ethics/PS&FS Topics
<u>Final Class</u>		
10	Mar. 16	Mock PS and FS Examinations

Registration is open beginning Monday, November 1, 2021 through PLSC: <http://www.plsc.net/>

The fee for the entire course is \$425 or \$75 per individual class.

A location for in-person classes in the Denver area is being finalized (additional information will be available when registration opens). Online classes will be broadcast each night, and recordings will be available 1-2 weeks after each class.

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

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NOAA's National Geodetic Survey Update

By Brian Shaw, brian.shaw@noaa.gov

GPS on Benchmarks

Thank you to everyone that has participated in this important effort over the last 7 years! GNSS data submitted to NGS is how the Modernized NSRS will be realized, so any data you can collect and submit will be greatly appreciated. This year has been a big year for GPS on Benchmarks across the country, breaking last year's records through the great efforts of many surveyors across the nation. The cut-off date to submit GPS on Benchmarks and guarantee that it is available to build the NAVD88-NAPGD2022 transformation tool and national adjustments is December 31, 2021. While some data submitted after this date is likely to be used to develop the transformation tool and to determine the initial Reference Epoch Coordinates (REC), only data submitted before the cut-off date is assured to be used. NGS will develop a transformation with all of the data we have, so the more data provided, the better the transformation. All of the data available will also be used to determine RECs which will provide adjusted coordinates at epoch 2020.00, similar to how the 2011 National Adjustment provided coordinates at epoch 2010.00. These RECs will provide authoritative coordinates for surveyors to use as control and you can learn more about them and other NSRS Modernization by reviewing the NGS publication Blueprint for 2022, Part 3: Working in the Modernized NSRS¹.

GPS on Benchmarks Web Mapping Application Updates

There have been a couple recent updates to help users perform analysis and plan their GPS on Benchmarks field work and you can access the application from the GPS on Benchmarks Home page². A number of users asked to have a map layer for the secondary marks that can be used for GPS on Benchmarks when a priority mark is unavailable. Many users would report the primary priority list mark was no longer there or not GPSable and would use the hexagon secondary PID list to look up marks using the NGS Data Explorer. To keep people from having to go between multiple mapping applications NGS added a layer of all the secondary marks that met the criteria for the GPS on Benchmarks campaign, helping make reconnaissance and field work more efficient.

In the West there are large areas where no people live so NGS thought it would be ideal to have a mark priority based on population, in addition to the current priority based on the type, setting and type of data collected on

the mark. Using Census data, NGS performed analysis to determine all of the hexagons that fell within 20 km of areas with a population of 2500 people or more. Any hexagons, and marks falling within the hexagon, that met this criterion were given priority A (lighter color) and all of the rest were given priority B (darker color). This will allow states, counties and local governments to prioritize marks based on where there are larger populations. On the next page is a map showing the original prioritized hexagons based on the mark metadata for the Western US as well as another map showing the prioritized hexagons based on population. (*see map 1 and 2*)

Beta NGS Map

Over the last few years NGS has been working to make more authoritative data available via web services. Recently NGS has been developing Esri ArcGIS Online (AGOL) web services to be used by constituents and other organizations. This enabled NGS to develop the OPUS Share and GPS on Benchmarks web maps, dashboards and web services that many states and organizations have used and added these services to their own maps and dashboards. For the Beta NGS Map³, NGS added services for the NOAA Continuously Operating Reference Station (CORS) Network (NCN) as well as services for the NGS Datasheets. This allowed NGS to create a Web Map Application including the CORS, OPUS Shared Solutions and Datasheets all on one map (*see Map 3*) to explore the different data NGS analyzes, archives, and provides to the public. Creating these services allows constituents and organizations to add these data services to their Desktop GIS or web maps without having to download the data. There are many different tools for exploring, selecting, exporting, printing, and sharing the data and maps with others and provides a great tool for survey planning. Below is a screen shot of the Beta NGS Map zoomed in to the Denver Airport. (*see Map 3*)

OPUS Projects

OPUS Projects is a web-based geodetic application which enables baseline processing of simultaneous, static GPS observations and conducting least squares adjustments to achieve maximum accuracy and consistency within the survey network. At this time, users need to take or have taken OPUS Projects Manager's training to gain access and use OPUS Projects. There are several classes currently available to sign up for and all NGS training is free of charge. To

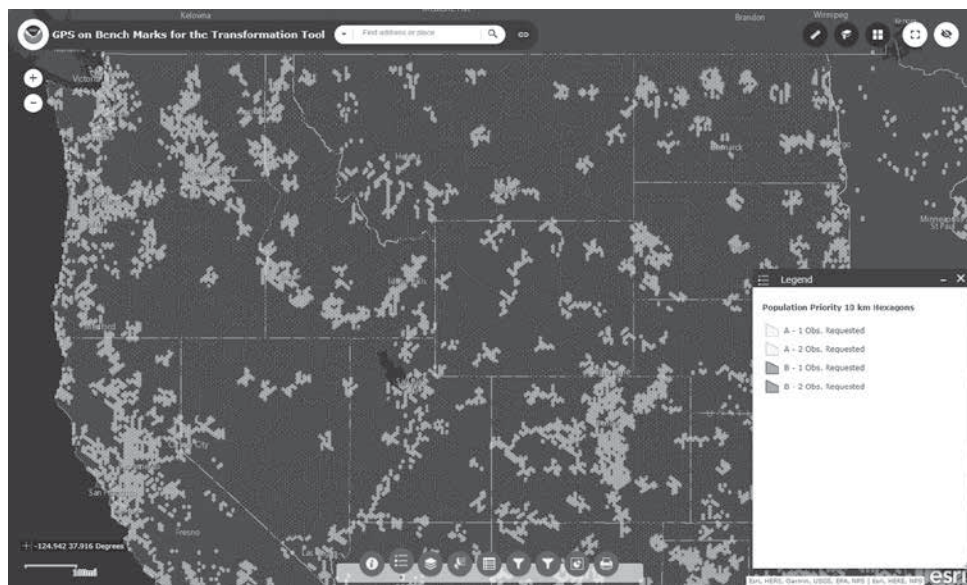
Map 1

Original Mark Priority Hexagons
for Northwestern Conterminous US



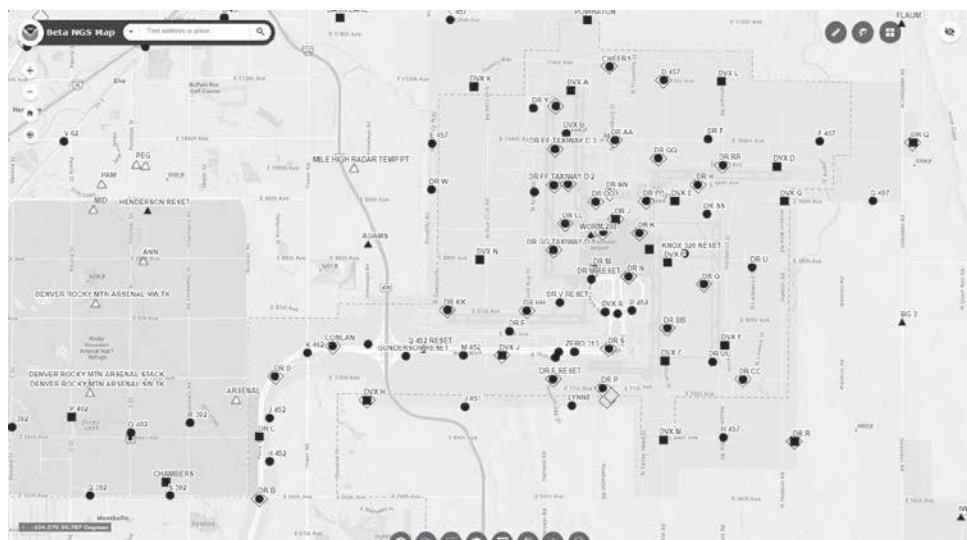
Map 2

New Population Priority
Hexagons for Northwestern
Conterminous US



Map 3

Beta NGS Map in ArcGIS Online



see upcoming classes please visit the NGS Upcoming Training web page⁴.

OPUS Projects 4.0 now in Production

In early July OPUS Projects 4.0 completed beta testing and was moved to our production servers, making it the current authoritative version. This update allows users to process GPS projects and submit them to NGS for bluebooking and loading into the NGS Integrated DataBase (NGSIDB). In the past, organizations submitting projects to NGS had to develop “bluebook” files after adjusting the projects in vendor-specific software and/or text editors. The latest version of OPUS Projects (4.0) has greatly improved this process by providing online session processing and adjustment software that now creates all the “bluebook” files required to submit observations. Submitting this data to NGS adds new certified coordinates to the National Spatial Reference System (NSRS) that are available on NGS datasheets. This provides the ability for users to easily establish survey control where they need it. OPUS Projects can make technical assistance and problem solving more efficient by enabling users to work with Geodetic Advisors or GPS project analysts at NGS within the software. Everyone can work with the same project online to analyze any issues with the data, adjustments or files, eliminating the need to send data files back and forth. There is a new detailed user guide for OPUS Projects 4.0 (currently in draft form) available for download⁵.

OPUS Projects 5.0 now in Beta

In the middle of September, the much-anticipated OPUS Projects 5.0 was released to the public for beta testing. This is a very big update that allows users to do session processing and least squares adjustments using CORS, static occupations and Real Time Kinematic (RTK) or Real Time Network (RTN) collected vectors. Users can upload vectors from RTK/RTN observations to OPUS using the GNSS Vector Exchange (GVX) format⁶. Many vendors are working to develop conversion software to export vectors in this format. NGS does have internal software for converting vendor vector files so you can contact me if you have any vectors you would like to convert to use with OPUS Projects 5.0.

Links

¹ https://geodesy.noaa.gov/library/pdfs/NOAA_TR_NOS_NGS_0067.pdf

² <https://geodesy.noaa.gov/GPSonBM/>

³ <https://arcg.is/1KHTOa1>

⁴ <https://geodesy.noaa.gov/corbin/calendar.shtml>

⁵ <https://geodesy.noaa.gov/OPUS-Projects/docs/Documentation.pdf>

⁶ <https://geodesy.noaa.gov/data/formats/GVX/>



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SOUTHWESTERN CHAPTER OF THE PLSC

GPS ON BENCHMARKS EVENT - July 31st, 2021

by Todd Johnston, PLS – SWPLSC President

On Saturday, July 31st 2021, The Southwestern Chapter of the PLSC (in conjunction with the Northern Chapter) held a GPS on Benchmarks event.

GPS on Benchmarks is a National Geodetic Survey (NGS) program designed to improve the National Spatial Reference System (NSRS). Data is collected on specific benchmarks in an area with survey grade GPS units for at least four (4) hours. This data is then submitted to the NGS and is processed with other data and incorporated into the 2022 NSRS modernization.

We had a great turn out with ten participants from six different agencies/companies.



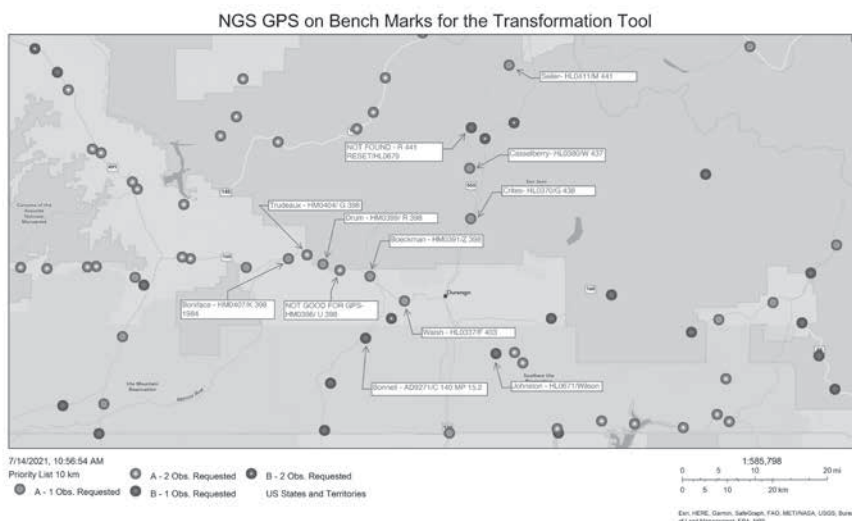
Survey Rigs Getting Ready to Depart

We completed the work in an efficient and safe manner. Everyone had a great time and we had good luck with the weather. After the event participants celebrated at Burger Theory for drinks and good food where many survey stories were told!

Thanks to all those who participated! Special thanks to the SWPLSC Officers (Josh, Justin and Brian) for planning the event and our technical experts (Justin, Brian and James) for assisting with data collector/GPS unit setup and submission of data.



Participants were (from left to right) Standing: Bob Drum (CDOT), Mike Boeckman (BLM retired), Rob Trudeau (Goff Engineering), Justin Bonnell (SEH) and Daryl Crites (DZC Surveys). Kneeling: James Walsh (CDOT), Todd Johnston (CDOT), Josh Casselberry (Moreno Surveying) and Brian Boniface (Goff Engineering). Taking the selfie is Dave Seiler (CDOT)



Observations were taken on benchmarks along US Highway 160, US Highway 550, State Highway 140 and State Highway 172 surrounding the Durango, CO area.

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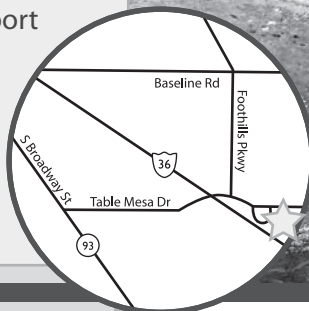
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John B. Stahl, PLS, CFedS, is a registered professional land surveyor in Utah and Montana, currently owning and operating Cornerstone Professional Land Surveys, Inc., and Cornerstone Land Consulting, Inc., in Salt Lake City. Mr. Stahl specializes in surveying land boundaries, resolving boundary conflicts, performing title and historical research, land boundary consultation services, mediation, and dispute resolution.

PRESENTATIONS

IN PERSON

***Boundaries, Disputes and Discrepancies
AND***

Writing Land Boundary Descriptions

John Stahl, PLS, CFedS

*What Makes a County Road and Highway
ROW Title*

Eminent Domain

Easements and Contracts

DORA Update

SUE/POINT MAN and PROSTAR

CDOT Moving Towards Open Roads

SPECIAL SESSION: Real World Survey
Problems and Solutions - An Interactive and
Engaging Event with All Attendees

VIRTUAL

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Civil 3D Class

Drone Class

NATRF 2022

State Plane Coordinate Systems 2022

Virtual Mesh

Project Management and Survey Quality

Phoenix LiDAR-UAS

AND MORE!

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information.

Go to www.rockymountainsummit.net
for complete information.

WOMEN IN SURVEYING

Marla Mellor McOmber, PLS



I started surveying when I was about 15 years old. My father, Stan Mellor PE LS, ran a survey group for a large engineering firm. He would have me work with him on some weekends to correct errors in his crew's work (busted differential level loops, traverses that didn't close). This did not endear me to any of his survey teams when he would tell them "My 15-year-old daughter fixed your work." It was a bit of a bummer not to hang out with my friends some weekends, but I got to see incredible places, spend my time outside, and work with expensive accurate survey equipment. Plus, the physical aspects of surveying; digging, pounding, walking for miles made me strong.

After I graduated from high school, I worked in an office for about a year. The hours crawled by... it seemed an office environment was not for me. About this time my father started his own survey company and asked my brother and I if we would like to join him. My brother declined due to having a very bad experience surveying on horseback. I said yes and my father said, "God help me." Mellor Surveying was created and then we joined Donald Sutherland and Associates to widen our client base. We did a project in Gardner, Colorado staking the alignment for a new water line system.

When we were doing our "project control survey" we located several original survey markers for the section corners. I had never seen the rocks that were described in the Survey Manuals and there they were. The marks for position in the township were clearly visible and it hit me... this is history, we are retracing the steps of surveyors that came before us. My dad instructed that I make sure that the rocks were in the correct orientation per the manual to confirm they are in their original location, because they may have been disturbed by farming or development. After assisting with so many surveys in metro Denver, I was surprised this was the first time I had the opportunity to see original undisturbed monuments. This was history and the Survey Manuals held new, yet really old information that fascinated me. During the rest of my career, I found new joy and purpose in discovering an original monument and the piece of history it entailed.

I really enjoyed the outdoors and the physical aspects of surveying. Each job was a learning experience. The projects took me to all parts of Colorado and throughout the expanding Denver metro area. The equipment was fun to run, and I liked to challenge myself with getting faster and more accurate results. The math was interesting, and I ultimately took some surveying courses at Red Rocks Community College offered at night.

My parents eventually moved to California, so I began my career working for someone other than family. I went to work for Merrick and Company. They had twelve two-man survey crews, and did many large land development projects. I didn't know where to start on the field crew, but within a few weeks I was running my own crew on a large land development project. The biggest compliment I recall was from a land development site manager who called my boss and said, "Send back that female, she's better than the men you've been sending lately."

At this time in the early 1980's there were very few women on the construction sites, and I hadn't met another woman surveyor. Although the language and attitudes on the construction sites could get a little rough at times, I never felt disrespect. If you did a quality job efficiently, you were respected.

Eventually, I moved into the office and started working as a project surveyor. This offered many new challenges such as learning boundary law and business from very knowledgeable land surveyor's, including Doyle Abramson for boundary and Ken Carlson for business and marketing. Boundary determinations really piqued my interest because there wasn't just one



solution for a boundary line, and you had to gather many facts and decide where the boundary line should be - it was like a puzzle. These well respected Professional Land Surveyors were great teachers, and eventually their craft became my own. I passed my exams to become a Professional Land Surveyor, and was told that I was one of only two hundred women who were Licensed Land Surveyors in Colorado, and many were dual licensed Professional Engineers and Land Surveyors, a fact I never was able to validate.

Every day I learned some new skill or faced a new challenge in my chosen occupation. Computers replaced calculators, CADD replaced hand drafting, Total Stations replaced Theodolites and EDM's (Electronic Distance Measuring) devices. I was always challenged and very interested in the direction technology was leading the Survey Profession. I worked at Merrick for 19 years.

One highlight in my journey was being able to sign the new Charter for the Central Colorado Professional Surveyors as a chapter of the Professional Land Surveyors of Colorado and serving as a director for multiple years.

I joined Carter & Burgess and eventually we were acquired by Jacobs. As I progressed in my career, I became a Project Manager providing surveying services

to our in-house engineers and for many external clients on large and complex transportation projects for CDOT and RTD. (T-REX, FasTracks, Wolf Creek Pass, State Highway 7 Flood recovery, and I-25 Castle Rock to Monument).

The thing that kept me coming to work each day was that I was very passionate about pleasing my internal and external clients. The staff we had was incredible and worked to produce extremely high-quality products very efficiently. I was very fortunate to have great relationships with my clients and project teams. Many of the engineers I worked for told me that their project was only as good as the survey it was based on. You can't have a successful project without a strong foundation. I worked at Jacobs for 22 years, and now I'm retired and splitting my time between Arizona and Colorado.

Ladies, (and gentlemen) if you want a rewarding career that begins by working outside with lots of physical activity and keeps you challenged with new technology, then you might want to consider becoming a Professional Land Surveyor. I'm forever grateful my Dad gave me my start in this career. It may have been a challenge, but it never was boring.



National Trig-Star Committee Selects Winners of the National Trig-Star and Teaching Excellence Awards

The National Society of Professional Surveyors (NSPS) is pleased to announce the recipients of the 2021 Richard E. Lomax National Trig-Star Awards. The Trig-Star committee met on July 23, 2021 to determine the three top high school students from the national examinations submitted by state winners. This year there were twenty state winners submitted.

The Richard E. Lomax National Trig-Star Awards are as follows:

FIRST PLACE		SECOND PLACE		THIRD PLACE	
<div style="font-size: 1.5em; font-weight: bold;">\$2,000</div>	Rohit Dasanoor Revere High School Richfield, Ohio	<div style="font-size: 1.5em; font-weight: bold;">\$1,000</div>	Mary Meyer Andale High School Andale, Kansas	<div style="font-size: 1.5em; font-weight: bold;">\$500</div>	Kendall Sutton Liberty Ranch High School Galt, California

The Richard E. Lomax National Teaching Excellence Awards are as follows:

<div style="font-size: 1.5em; font-weight: bold;">\$1,000</div>	Joanne Gilette Revere High School Richfield, Ohio	<div style="font-size: 1.5em; font-weight: bold;">\$500</div>	Janelle Geist Andale High School Andale, Kansas	<div style="font-size: 1.5em; font-weight: bold;">\$250</div>	Katie Sutton Liberty Ranch High School Galt, California
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The following is a list of the remaining participants:

Junzheu Jiang, Connecticut Brandon Dong, Colorado Shakira Cruz Lopez, Delaware Kenneth Holdman, Illinois Davis Trumm, Iowa George Barsan, Kentucky	Sean Williams, Maine Javid Garcia, Michigan Kyle Miller, Montana Noah Gersich, Minnesota Daniel Dickey, Missouri Evan Rosenblatt, New Hampshire	Abby Post, North Dakota Phong Le, South Carolina Ethan Jones, Texas Nolan Smith, Utah Qingyne Li, Vermont
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Private and Engineering Utility Locates

PLSC Board of Directors

Meeting Minutes

August 16, 2021

1. Call to Order: Pettit

Name	Position	Chapter	Attending?
Ralph Pettit	President	Central	x
Brian Dennis	Vice President	Southern	x
Shaun Lee	Secretary/Treasurer	Central	
Becky Roland	Executive Director	n/a	x
Heather Lassner	Director	Northern/TrigStar	x
Eric Carson	Director	Central	x
Brian Bowker	Director	Western	x
Ian Cortez	Director	Central	x
Todd Johnston	Director	Southwestern	x
Eric White	Director	Southern	
Tom Sylvester	Director	Western	x
Scott Thompson	Director	Western, Legislative Co-Chair	x
Steve Parker	Ex-Officio	Southern/NSPS	x
Parker Newby	Non-Voting	Southwest	
Todd Beers	Non-Voting	NSPS/WFPS Delegate	
Guests:			
John Hunter		Geo-Coordinator	x
Peggy Streicher		GIS in the Rockies	
Robert Boehm		Central Chapter	x
David Berglund		Northern Chapter	
Willie Whelen		NW ¼ Chapter	
Brian Shaw		NOAA/NGS	x
James Combs		YSN	
Cole Conger		Central Chapter	x

2. Determination of Quorum (6 voting), determined

3. Any changes to the Agenda? Pettit

a. none

2. Determination of Quorum (6 voting): quorum present

3. Any changes to the Agenda?:Pettit

- a. CO NE Project under Project Updates
b. Educational Requirements under WCCC Updates

4. Approve July Minutes: Pettit

MOTION: To approve the July 2021 Minutes as presented. (Carson/Johnston)

Approved unanimously

5. Financial Items: Pettit/Lee/Roland

- a. No report at this time

6. Organization Chart Review: All

- a. Comments this week
i. Spell out abbreviations
ii. Ralph to follow up with BOD on Monday

- b. Post to website with links

- c. Publish in

7. Side Shots Report: Parker

- a. Need content – next deadline is September 30
b. Anything new or different that would make a great article?
c. Laine Landau and John Hunter are on the committee
d. Women in Surveying – new series
e. Photo ops for covers/social media/website
f. Todd Johnston will write-up on Southwestern Chapter GPS on Benchmarks event (with photos) and possible Northern Chapter input

8. Project Updates

- a. Colorado Railroad Museum Project: Hulsey/Boehm
i. Shaun Lee reached out to museum – no on call
b. Adams County: Berglund/Lassner
i. Ian Cortez met with Heather Lassner and Laine Landau to review Weld County work being done for online **resources**
ii. Ian reached out to Clerk & Recorder for County re: help with scanning – waiting response
c. Buettner Estate: Roland
i. Brian Dennis and Brian Bowker volunteered to pick up items in Basalt and get them to the PLSC storage unit or WCCC.
d. CREJ Article: Roland
i. Need volunteers to write an article for submission
e. CO/NE Project: Roland
i. Ian Cortez and Robert Boehm are interested
ii. Open to membership to assist
1. Send documents – how did they establish lat/long?
2. Poster that discusses some of the US Coast and Geodetic Survey Latitude/Longitude Observatories. There are some references that may be helpful as well. https://geodesy.noaa.gov/web/science_edu/presentations_library/files/caccamise_agu_2017_ilo_poster.zip

9. Reports

a. WCCC Update/Scholarship Committee

Sylvester

- i. Classes start Monday – 73 seats filled throughout all courses; over 30 surveying students
- ii. Dave Henderhand is assisting with labs and teaching survey tools class
- iii. Luke Jamison is helping with labs and ethics class
- iv. No new scholarship applications
- v. Educational Requirements Draft
 1. Please send stories/examples/feedback to Tom Sylvester
 2. Goal is to send the document to Christy Thomas at AES Board; publish to Side Shots in a week or so
 3. Add to agenda items for follow up this week – Ralph to remind Monday

b. GIS in the Rockies: Streicher

- i. No report

c. Colorado Coordinator Activities: Hunter

- i. Continuing to create content for support on State Plane

d. NGS Update: Shaw

- i. Michael Dennis is reviewing input on State Plane
- ii. Goal is to have information out by end of year and implement in 2022
- iii. New SW Advisor - Lynda Bell
- iv. Webinars monthly
- v. OPUS Project versions being published
- vi. Links
 1. Chapter One: Henry S. Pritchett and the Great Reorganization of the Coast & Geodetic Survey” https://library.oarcloud.noaa.gov/docs.lib/htdocs/rescue/coastandgeodeticsurvey/science_on_the_edge/8_Pritchettchapter.pdf
 2. NGS Webinars
 3. June GPS on Benchmarks Update
 - a. OPUS User Forum - New Capabilities in OPUS Projects
 4. July Vertical Datums: An Overview & Planned Updates
 5. August Modernization Plan for the NOAA CORS Network

e. Lobbyist/Legislative Committee: Thompson/Pettit

- i. Met with lobbyists and will be receiving quarterly reports
- ii. Met Rep. Marc Sidney (D) to sponsor bill on ILC – former title attorney – Scott Thompson has a possible Republican to ask
- iii. Rumor: elimination of County Surveyor constitutional requirement language being considered again

1. 28 of 64 counties list County Surveyor and only 9 are PLSC members.
 - a. Are ILC and plat deposit issues due to counties not having a surveyor?
2. Scott is contacting the non-members to see why.
 - a. Share information with Eric Carson
3. Is there a better plan than fighting this issue every four years? Send input to Scott.
 - a. Payment is low (\$3K-\$6K) – is this something?
 - b. Multi county surveyor?

f. Membership Committee: Carson

- i. Aztec will pay for campaign
- ii. Campaign in September
- iii. Becky will send draft to Eric Carson for review/comment

g. Outreach Committee

Dennis

- i. ACE Mentoring Program – Nothing significant to report (NSTR)
- ii. Sandboxes – almost done
- iii. CSCA – Oct 6-8 in Keystone
 1. Becky Roland to order sand now
- iv. Scouts -PVR Sept 25

h. Education Committee: Johnston/Bowker

- i. RMSS Planning
 - 1.1 John Stahl plenary speaker
 2. February 23-25, 2022 at Denver Marriott West with online classes following week
 3. Transferred Chair to Johnston and Bowker from Keane
 4. Developing program for in person and virtual
 5. Next meeting Sept 7
- ii. Refresher Course
 1. Mike Greer has retired – new host at Aztec Consulting

i. Trig Star Committee: Lassner

- i. Exams were graded – Colorado student did not win

j. CST Committee: Parker

- i. Exam July 24 at HKS – 7 examinees
- ii. Exam in October – need Saturday location
 1. Ian Cortez will send his schedule to Becky
- iii. Exam in November at HKS

k. NSPS Delegate Report: Beers

- i. September Meeting in-person and virtual

l. WSPS Delegates' Report: Beers/Nelson

- i. Meeting October in AZ – Merrick to pay

m. NSPS YSN: Combs

- i. No report

n. QBS Update: White

- i. No report

- o. Colorado County Surveyors: Joy
 - i. No report – Becky to discuss with Scott Thompson

- f. Southwestern: Johnston
 - i. GPS on Benchmarks was July 31 – had 10 participants from 4 firms, met for dinner after and gave a chance to Promote/participate in PLSC and RMSS
 - ii. September 21 – business meeting
 - iii. Another GPS event in fall

10. Chapter Reports

- a. Southern: Parker
 - i. NSTR – invite VP/Secretary next month
- b. Central: Boehm
 - i. Golf tournament flyer and registration setup
 - ii. Becky to report to CCPS weekly
 - iii. Postponing remaining in-person for now
- c. Northern: Berglund
 - i. No report
- d. NW ¼: Whelen
 - i. No report – Becky to check in
- e. Western: Bowker
 - i. BBQ went well
 - ii. Phoenix LiDAR at September meeting
 - iii. Looking to set up committees to get more volunteer involvement

11. Next Meeting Date and Location

- a. Next BOD Meeting - September 14 at 4:30PM
- b. BOD business work group – Website videos and resources
 - i. New resources page – member only?
 - 1. Information is public so make the page member only as a resource
 - 2. Weld County
 - 3. Robert has some info

12. Adjourn (Dennis/Carson)

	2021 Draft Budget	2020 Budget	8/31/21
Scholarship	56,100.00	55,100.00	1,680.00
Silent Auction	500.00	1,075.00	0.00
Summit Income	90,025.00	136,775.00	50,725.00
Continuing Education Webinars	500.00		
Publication (books)	150.00	150.00	0.00
Refresher Course Income	4,050.00	14,675.00	3,650.00
Refresher DVD	1,500.00	900.00	1,200.00
GIS in the Rockies	0.00	0.00	0.00
Membership Dues			
NSPS Dues	8,950.00	7,040.00	9,650.00
Membership Dues			
Voting	30,600.00	22,500.00	21,230.00
Associate	6,375.00	7,575.00	6,900.00
Sustaining	3,680.00	3,680.00	3,910.00
Student	240.00	90.00	240.00
Retired	360.00	180.00	360.00
Membership Dues Subtotal	41,255.00	34,025.00	32,640.00
Total Membership Dues	50,205.00	41,065.00	42,290.00
Miscellaneous	50.00	50.00	0.00
Side Shots Ads	3,500.00	4,000.00	2,800.00
	206,580.00	253,790.00	111,995.00
BOD/Chapter Summit Meetings	0.00	1,800.00	215.25

Awards	440.75	1,600.00	399.71
Scholarship	56,100.00	55,100.00	1,680.00
Twist	0.00	0.00	0.00
Endowment	50,000.00	50,000.00	0.00
Other	500.00	500.00	0.00
PLSC	1,500.00	1,500.00	1,500.00
CFedS	1,500.00	1,500.00	0.00
Chapter/Matching	2,500.00	1,500.00	0.00
Trigstar	100.00	100.00	180.00
Refresher Course			
Speaker honorariums/planning	2,200.00	2,400.00	1,800.00
Online Course Development	0.00	0.00	0.00
Copies/Printing	0.00	0.00	348.36
DVD Sales	0.00	250.00	191.65
Supplies, Bus	250.00	250.00	0.00
Storage	2,600.00	2,100.00	2,018.00
Special Projects			
???	0.00	0.00	0.00
Merchandise	0.00	500.00	0.00
Marketing/Enlistment Campaigns			

Publication (books)	0.00	0.00	0.00
Outreach			
High School/Middle School	450.00	750.00	530.70
Scouting	0.00	0.00	0.00
Legislative	0.00	0.00	0.00
Trigstar	100.00	100.00	0.00
6PM Plaque Renovation			
Tax prep	750.00	750.00	750.00
Web Site	1,200.00	4,000.00	1,196.98
Online Meeting accounts		600.00	
Web Site - Don Lambert	1,000.00	1,000.00	0.00
Lobbyist	15,000.00	15,000.00	10,000.00
Travel, Bus			0.00
BOD Travel	0.00	500.00	0.00
WFPS Travel	0.00	1,500.00	0.00
NSPS State Directors	0.00	0.00	0.00
NSPS Travel	2,000.00	4,000.00	571.85
Credit card/Bank Expense	3,611.52	4,768.56	3,019.95
Insurance	655.00	600.00	680.00
Miscellaneous, Bus	150.00	150.00	271.13
Phoenix AMC	25,000.00	21,000.00	13,326.25
Postage	300.00	250.00	49.08
Membership Packets			
Books	3,000.00	3,000.00	3,097.67
Decals	250.00	250.00	0.00
Postage	600.00	500.00	233.15
Dues			
NSPS Dues	8,950.00	7,040.00	9,050.00

Chapter Disbursements	6,180.00	6,180.00	0.00
RMSS Chapter Distribution			
NCPLSC	6,334.00	6,334.00	0.00
SCPLSC	6,334.00	6,900.00	0.00
CCPS	6,334.00	8,900.00	0.00
RMSS Meeting Expense			
Promotion	625.88	540.00	625.88
Supplies	23.74	400.00	23.74
Copies/Printing	0.00	0.00	0.00
Attendee Food/Beverage	8,000.00	54,500.00	7,986.76
Speaker Travel/Expense	26.52	8,500.00	26.52
PLSC Meeting Expense - Other	35,000.00	18,500.00	34,865.38
Total PLSC Meeting Expense	43,676.14	82,440.00	43,528.28
	206,465.41	253,512.56	101,656.70
	114.59	277.44	10,338.30

Western Federation of Professional Surveyors

Highlights from the Western States

The Western Federation of Professional Surveyors (WFPS) held a virtual Board of Directors meeting on June 12, 2021 via Zoom video conferencing.

ALASKA (ASPLS) Steve Buchanan – The ASPLS Board of Directors and local ASPLS Chapters have continued to meet virtually. There has been a significant decline in membership and ASPLS is looking at ways to promote membership. The University of Alaska Anchorage (UAA) - Department of Geomatics: The program is continuing with 3 full-time faculty members and several adjunct instructors. The new leadership at UAA is seeking to consolidate our bachelor program into a single “surveying” track and dropping the GIS concentration option. More information about ASPLS can be found on their website AlaskaPLS.org

ARIZONA (APLS) Mike Fondren – Current membership is 354. APLS participated in the 7-States Virtual Survey Conference and will participate in the 2022 Western Regional Survey Conference which will be a joint conference with Arizona, California, Nevada, Utah and WestFed held in Las Vegas March 30 – April 2, 2022. The Arizona Board of Technical Registration (BTR) has confirmed a new Executive Director, Judith Stapley, and new Land Surveyor Member of the Board, Helmuth Hack, PLS. APLS has revised their voluntary professional development program which is in place until Arizona adopts a continuing education requirement. APLS continues to hold virtual statewide meetings to engage membership and will hold their first in-person event October 15-16, 2021 which will feature a full day seminar with Jeff Lucas followed by a golf tournament. More information about APLS can be found on their website AzPLS.org

CALIFORNIA (CLSA) Kevin Hills & Ray Mathe – California is beginning to open from the pandemic. Membership continues to lag and CLSA Board is working to promote membership. CLSA participated in the 7-States Virtual Survey Conference and will participate in the 2022 Western Regional Survey Conference which will be a joint conference with Arizona, California, Nevada, Utah and WestFed held in Las Vegas March 30 – April 2, 2022. California will have two LDPs, one for the bay area and one for LA basin. More information about CLSA can be found on their website CaliforniaSurveyors.org

COLORADO (PLSC) Steve Parker & Todd Beers – Current membership is 286. The May issue of their magazine *Sideshots*, available on-line, was dedicated to the late JB Guyton, a past WFPS Director and respected member of the land surveying community. The PLSC Rocky Mountain Surveyors Summit (RMSS) was held February 22-26, 2021 in Golden, CO as a hybrid event with some presentations in-person and some online. The 2022 conference will be held February 23-25 at the same venue and again will be a hybrid conference. PLSC tracked several bills during the legislative session. The Colorado Mesa University/Colorado Community College continues to increase enrollment. The 2021 GIS In the Rockies Conference will be all virtual September 28-30, 2021. More information about PLSC can be found on their website PLSC.net

HAWAII (HLSA) Cliff Yim – Current membership is 86. Counties are easing restrictions and starting to welcome back inter-Island visitors. HB244 (Land Court Deregistration Bill) was passed in the State Legislature on April 27. HLSA recently found out that there are parties trying to sway the Governor not to sign HB244 based on misunderstanding on the mechanics of the new bill. HLSA drafted a letter to the Governor to clarify the misinformation and it was signed. HLSA plans to start working on a right-of-entry bill as our next legislature goal. HLSA just completed a 3-part virtual workshop on Carlson Software in May. A virtual Civil 3D workshop is planned in mid-June. HLSA plans to hold at least one workshop per month in lieu of our 2021 Conference. More information about HLSA can be found on their website HLSA.hawaii.org

MONTANA (MARLS) Dick Smith & Russ Kluesner – MARLS worked to oppose a “pin finder” bill that was introduced. MARLS is working with the Board of Registration to update easement rules and requirements. MARLS will hold a summer seminar August 27-28. More information about MARLS can be found on their website MARLS.com

NEVADA (NALS) Trent Keenan & Greg Phillips – Current membership is 271. NALS membership continues to increase. NALS participated in the 7-State Virtual Survey Conference in 2021 and will participate in the 2022 Western Regional Survey Conference with Arizona, California, Nevada, Utah and WestFed. The

conference will be held March 30 – April 2, 2022 at the Luxor in Las Vegas, Nevada. Great Basin College (GBC) continues to increase enrollment and NALS is working with UNLV to develop a minor program that would be able to transfer to GBC. NALS continues to publish and mail four issues of the Nevada Traverse magazine each year. NALS was able to effectively lobby the Senate Commerce and Labor Committee to amend SB 402 which would have eliminated the requirement to take the state-specific test for reciprocity for active-duty service members and their spouses. NALS will hold their first in-person event July 15-16th in Reno, Nevada. NALS continues to hold statewide virtual meetings to engage the membership. NALS continues to focus on outreach. Currently, the NALS Outreach Committee is working on media that can be used for career fairs. In addition, NALS continues to support the Nevada Young Surveyors Network (NV-YSN) and they are thriving. More information about NALS can be found on their website NvLandSurveyors.org

NEW MEXICO (NMPS) Allen Grace – NMPS participated in the 7-State Virtual Survey Conference in 2021. NMPS will hold their next Board meeting on June 19th. They are struggling with participation during the pandemic. More information about NMPS can be found on their website NMPS.org

UTAH (UCLS) Mike Nadeau – Current membership is 335. UCLS will participate in the 2022 Western Regional Survey Conference with Arizona, California, Nevada, Utah and WestFed. The conference will be held March 30 – April 2, 2022 at the Luxor in Las Vegas, Nevada. At the end of the legislation session a bill was amended that created issues with boundary line adjustments. Unfortunately, the bill was pushed through and UCLS will now work through the proper channels to resolve the issues this has caused. It was noted that UDOT was exempted in the legislation. More information about UCLS can be found on their website UCLS.org

WASHINGTON (LSAW) Ben Petersen and Tony Chenier – Current membership is 713. LSAW participated in the 7 State Virtual Survey Conference and had the majority of registrants (over 35%). The Conference was well received by the membership. The 2022 Conference will be held March 2-4 in Vancouver at the Hilton. LSAW continues to hold virtual meetings during the pandemic. The first in-person Board of Directors meeting will be held in August and a seminar is being planned for the fall. LSAW is promoting the NGS GPS on Benchmarks program. Washington State legislature passed HB 1277 on April 24th. As we understand, HB 1277 will add a \$100.00 fee on top of

all other existing recording fees collected by the Auditor and will affect map recordings. This was passed as an “additional revenue source for eviction prevention and housing stability” and beginning July 1, 2021. More information about LSAW can be found on their website LSAW.org

WYOMING (PLSW) Mark Corbridge – Current membership is 115. The fall technical seminar will be held November 4-5, 2021 in Casper, WY. PLSW continues to seek a sponsor for 2022 datum legislation. PLSW is working with the Board of Registration on outreach efforts. More information about PLSW can be found on their website PLSW.org

WFPS LSIT EXAM STUDY RESOURCE

The Western Federation of Professional Surveyors (WFPS) is developing an online exam preparation course for those studying to take the NCEES Fundamentals exam. A series of videos will be available through WestFed. Proceeds from the sales will be shared with WestFed state associations. The series will be priced low in an effort to encourage more people to get on a path to licensure. The series should launch at the end of September.

MARK YOUR CALENDAR

Western Regional Survey Conference

Arizona (APLS), California (CLSA), Nevada (NALS), Utah (UCLS), and WestFed

March 30 – April 2, 2022 ~ Luxor Hotel ~ Las Vegas, NV

Information will be available in September at PLSeducation.org

NSPS Membership Benefits Guide

It Pays to Belong

Benefiting Members and the Surveying Profession

The National Society of Professional Surveyors has an active government affairs program that protects the interests of the surveying and mapping professions in the federal legislative and regulatory arenas. Working with a government affairs consultant, NSPS monitors federal government activities that may be of interest and concern to our members. The consultant works closely with members of the NSPS Government Affairs Committee and our Executive Director to represent members' interests before Congress and Executive Branch Agencies.

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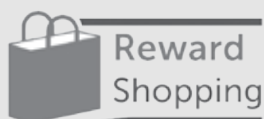
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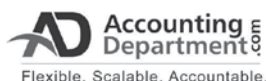
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Introducing Janet Wilkins – New BLM Cadastral Surveyor

Janet began her land surveying career in the Bureau of Land Management (BLM) Oregon State Office. During this time, she actively progressed in her responsibilities and became a licensed professional land surveyor. Her last three years in Oregon were spent as the Spatial Products Section Chief, in the Branch of Geographic Sciences. In this position Janet supervised the Public Land Survey System (PLSS) Dataset Team, Cartography and Remote Sensing Team, and the Land Records Team.

From Oregon, Janet headed to the BLM Headquarters office in Washington, DC to become the Cadastral Services Fiduciary Trust Manager for the national Cadastral Survey Program. In this position Janet provided Cadastral consultation; including boundary, GIS, and land title support to the Bureau of Indian Affairs (BIA), Tribes, and individual Indians. She also served in temporary assignments as the Headquarters Lands and Cadastral Survey Branch Chief and the national Chief Cadastral Surveyor. In addition, she served in two temporary assignments in the BLM Eastern States Office as the Geospatial Services Deputy State Director and Chief Cadastral Surveyor.

Janet moved to Colorado in February 2020, to become the Branch Chief for Resource Data at the BLM's National Operations Center (NOC). At the NOC Janet

managed GIS Operations, Cartography, Data Management, and Geospatial Imaging.

In June 2021, Randy Bloom retired as the Colorado Chief Cadastral Surveyor and Janet was selected into that position behind Randy.



Janet Wilkins signs a plat for a cadastral survey located along the Utah and Wyoming State Boundary.)

Janet has also taught college-level land surveying courses at Clark College in Vancouver, Washington. Janet has a Bachelor of Science degree in Geomatics from the Oregon Institute of Technology (OIT) and a Master of Public Administration degree from Troy University. Janet also graduated from both the BLM Emerging Leaders program and the BLM Leadership Academy Program.



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The Visitation of the Surveyor

By Scott Thompson, PLS

"If all the lines were now subject to correction on new surveys, the confusion of lines and titles that would follow would cause consternation in many communities. Indeed, the mischiefs that must follow would be simply incalculable, and the visitation of the surveyor might well be set down as a great public calamity." Judge Thomas Cooley, *John C. Diehl and Christine Diehl v. Ferdinand Zanger and Magdalene Zanger*, (39 Mich. 601)

I first read these lines when I sat for my interview in 1981 to determine if I was ready to take the test for licensure as a Professional Land Surveyor in the State of Colorado and one of the interviewers gave me a copy of Judge Cooley's observations on surveying. Somehow that "great public calamity" phrase stuck with me all of these years. Now that I have retired from private practice and taken on the role of the Mesa County Surveyor I am gaining an even greater comprehension of what Judge Cooley was conveying.

In my first year in office, I fielded over 500 phone calls and 230 visitors. Most of these contacts were concerning boundaries. Many of these were "new neighbor" issues, where a once harmonious neighborhood was now in conflict over the action of the newest residents. I can understand that, I have lived in the same house for about 35 years and have seen my share of new neighbors! Some of these issues involved surveys but most do not as people are reluctant to pay the price of a survey. Why pay the cost of a survey to mark the boundaries when they have been pointed by the realtor. Most of the issues are about fences and discrepancies sometimes measured in inches, not feet. I think the issues are often more about mutual dislikes of the adjoiningers.

However, I have seen several disputes that were founded in a survey. People who have lived next door to each other on a friendly basis can become adversaries overnight based on the placement of boundary markers. I am not challenging the surveyors who have set these markers over the location they have determined as I have not performed a survey of the boundaries in question. However, in not a single case that I have dealt with was the adjoininger contacted or notified prior to the survey. People come home from work to find an orange paint circle and monument in the middle of their driveway or some other apparent invasion of their property. Of course, they get excited.

A recent situation involves the retracement of lots in a 1940s era subdivision. Although not typical of all work in that time period this plat is short on information. It has no bearings and some distances are not labeled. It has angles from several random control points to a few lot corners and other random points of no significance. The road that circles through the subdivision varies in

width as on one side it is sometimes tangent while the other appears as curved, although no curve data is on the plat. It is a horrible plat to try and retrace. I surveyed one lot in there years ago and even though I included a comprehensive report on how I had determined the location of the monuments when I review my plat today I can see that I might do something different if I were to survey it now.

So the most recent surveyor had the same issues to deal with and although he did not include a narrative explaining the results of his work I don't question his finished survey. But I do wonder if a discussion with the adjoiningers might have circumvented the legal battle that is heating up now.

These neighbors had reportedly lived next door to each other without issue for a couple of years prior to the survey. Why the survey was requested I do not know so perhaps there was an underlying issue. What happened is that the adjoininger to the property surveyed came home to find orange paint and monument in his driveway.

The party that hired the survey has been to my office several times and because the distances reported on his survey match those of the original plat exactly he cannot be convinced there might be some other solutions to the boundaries in this area.

So the attorneys are brought in and the fighting and spending commences. By the parties own admission they were perfectly happy with their land before the survey and they were fine with the neighbors also. Now, win or lose, I wonder how pleasant the neighborhood will be when it is all over. I suspect one party or the other will probably move not wanting to live next door to an adversary.

I have recent buyers of parcels in older established areas come to my office for advice when they are thinking about replacing old fences. They wonder if they should get a survey. I frequently advise them that the old fence is probably the best evidence of their boundary. That if they were happy with their situation previously perhaps they are best off to accept it and replace the fence in place.

However, if prospective buyers ask me if they should get a survey prior to the purchase of a property I always recommend that they should. It is far better to know what you are getting into than to second guess your decisions later.

As Surveyors we need to be fully aware that every boundary line we establish or survey belongs to two parties! We should have the respect for those owners to engage with them if at all possible before marking that line.

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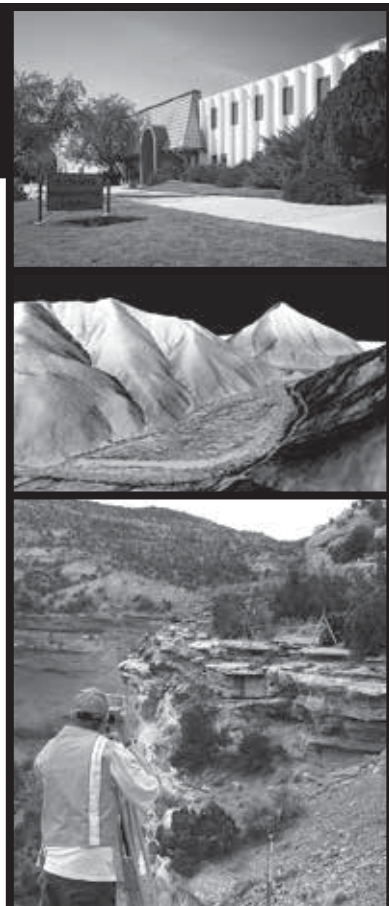
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CCPS – PLSC

I'd like to start with an apology for not providing an update in the August issue of Side Shots. My work demands have been steadily increasing since the pandemic started and I keep thinking it's got to level off at some point, but that has yet to happen. I've asked the other surveyors I know at other companies about their workload and everyone seems to be very busy. I'm not sure exactly what's driving the demand for our services, but it's a good thing that everyone is busy and the demand for surveyors is driving up wages. Hopefully that will lead to more people entering our career field to help us deliver all this work. That demand will be supercharged if the two infrastructure bills are passed by the federal government, so we may be in for an even wilder ride ahead. In light of that I hope you all keep your mental wellness front and center through what sometimes seems like chaotic times. Remember that in addition to taking care of work, family and professional commitments, you also need to take care of you, which tends to be the first thing we sacrifice when times get tough.

The second annual golf tournament was a success again as you may have read in the article in this issue. The idea of having a spring and fall tournament has been put on the table and there is a good chance we will try that next year.

I've received feedback from a number of you wondering when we are going to resume chapter meetings. The CCPS board is currently working on scheduling a social in early November before the weather turns, so if this issue is out before then be looking for that invitation. We will likely resume regular chapter meetings in January and we are looking for your input on whether you would prefer a face to face meeting or a virtual meeting. We also would like to know what kind of speakers you want to see at the meetings and we will be sending out a survey monkey to get your thoughts.

We are also gearing up for the annual election and will be sending out a call for nominees in November. If you are interested in running for a position on the board, please send us an email expressing your interest along with a bio paragraph to colocentralsurveyors@gmail.com.

Regards,
Robert Boehm
CCPS President

NORTHERN CHAPTER

Due to the busy summer schedule, the Northern Chapter was on hiatus and did not hold regular meetings in July or August.

On August 31, 2021, the Northern Chapter (in conjunction with the SW Chapter) completed GPS on Benchmarks observations. On the Northern Chapter side, there were a total of 11 participants including seven field personnel and four volunteers. We were able to occupy four NGS monuments during the event and we hope to complete another group of observations this coming fall.

On September 1, 2021, we had our first in-person Chapter meeting in which regular business was discussed. Our speaker was Don Davis from Larimer County Search and Rescue. He presented on wilderness safety and preparedness. Don was a great speaker and provided us with information pertinent to back country activities as well as suggested and necessary equipment and supplies.

We look forward to our upcoming meeting planned for October 6, 2021, in which we intend to discuss AutoCAD/Civil3D processing and surface model creation. In addition, a discussion about creating "how to" videos on land surveying procedures such as construction staking, and equipment maintenance is planned.

Respectfully,
Dave Berglund
President
PLSC Northern Chapter

SCPLS

(Southern Colorado Professional Land Surveyors), a.k.a. Southern Chapter has recovered from the pandemic and is back and running at full capacity. The last couple of meeting addressed chapter business, public involvement, youth outreach, the young surveyors' network, subsurface utility engineering (SUS) surveys, progress with GPS in benchmarks, drone imagery and our Miramont Castle Museum Christmas Party, scheduled for December 3rd. If you want to attend a chapter meeting call the secretary at 719-641-3355.

RSVP for the Christmas Dinner at scpls.net.

SWC – PLSC

The SWC held an in-person/virtual meeting on September 30, 2021 at the Durango Community Recreation Center. We did not have a topic presenter at this meeting and focused on going over old/new Chapter business.

Some highlights to this meeting were:

- Treasurer's Report: Account balance is \$11, 098.30
- The Chapter voted to close its existing account with a national bank and move the balance to a local institution, Alpine Bank. Treasurer, Justin Bonnell will proceed with the process as soon as possible.
- President Todd Johnston, went over the current speaker lineup and format of the 2022 Rocky Mountain Survey Summit (RMSS). The in-person portion of the Summit will be held February 23 – 25 with John Stahl, PLS CFedS as headline speaker. The virtual part of the Summit will be held the following week. The Bureau of Land Management (BLM) will hold a virtual (live) class for CFED continuing credits on February 28. All other virtual presentations will be two hour pre-recorded sessions that can be viewed anytime that week. Vendor participation was discussed, but the RMSS Planning Committee is still working on that part of the Summit.
- It was discussed that all Chapters will be able to participate in the RMSS Planning Committee. Chapters will be able to share in Summit revenue based on participation in the Committee. Specifics for this setup still needs to be fully drafted and approved by the PLSC Board of Directors.
- The "GPS on Benchmarks" event held on July 31, 2021 was discussed. There was very positive feedback. Brian Shaw, NGS Regional Advisor, would like observation files so they can be ran through OPUS PROJECTS. The NGS Webmap was displayed and the group could see the progress made by this event. It was decided that because of workload, a Fall "GPS on Benchmarks" event will not be held by this Chapter.
- Because of worker challenges to the local restaurant industry it was decided to push back the Surveyor Rendezvous to the Spring of 2022.

Our next meeting has been pushed to January 18. Bob Green with Frontier Precision has volunteered to be a speaker at that meeting. More details will be shared as that date approaches.

Everyone have a great Fall season!

Todd C. Johnston, PLS
President - SW Chapter PLSC

WCLS

The WCLS September meeting was held again in person at Kaart and virtual. Our guest speaker was Kory Kellum with Phoenix LiDAR Systems. Phoenix LiDAR Systems specializes in custom, survey-grade laser mapping systems with automation software for flight planning, acquisition and post processing. He presented on their multi-platform LiDAR solutions that can be customized for specific projects.

The Spring Seminar Committee will be looking into the possibility of doing a Seminar next year. Due to the size of our seminars WCLS wants to keep our seminars in person, but this has presented a challenge as of late.

Alex Lheritier and Rich Conners will be looking into updating our WCLS webpage, within the PLSC website, and also look into the WCLS Facebook page.

Last but not least, I would like to thank those who worked on site at the Buettner Estate so that Louis's wishes were met with donating to PLSC. Becky Roland, Ken Roland, Brian Dennis, Eagle County Surveyor Kelly Miller, and Chris Ransier. Louis's sister Charlotte was very helpful and we appreciated the opportunity to do this.

Brian K. Bowker, P.L.S.
President, Western Chapter PLSC

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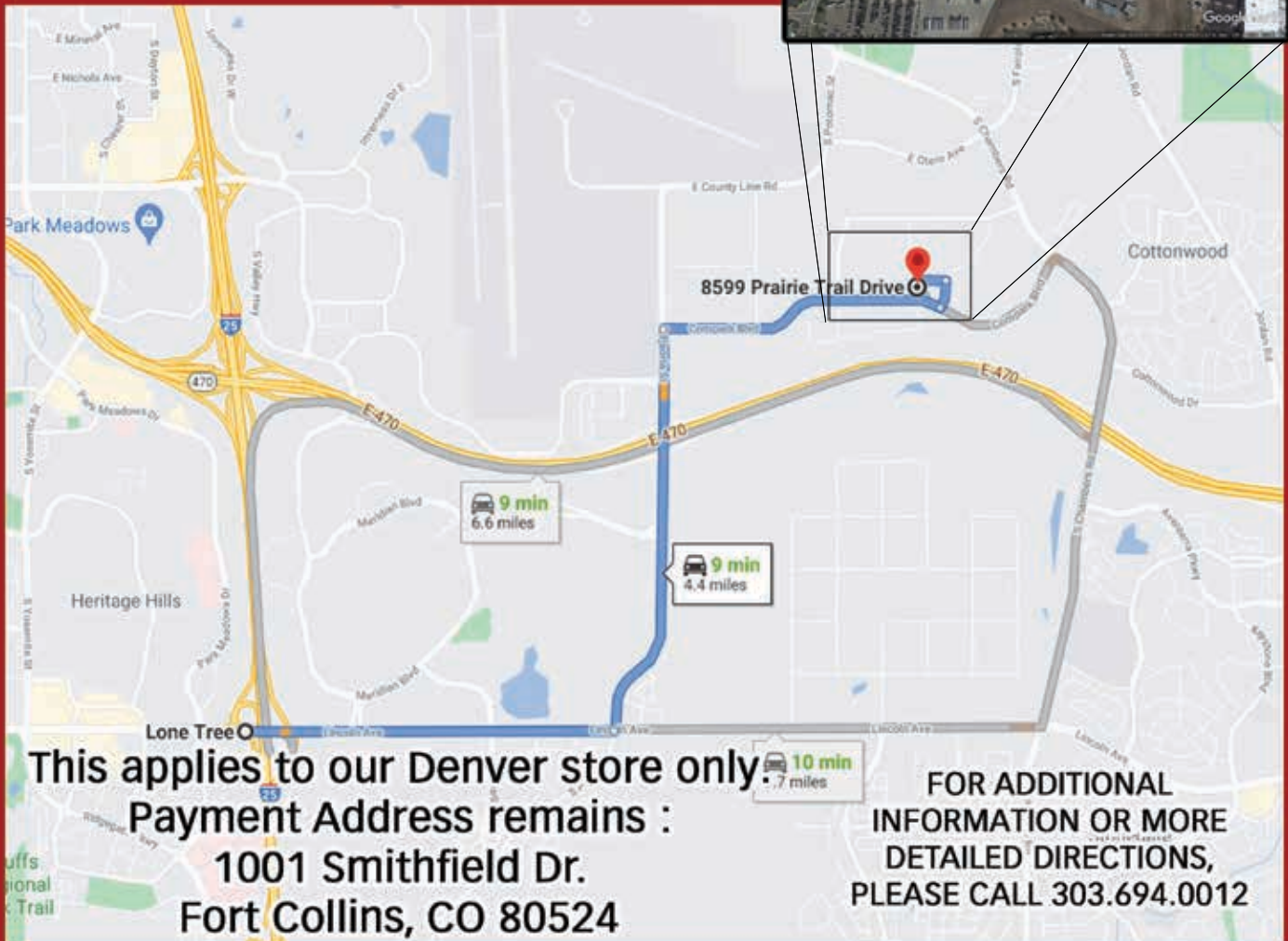


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