



Central Valley Chapter - California Land Surveyors Association
www.californiacentralvalleysurveyors.org

Central Valley Chapter THE PRISM

Up
Coming
Meetings!

Date: May 23, 2018

Time: 6:00 p.m.

Location: The Standard Pour

19040 Standard Road, Sonoma, CA. 95370

Topic: Welcome Warren to Tuolumne County

Date: TBD

Time: TBD

Location: TBD

Speaker: TBD

Topic: TBD

Announcements

CHAPTER DIRECTOR NOMINATED FOR 2019 STATE OFFICE

Central Valley Chapter's Director/Treasurer, Warren Smith has been nominated for 2019 State Treasurer.

FOUNDATION CELEBRATES ANNIVERSARY

The California Land Surveyors Association Education Foundation is celebrating it's 25th Anniversary this month. Founded in 1993, over the past 25 years the Foundation has awarded over \$500,000 in scholarships to deserving college students majoring in survey related fields To make a donation to the Education Foundation, go to <http://www.californiasurveyors.org/educfound.html>.

2018 CHAPTER MEMBERSHIP DOWN

As the 2018 Chapter Membership drive has come to a close, Membership is down about 30%. It is still not too late to support your local Chapter. Go to our Chapter website at <http://californiacentralvalleysurveyors.org/join.shtml> to join.

GPS on BENCHMARKS INITIATIVE 2018

Deadline for submissions to the GPS Benchmarks Initiative 2018 are due by August 31, 2018. NOAA's National Geodetic Survey encourages anyone with survey-grade Global Positioning System (GPS) receivers to help perform GPS on Benchmarks (GPS on BMs) to support the development of GEOID18 and transformation tools that will be produced for North American-Pacific Geopotential Datum of 2022 (NAPDGD2022). Go to <https://geodesy.noaa.gov/GPSonBM/> for more information.

2018 Chapter Officers

President: Rich Fultz

Vice President: Will Paul

Secretary: Rich James

Treasurer: Warren Smith

Chapter Director: Warren Smith

Chapter Director: Rich James

Alt. Chapter Dir: Will Paul

Alt. Chapter Dir: Rich Fultz

2018 Chapter Committees

By-Laws Committee:

Keith Spencer (Chairman)

Education Committee:

Keith Spencer (Chairman)

Membership Committee:

Rich Brown (Chairman)

Monument Pres Committee:

Mike Quartaroli (Chairman)

Newsletter:

Rich Brown (Editor)

Professional Practices Committee:

Mike Quartaroli (Chairman)

Website:

Keith Spencer (Web Master)

2018 Chapter Programs

Public Outreach Committee:

Zachary Wong (Coordinator)

Workshops:

Rich Brown (Coordinator)

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Classes, Training, and Continuing Education

Mark Your Calendars

CAD Masters - AutoCAD Level I (3-Day Course)

May 21-23, 2018, Sacramento
 Jun 4-6, 2018 Walnut Creek
 Jun 18-20, 2018, Sacramento
 Jul 16-18, 2018 Walnut Creek
 Jul 16-18, 2018, Sacramento

[Register here](#)

CAD Masters - AutoCAD Level II (2-Day Course)

May 14-15, 2018, Walnut Creek
 Jun 6-7, 2018, Sacramento
 Jun 25-26, 2018 Walnut Creek
 Jul 19-20, 2018, Sacramento
 Jul 26-27, 2018 Walnut Creek

[Register here](#)

CAD Masters - AutoCAD Level III (1-Day Course)

Jun 21, 2018, Sacramento

[Register here](#)

CAD Masters - Civil 3D Introduction (3-Day Course)

May 14-16, 2018, Sacramento
 May 29-31, 2018, Walnut Creek
 Jun 11-12, 2018, Sacramento
 Jul 9-11, 2018, Sacramento
 Jul 23-25, 2018, Walnut Creek

[Register here](#)

CAD Masters - Civil 3D Advanced (2-Day Course)

Jun 4-5, 2018 Sacramento
 Jul 19-20, 2018, Walnut Creek

[Register here](#)

CAD Masters - Civil 3D for Surveyors (2-Day Course)

Jul 2-3, 2018, Sacramento

[Register here](#)

CLSA Webinars

GPS on Benchmarks Initiative

May 23, 2018, 11:00am-12:00pm

[Register here](#)

Best Practices in Drone Surveying

Jun 8, 2018, 11:00am-12:00pm

[Register here](#)

Hybrid Survey Networks

Jul 11, 2018, 11:00am-12:00pm

[Register here](#)

If you have information about a training or class, please submit to: editor@californiacentralvalleysurveyors.org

Editor's Message



Meet this year's State Secretary: Keith Spencer, LS 6406

Keith began his career as a photogrammetrist in the US Air Force from June 1970 through November 1977, stationed with the 38th Tac Recon Squadron at Ramstein AFB and Zweibrucken AFB, Germany, with the 2nd Bomb Wing at Barksdale AFB, Louisiana and with the 9th Strategic Recon Wing, at Beale AFB, California and at Kadena AFB, Okinawa. From December 1977 until November 1982, he worked as a contract surveyor with the Corps of Engineers, Vicksburg District, on the Mississippi River south from Memphis to the mouth of the river. Returning to the Central Valley in early 1983, He worked as a private sector surveyor, including a stint as owner of his own surveying firm, for over 33 years before joining Caltrans in 2016. He joined CLSA in 1988, has served on the Board of Directors since October 1990 and is a founding director of the CLSA Education Foundation.

If you would like to comment on this topic or suggest another, please submit it to: editor@californiacentralvalleysurveyors.org

Monument Obituaries

By Mike Quartaroli, PLS



CLSA **CENTRAL VALLEY CHAPTER** Survey Monument Conservation Committee



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National News

State Plane Coordinate System 2022

By Jason E. Foose, PS

There are some big doings underway at the National Geodetic Survey. The word on the street is that we are getting a new datum, SPCS2022. I watched a video presentation posted on the NGS website about the future of state plane coordinates (ngs.noaa.gov/SPCS/learn-more.shtml).

Michael Dennis conducted two webinars in March and April about the subject, and there will be perhaps several more based on the level of interest. I understand there were 800 attendees at March webinar. The page above has links to both webinars as well as other white papers on the subject. I would encourage every surveyor to watch the presentation and get their snouts in the mix. The Feds are asking for our opinions and assistance.

As County Surveyor, I have the obligation of reviewing the work of others in an authoritative capacity. I see both proper and improper use of SPC projections. Understanding or lack thereof seems to be the culprit behind misuse. Just because the yellow box spits it out does not make the numbers right or appropriate. For example, what good is reporting acreage on the grid? Yeah, a surveyor can plug the reported parameters into a computer and scale them to any height above the ellipse. The problem is the person relying on the number is selling dirt on the surface of the earth and expects "the real number," not an equation and math problem to quantify.

Big whoopie ding on a 6,000 square foot lot in New Jersey, right? Well, what about a pipeline company buying 500 miles of right-of-way across the top of the Rockies? They may be inadvertently ripping off the land owners at a scale factor of \$0.99 to the dollar on grid acreage. What about the taxes assessed on the grid? The heavily opposed Nexus pipeline across Northeast Ohio turns out to be a windfall to the Cloverleaf School District in Medina County, with the school receiving an estimated \$5,447,824 this year and we want to be sure that the kiddos get every dime due from an accurate ground survey! What if a State Plane Coordinate system better approximated the ground?

NGS is offering the opportunity for States to submit low distortion projections (LDP) as plane system. However, NGS is not offering to build you an LDP so we might have to roll up our sleeves and put some elbow grease to it. This is also a great opportunity for state associations and eager students to build community pride through our profession. I won't mention that it might make life a little less complicated for a few old fogies who still measure flat earth...like me. Whether it's designing an LDP or perhaps tweaking your regulatory guidance to accommodate a new datum, SPC2022 is going to be an interactive collaboration between the NGS and the States.

We are approaching a century of experience with State plane coordinates. NAD27 held on for about 60 years and I'm still good with that. NAD83 seems like it was the AutoCAD 13 of datums. In all defense a lot has happened with technology and we all had to swim upstream with the changes. I see 2022 as an opportunity for everyone,

I mean everyone, not just the paperheads, but the mud tracking ground pounders, to build a better system based on 100 years of knowing what really works and what needs to be put in a GSA storage container chained up in a wooden crate and placed on a low shelf behind a pile of rags in the basement of the Greenbrier Hotel.

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Legislative News

2018 Legislative Year Begins: Changes Afoot

By Michael Belote

The California Legislature returned to Sacramento to begin the 2018 legislative year on January 3. This is the second year of the current 2017- 2018 two-year session. Some 2000-2500 new bills will be introduced by the February 16, 2018 deadline, and some bills will be carried over from 2017 as well.

No one is quite sure how to handicap the new legislative year, for a variety of reasons. First, the make-up of the Assembly and Senate have changed, based upon the sexual harassment allegations against legislators. In both the Assembly and Senate, Democrats have lost their two-thirds supermajority in each house, at least temporarily. In the Assembly, Democrats Raul Bocanegra and Matt Dababneh have resigned in the wake of allegations, and Sebastian Ridley-Thomas has resigned for health reasons. This leaves the balance of Democrats to Republicans at 52-25 with three vacancies. Special elections to replace these three members will begin in the spring.

In the Senate, Democrat Tony Mendoza is on a leave of absence relating to harassment allegations, and his return is uncertain. This reduces Democrats to 26 members, one below the 2/3 supermajority. Thus, Democrats no longer have the supermajority which permits tax increases, ballot measures, and veto overrides without Republican assistance. Why is this important? See the discussion below relating to recording fee surcharges for a good example!

In addition to the sexual harassment allegations roiling the Capitol, the Senate will soon transition to a new President pro Tem to replace Kevin De Leon, who is termed out of office and running for U.S. Senate. His replacement will be Senator Toni Atkins from San Diego, who previously served as Speaker of the Assembly.

[Continued on page 9](#)

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State News



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Help CLSA Support the NGS "2018 - GPS on Benchmarks" Program



Deadline is August 30, 2018

NOAA's National Geodetic Survey encourages anyone with survey-grade Global Positioning System (GPS) receivers to help perform GPS on Bench Marks (GPS on BMs) to support the development of GEOID18 and transformation tools that will be produced for North American-Pacific Geopotential Datum of 2022 (NAPDGD2022).

GPS on Benchmarks Initiative 2018

Dear California Surveying Community,

The CLSA is proud to support the National Geodetic Survey's "2018 - GPS on Benchmarks" program. The program is simply a crowdsourcing call to citizen surveyors to collect GPS observations on NGS NAVD88 benchmarks and share these data with NGS. These collected data will be used to create the next hybrid- Geoid 18, then be the basis for the future conversion tool(s) to the upcoming 2022 datum and gravimetric geoid. This effort is an essential component in tying recent GPS observations and solutions to the current national vertical datum - NAVD88.

CLSA recognizes the importance of this program, is tracking progress and actively mobilizing our community. With your help, we can contribute to better heights for years to come. Our goal is to densify the data, hopefully avoid NGS extrapolating geoid data over very large distances uncontrolled. We can get this done!

For more detailed overview see:

<http://www.xyht.com/surveying/gpsonbm2018/>
<https://geodesy.noaa.gov/GPSonBM/>

CLSA is making every effort to avoid duplication of observations and track our success. Please communicate plans and forward your OPUS solutions to GPSonBMs@californiasurveyors.org
[CLSA Sign-up list: Google Docs Link](#)
[CLSA Map](#)

[Click here for important reference links.](#)

Thank you,
CLSA, GPS on BM committee

Pictures of the Issue

2018 State CLSA Conference, Sacramento

By Rich Brown



Natalie, Kim, and Annette getting ready to get their bowl on!



CLSA President Ron Nelms speaks with student Vincent Lazar



Rich James checking his messages before going into a lecture



Emily Morrow (right) with sister Rachel



CAMS ready to start the 2018 State Conference

2018 Legislative Year Begins: Changes Afoot, *cont. from page 6*

Further, the system is gearing up for elections in June, where our state will elect a new governor and constitutional officers. The point is, there are lots of political dynamics which will distract our Capitol from the usual focus on policy issues.

In terms of policy, expect 2018 to continue California's attempt to be the "anti-Trump." Whether the issue is climate change, immigration, taxation or health care, policymakers in California are very explicitly forging paths completely at odds with Washington, D.C. Even as this is written, for example, there are plans in Sacramento to pass legislation allowing California taxpayers to make charitable contributions to the state in lieu of income taxes, in order to make the payments deductible on federal tax returns. Whether this approach will succeed is being hotly debated by tax law experts.

SB 2: The Roll-Out Begins: CLSA members are well-aware of the enactment of SB 2 (Atkins) during 2018, which imposes a \$75 surcharge on the recording of real estate documents, in order to create a permanent source of funding for affordable housing. The maximum surcharge per "transaction" is \$225. Along with a host of other associations and county recorders, CLSA was opposed to the measure, which was considered a tax increase subject to a two-thirds vote requirement.

SB 2 became effective on January 1, 2018, and many questions remain. For example, the bill contains a non-exclusive list of real estate documents covered by the surcharge, but does not speak to the hundreds of documents which might or might not be covered. Is a mining claim covered? More relevant to CLSA, is a record of survey? The bill provides no answer, and 58 different county recorders are likely to come to different conclusions, and their conclusions may change over time! CLSA is working with recorders and other groups interested in promoting consistency in the application of SB 2, and we will have more to report soon. It is also very likely that clean-up legislation will be introduced on the subject, but the basic law is here to stay, and it will be necessary to adjust as implementation issues arise.

Politically, however, SB 2 is an excellent illustration of the power of supermajorities. As a tax increase, the bill required a two-thirds vote in each house, and that is exactly what it received, 54 votes in the Assembly (including one Republican vote) and 27 votes in the Senate (with no Republican votes). If the same votes were conducted today, with Democrats below the supermajority threshold, it is extremely unlikely that the necessary votes could have been obtained. These things matter!

Bill Introduction Deadlines Approach: As noted above, the deadline for introduction of new bills for 2018 is February 16. We are working to refine the ideas for CLSA bill sponsorship, which will be reported to the membership. With the continued focus on housing and infrastructure, however, it is a certainty that many of the new bills for 2018 will be of interest to CLSA members. Watch for updates after February 16!

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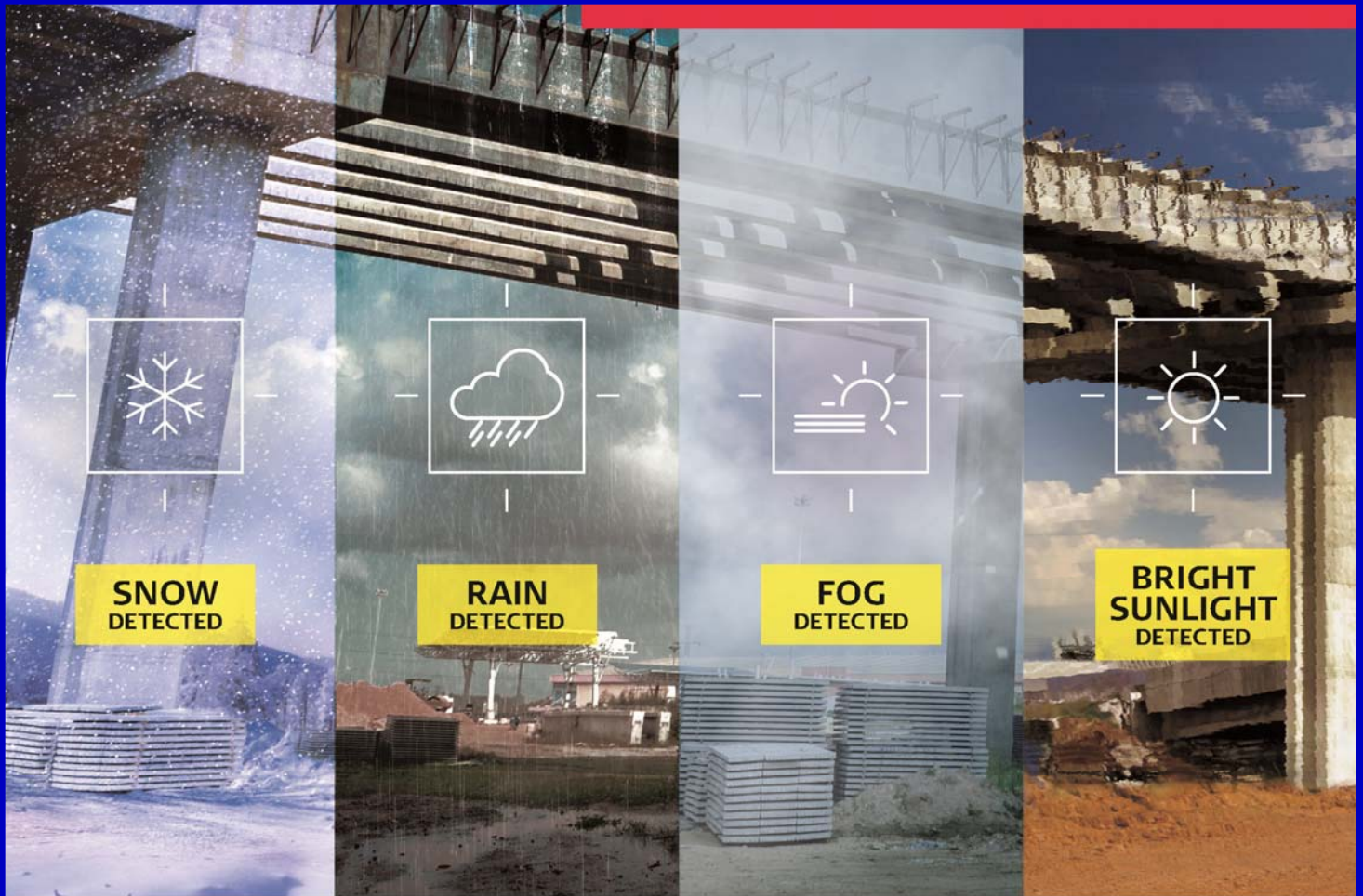
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Know of an available job. Please submit the position information to:

editor@californiacentralvalleysurveyors.org

Just for Laughs

An engineer, a surveyor and an arts graduate were given the task of finding the height of a church steeple (the first to get the correct solution wins a \$1000).

The engineer tried to remember things about differential pressures, but resorted to climbing the steeple and lowering a string on a plumb bob until it touched the ground and then climbed down and measured the length of the string.

The surveyor laid out a reference line, measured the angle to the top of the steeple from both ends and worked out the height by trigonometry.

However, the arts graduate won the prize. He bought the vicar a beer in the local pub and he told him how high the church steeple was.

An engineering student is walking along when a fellow student arrives on a new bicycle. Impressed, he asks, "Where did you get this beautiful bicycle?"

"Well," the second engineering student says, "A couple of days ago I was just walking along when this gorgeous blonde pulls up, hops off the bike, rips off all her clothes, and says 'take what you want'."

The other engineering student nods and says "Good choice. The clothes probably wouldn't have fit."

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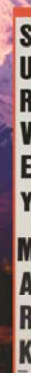
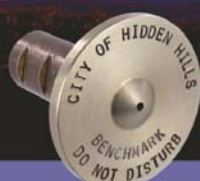
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CLSA EDUCATION FOUNDATION

Land Surveying Photo Gallery



California Land Surveyors Association Education Foundation would like to thank Bryant Sturgess for generously donating his collection of historic images.

The proceeds from the photos sold on this website will be used to fund scholarships for land surveying students.

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