

Parallax

Newsletter of the Central Coast Chapter of the California Land Surveyors Association

NOVEMBER 2015 MEETING

Date: TUESDAY, November 17, 2015

Where: History Center in San Luis Obispo Map

696 Monterey Street., San Luis Obispo

Followed by: Creekside Brewing Company

1040 Broad Street Map

Time: 5:30-7:00 Social (BYOB) and Program at History Center

7:00 - Dinner at Creekside Brewing

Menu: Order off limited Menu

Cost: \$30.00 (payable to Central Coast CLSA)

\$5 will go to History Center

RSVP: Cristi Fry cfry@thainc.com

ABOUT THE PROGRAM

es, <u>seriously</u> this is a BYOB party at the History Center in San Luis Obispo. If you are willing, bring a few appetizers for the group also.

The History Center's curator, Eva, is going to really surprise you at the enthusiasm she has for her age (I won't divulge that information). Eva is going to invite about 6 or 7 people that are involved with their mapping.

She plans to show some historic surveyors' tools from the History Center collection, as well as a sampling of the maps stored in our archives room. Eva would like to start a conversation about historic mapping collaborations to connect collections and data across a variety of institutions!

November 2015

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From the History Center we will walk over to Creekside Brewing Company for dinner meeting downstairs in the room next to the bar.

We will choose from limited menu \$30 each paid to CCCLSA (\$5 of the \$30 from each person will be donated by the Chapter to the History Center at the end of the meeting).

It will be a fun evening!

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2015

Central Coast Chapter

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The San Luis Obispo High FFA ParliPro team were guests at our October meeting and performed a rehearsal of parliamentary procedure in front of the chapter. In addition to the president there were 5 members of the team who were each given a random point related to the topic, in this case a planning meeting for land use. Each member made at least two motions related to their assignment, and all with a ten minute time limit. The team was lightning quick and demonstrated their ability to improvise within the framework of Robert's Rule's of Order. The chapter was impressed and wished them well on their upcoming competition.

Following their performance at our meeting they left for for Kentucky on following Saturday and took first place in the National Championship!

For mor information on the FFA ParliPro go to: https://www.ffa.org/participate/cdes/parliamentary-procedure

President's Message

Jonathan Walsh

o here we are in November! Wow, 2016 here we come! I think it has been a good year, and I really think we are on a great path, and I am so looking forward to next year. I am excited about our officers next year. Next year more than most any year, I feel the Directors' job is huge. There are major changes taking place at the state level that will affect the Association for years to come. Let's just hope, the turmoil is behind us.

Our last meeting was very interesting, kudos to Cristi for putting that together on short notice as we changed the venue for the Monument Preservation Meeting. That meeting takes place on Friday November 6, 2015 at the Madonna Inn, in San Luis Obispo. At the last meeting, we had the San Luis Obispo High School FFA Parliamentary Procedure Debating Team and a gentleman named Rudy Xavier, of Life Learners of the Central Coast. It was fun, exciting and educational. I was a little miffed at Cristi for inviting the Debating team while I was President. We all know my Parliamentary Procedure knowledge is lacking to say the least, and then some young High school kids



are going to come in and make me look bad. Well did they ever do that! Fortunately, though we had them first and then they chose to leave and not stay for dinner. Luckily, they did not get a chance to see me in action. They were heading to Kentucky in a couple days for the National Tournament, of which they were the defending champion!

I had invited the Morro Bay High School Student that interviewed me earlier in the month to this meeting and he and his father did show up. Thank you to JoAnn Head, Sam Taylor and Doug Rion for entertaining them at the dinner table. I got a very nice thank you note from the father the next day. He specifically mentioned the people at his table. He is very excited by his son's excitement for a career in Land Surveying.

This past weekend I went by

Cuesta College for the second time in a week, and it did not involve a wrestling match! Cristi Fry, Leonard Lenger and I attended the Cuesta College Tech Fair last Friday, October 23. There was a great turn out of High School Students from all over the area. I think we may have struck a nerve with a couple kids, maybe? It was hard to tell if we got through to them or not. I also went to the Engineering Class on Saturday, October 31, and talked to the students about a career in Land Surveying. I took my CalTrans truck and set up the S6 and a RTK unit. We used CalTrans Real Time Network and set some RTK points. We then shot the same points with the instrument and talked about the results. It was a good day! There was a young man in that class that is working for a local company and he was very interested in the things that I had to say.

Oh life is funny, today is Sunday November 8, 2015. I have asked Tom Mastin, our fearless editor hold the presses for me so I could change and update my message. I have good and bad news, the good first. The FFA Parliamentary Procedure Debating Team from San

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NORTH COUNTY ENGINEERING ICON; DANIEL J. STEWART PASSES AWAY



aniel J. Stewart, 86, of Atascadero died Tuesday, 11/3/15 home with his family. Daniel was born July 25, 1929 to Theodore and Barbara Kupec Stawicki. Growing up in Connecticut Daniel loved sports including baseball, basketball, and football, but he dreamed of being a professional baseball

player. In Oct. 1949 he received a call from Carl Hubbell of the New York Giants for a tryout. Although he didn't make their team, he was picked up by the St. Louis Browns and played on their farm team in Hershey, PA. In 1951 he was drafted into the US Army where he played shortstop for the Army team until he was discharged in 1953.

During this time, Daniel met and married the love of his life, Sylvia Dorsey Stewart. Daniel graduated from the University of Alabama with an engineering degree. He took a job with the State of California Bridge Dept. in Los Angeles designing many bridges in the Greater LA area and was the Chief Engineer for many of the highway interchanges. In 1965 Daniel and Sylvia moved to Paso Robles. Along with Ralph McCarty Daniel began the MidState Engineers and four years later he went out on his own, Daniel J. Stewart & Assoc.

Daniel designed countless commercial and residential developments in Paso and Atascadero including several wineries and convalescent hospitals. Not only was Daniel involved in local sports he also coached Little League teams. Daniel was a long time member of St. Rose of Lima Catholic Church, Rotary Club of Paso Robles, Elks, Pioneer Players, the American Society of Engineers. and CA Licensed Surveyor's Assoc. . Dan was a member of the National Engineer's Association receiving a certificate for 50 years of membership.

In addition to his wife of 59 years, Sylvia, Daniel is survived by a son, Daniel J. (Teresa) Stewart, Olympia, WA; and a daughter, Melody A Stewart of Paso Robles; three grandchildren: Mariah Anne, Tara Lee, and Sabrina Chastaine. A Memorial Mass will be held Sat., 11/21, at 1 pm at St. Rose of Lima Catholic Church. Arrangements under the direction of Kuehl-Nicolay Funeral Home, Paso Robles, CA.



Some Yogi Berra Quotes

- You can observe a lot by watching.
- If you don't know where you are going, you might wind up someplace else.
- Always go to other people's funerals, otherwise they won't come to yours.
- In theory there is no difference between theory and practice. In practice there is.
- I usually take a two-hour nap from one to four.
- I never said most of the things I said.
- It ain't the heat, it's the humility.
- A nickel ain't worth a dime anymore.

- Baseball is ninety percent mental and the other half is physical.
- You better cut the pizza in four pieces because I'm not hungry enough to eat six.
- It ain't over till it's over.
- If people don't want to come to the ballpark, how are you going to stop them?
- We made too many wrong mistakes
- Love is the most important thing in the world, but baseball is pretty good, too.

Luis Obispo High School defended their National Championship in Kentucky earlier this month!!! They won it all, AGAIN!!! Congratulations to them, they were so very impressive.

Now the bad, sad news; Daniel J. Stewart, RCE 14994, passed this past Tuesday November 3, 2015 at his home with his family in Atascadero. Dan was a former employer of mine for eight years, 1987-1994, and a friend for life. I grew to know and respect Dan as way more than a boss after working for him for only very short time. Dan was a gentle easygoing person to work with. During my time at Daniel J. Stewart and Associates (DJS & Assoc), in Paso Robles, CA, the Surveying world went through a modernization period and so did we at DIS & Assoc. We went from hand notes and field books to a semi-total station and then a total station. We had computers and a plotter brought in to an office that was productive for many years; Dan started his own company in 1965, by doing things the old way. I must admit, it was not easy to convince Dan that all these modern things would help his clients, him, the bottom line, and ultimately us but he did, and finally went along with the times. This also meant that Dan must learn these new systems as well.

I remember our first GPS project. I worked with Randy Woodjack PLS, he was the party chief and I was the chainman. DJS & Assoc. had hired Michael McGee PLS, as a GPS consultant. We used Michael not only for the GPS equipment and processing, but also for train-

ing. We did a small project in East Paso Robles. This was 1988, our GPS "window" was 2:00 in the morning, and just like in the books, it was pouring rain. Michael was not going to let a little rain stop our project though, so at 12:30 am I was on the ATC 90, this was before quad runners, with an Ashtech GPS receiver on my back and a tripod strapped to the back of the ATV. We were on our points for four hours. We completed the survey, and in those days Dan didn't get into the field that much, but he did come out that night, in the pouring rain.

In my time working for Dan, I bought my first Surveying Books. I bought my first calculator, an HP 11c, and later an HP 41. I also joined CLSA and the Central Coast Chapter. Dan always supported us and paid for any expenses, including seminars for anyone that wanted. I took and passed the L.S.I.T. while working for Dan. Dan was one of my four Professional Land Surveyor License References. I attended many of their families' wonderful Christmas Parties, Dan's legendary Eightieth Birthday Party, and their daughter's wedding.

Some things not mentioned in his obituary that I can remember; Dan always had several crossword puzzles going. He had legal pad after pad of handwritten Professional Baseball statistics. Every year a new pad for yet more stats. He could rattle those statistics off the top of his head too. He liked to do puzzles, he collected stamps. He loved his wife Sylvia. Dan loved his family and encouraged his employees to do the same. Dan named streets in

a subdivision in Paso Robles after his wife, daughter, and mother-inlaw. Dan was the City Engineer for Soledad and Gonzales and I think maybe Chualar and Greenfield too. Dan was colorblind but could still read a quad sheet or any map for that matter. Dan was a reference for many Professional Land Surveyors and Professional Engineers.

I mentioned that life is funny above. On Monday last, I received the best annual review I have ever received and the same day I learned that a long time friend and mentor of mine was on hospice. He passed the next morning before I was able to say good-bye. Good-bye Dan, and thank you.

One more event that has taken place is our Monument Conservation Meeting. We had Ron Nelms come and present his Monument Conservation talk. The Central Coast Chapter CLSA Professional Practices Committee has worked for months to invite appropriate people from appropriate agencies for this meeting. We had a full room at the Madonna Inn on Friday November 7. We took a couple informal surveys and overwhelmingly the room thought it was worthwhile and something that they benefited from and that they thought others would benefit from. More on this later. Kudos and Thank You for all involved on making this happen, Especially Ron Nelms, Robert Reese, Cristi Fry, JoAnn Head and the rest of the Professional Practices Committee, Ian McClain, Doug Rion, Michael Stanton and myself.



resident Joanathan Walsh, Vice President Cristi Fry and super volunteer Leonard Lenger spent the day at the Cuesta College Tech Fair on Friday October 23. The fair is for high school students who are looking for technology based careers. This is the Chapters umpteenth year at providing outreach through this Tech Fair. This is only one of the many ways your chapter educates and informs the public about the surveying profession.





CLSA MONUMENTATION CONSERVATION MEETING A BIG SUCCESS!

The Chapter's special meeting with public agencies and private firms listening to Ron Nelms discussing the State laws concerning monument conservation filled the room at Madonna Inn. This topic has been an ongoing point of contention on how monument conservation should be handled. This successful meeting was the first step in improving the situation in the local area.



New Study shows discrepancies in GPS Positions

From: Associated News Press

recently published study in the Journal of Geomat*ic Engineers* [Immott, S., (2015) Analysis of actual Satellite positioning systems, 08, 153-172] shows surprisingly large errors in positions with both GPS and GNSS receivers. The study analyzed over 10,000 independent measurements using both Carrier Phase Differencing receivers as well as Differential GPS receivers. However the study focused primarily on the Carrier Phase Differencing receivers because of their reputed high precision.

The study looked at rapid static solutions and Real Time Kinematic solutions and found no correlation

between the solution used and the computed precision.

A summary of a portion of the study results is listed in Table 1 (page 7). It is clear from the results that there is a discrepancy

Dr. Immott indicated that it is his belief that the manufactures have volkswagoned the results of previous studies. "No study has been as comprehensive and impartial as this study"

between published precision and the precisions determined by this study. While the study is clear as to the methodology used to determine the precision, there is no clear methodology used by the manufacturers. "A clear and consistent pedological framework must be established for manufacturers and a system must be in place to ensure the manufactures use that system" demanded Dr. Immott.

Figure 1 shows the results of this study over time and brings home the issues discovered by this study. Principal Investigator Dr. Immott indicated that it is his belief that the manufactures have volkswagoned the results of previous studies. "No

Continued on Page 7

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Receiver	Antenna	Published RMSE ¹	Actual RMSE ¹	Solution	Time/Epochs
Trimble R8	Internal	0.8 cm	18 cm	RTK	60 seconds
Topcon GR-5	Internal	0.3 cm	43 cm	Rapidstatic	20 minutes
Leica GS15	Internal	0.8 cm	32 cm	RTK	60 seconds
Ashtech PF800	Geodetic IV Rev. A	1 cm	15 cm	RTK	60 seconds
Sectra Precision SP80	Internal	0.3 cm	28 cm	Rapidstatic	20 minutes
Javad NT	GrAnt	0.3 cm	23 cm	Rapidstatic	20 minutes
Hemisphere 320	Internal	0.3 cm	45 cm	Rapidstatic	20 minutes

¹RMSE (Similar to Standard Deviation) is for Horizontal Positions only

study has been as comprehensive and impartial as this study" indicated Dr. Immott.

The study showed the results using Root Mean Square Error (RMSE) because the manufacturers rate the instruments using RMSE instead of the be more appropriate 95% confidence level because as the PI indicated "we wanted to be overly optimistic with our precision also".

In order to be totally impartial, the investigators had all measurements done using double blind processes. This initially caused some concern by the investigators as often the instruments were not set up over the actual monument because, well you know, they couldn't see. However this was corrected for the most part by putting an APS unit on the monument. The APS unit (Accessible Pedestrian Signal) will emit a shrill voice indicating if it is safe to cross the street. It was modified to be a MPS (Marco Polo Signal) which helped the investigators most of the time. However there was some concern about the ability to hold the 5 meter rods level as well as the problem of turning the units on and off.

Still Dr. Immott was satisfied with the results as being totally impartial. When questioned about the issues with the double blind testing, he responded "Really, haven't you ever see a surveyor out in the field?" Had the manufacturers been reached for comment, they probably wouldn't have commented, so no effort was made to contact them.

It is clear, that this study along with understanding of the manufacturers specifications will be ignored for years to come.

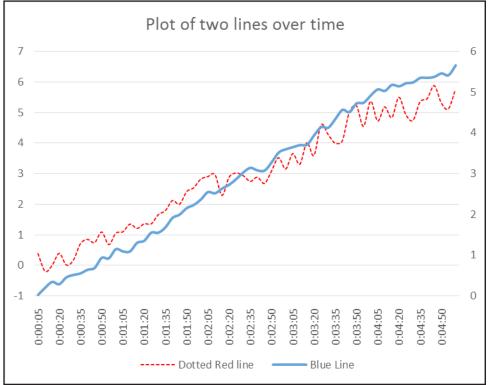


Figure 1 - The Results!



California Land Surveyors Association Central Coast Chapter 4th Quarterly Board of Director's Meeting Report

The CLSA Board of Directors met at the Holiday Inn in Oakland on November 7, 2015. Items of interest to the Central Coast Chapter included the following:

- The 2016 CSU Fresno Geomatics Conference will be held January 29th & 30th at the Double Tree Hotel in downtown Fresno. Early registration end November 15th. http://www.fresnostategeomatics.com/2016-geomatic-engineering-conference/
- The 2016 ESRI Geodesign Summit will be held January 27th & 28th in Redlands. http://www.geodesignsummit.com/
- Policies & Procedures Committee:
 - Changes to the CLSA Standard Contract were adopted
 - The Whistle-blower was adopted.
 - Action Item: The Antitrust Document and Chapter Affiliation Agreement were returned to the committee for revisions; input should be directed to Chairman Kieth Spencer.
 - The Event Calendar Policy was not adopted.
- Action Item: The CLSA Education Foundation is seeking donations from chapters and individuals to fund the Bob Hart and Hal Davis Scholarships.
- The Education Foundation has a new scholarship for 2016 that will be funded entirely by the Foundation: the and Dorothy Calegari Honorary Scholarship.
- NSPS President John Warren has extended a offer to visit and speak to all Chapters.
- The Board approved the application for the CSU Monetary Bay Student Chapter.
- Action Item: The Board approved awarding \$5,000 to Dorothy Calegari and \$3,000 to Crissy Wilson to be used for vacations of their choosing as a show of CLSA's appreciation for years of service to the organization. Individuals and Chapters are encouraged to supplement these amounts by December 31st. The final balance will be delivered on January 15, 2016.
- Action Item: Chapter Annual Reports, Annual Photo Competition submissions, Chapter Newsletter Award nominations, Chapter of the Year nominations, Chapter Website Award nominations, and Distinguished Service Award nominations are due by December 31st.

The next Board of Directors meeting will be at the Holiday Inn in Oakland on February 16. Chapter reports are due by December 18th.

Respectfully submitted, lan McClain George Marchenko Robert Reese (alternate)

SURVETORS Central Coast Chapter. 1966

CENTRAL COAST CHAPTER

of the

CALIFORNIA LAND SURVEYORS ASSOCIATION

Email: central.coast.clsa@gmail.com

Minutes

CENTRAL COAST CHAPTER CLSA MEETING held on October 21, 2015 at 6:00 PM at Café Roma, San Luis Obispo, CA

CALL TO ORDER 6:01 PM

PLEDGE OF ALLEGIANCE

ROLL CALL/INTRODUCTIONS

Jonathan Walsh, President
Cristi Fry, Vice President
David Karp, Secretary/Treasurer
George Marchenko, Immediate Past President
Ian McClain - State CLSA Board Director

21 Total in attendance at the meeting.

11 CLSA Members.

10 Guests.

APPROVAL OF MINUTES

MOTION by Jonathan Walsh and **SECONDED** by David Karp to approve the September 22, 2015 Chapter Meeting Minutes as published in the October Parallax. **MOTION CARRIED**

PRESIDENT'S REPORT

President Jonathan Walsh reported Fresno State Conference will be held on January 29th and 30th.

Cuesta Tech Fair: "From the ED COM report"

Jeff Jones has asked the Chapter attend the Cuesta Tech fair to represent the Land Surveying profession. The event is on Friday October 23, from 11:00 to 12:30. The audience is high school students thinking about what they might want to do when they graduate high school.

VICE PRESIDENT'S REPORT

Vice President Cristi Fry had nothing to report.



CENTRAL COAST CHAPTER

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CALIFORNIA LAND SURVEYORS ASSOCIATION

Email: central.coast.clsa@gmail.com

SECRETARY/TREASURER'S REPORT

Secretary/Treasurer David Karp reported the current Chapter checking account balance is \$9,176.33.

On 10/1/15 I sent a check(2793) to Fargen Surveys, Inc in the amount of \$575.01, for CLSA 2015 BBQ reimbursement

The cost for dinner tonight is \$30, make checks payable to CCCLSA.

DIRECTOR'S REPORT

Director Ian McClain reported the next Board of Directors Meeting is on November 7th at the Holiday Inn, Oakland

EDUCATION COMMITTEE

Tom Mastin reported was not present, but submitted his report:

We need to start discussing how we would like the LS and LSIT review sessions to go. Last year we just created study groups with limited success. I would like the chapter to discuss how they think the review sessions should be done.

Jeff Jones has asked the Chapter attend the Cuesta Tech fair to represent the Land Surveying profession. The event is on Friday October 23, from 11:00 to 12:30. The audience is high school students thinking about what they might want to do when they graduate high school.

MOTION by Cristi Fry and **SECONDED** by David Karp to find two people to go to Cuesta Tech Fair **MOTION CARRIED**

Cristi and Jonathan both volunteered.

WORKSHOP COMMITTEE REPORT

Jesse Brady reported, not present

TRIGSTAR COMMITTEE REPORT

George Marchenko was not present.

CHRISTMAS PARTY COMMITTEE REPORT

MOTION by Doug Rion and **SECONDED** by Bill Dyer to make out 2 checks in the amount of \$150 each for reserving the San Luis Yacht Club and another for the cleaning deposit. **MOTION CARRIED**

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CENTRAL COAST CHAPTER

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Email: <u>central.coast.clsa@gmail.com</u>

PROGRAM

San Luis High School FFA Debate team, presentation on "Robert's Rules of Order"

Rudy Xavier, presentation on

NOMINATIING COMMITTEE

Elections of new officers: The list was sent to central office.

OLD BUSINESS

President Jonathan Walsh called for any old business, no old business

NEW BUSINESS

President Jonathan Walsh called for any new business:

Doug Rion stated the Certificate of Corrections is now available online. A GIS layer if all the Record of Surveys is now available online as a "Map Grid Index."

MOTION by Ian McClain and **SECONDED** by Joe Morris to defer the matter of "Drones" to the PPC **MOTION CARRIED**

ANNOUNCEMENTS

Doug Rion announced that he will be retiring as the County Surveyor of San Luis Obispo in March of 2016.

Next meeting November 17, at Historical Center in San Luis Obispo at 5:30, speaker will be Eva Ulz, Curator and Director.

ADJOURNMENT

President Jonathan Walsh adjourned the meeting at 7:54 pm.

Respectfully submitted,

David Karp, PLS 2015 Secretary/Treasurer Central Coast Chapter of the California Land Surveyors Association