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The Texas Surveyor welcomes contributions from members. Submit original articles in Word doc form to communications@tsps.org. Copy all quoted material exactly as it appears in the original, indicating omissions by ellipses. Use quotation marks for quotes and give credit to the source from which you are quoting. Hi-res photos in .jpg format preferred. Include your name and identify the picture and all persons in photo. Email submissions to communications@tsps.org.

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On the Cover
The 67th Annual Convention & Tech Expo logo - Surveying USA. Design by Kristen Evon

Editor-in-Chief
Trisha Lund
Managing Editor
Kristen L. Evon

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The Texas Surveyor | July 2018
I am writing about two different subjects in this column. For my initial topic, I am stepping up on my soapbox. Steve Martin had a bit that went like this: “You can be a millionaire and never pay taxes. That’s right. YOU can be a MILLIONAIRE and never pay taxes. First, ……. getamilliondollars.” I suspect we would have quite a problem if we never paid taxes, but with the current demand for surveying services, surveyors should have no difficulty getting the million dollars. While we are bemoaning the decreasing number of licensed surveyors, shouldn’t our prices be going up? It’s as simple as the law of supply and demand. In my opinion, many surveyors are poor businessmen when it comes to pricing their services. In the 1970s I remember when my employer purchased the company’s first theodolite. It cost a relative fortune. But instead of increasing our rates to offset the cost of the equipment, he decided to give a price break to the clients. He concluded that we should give them a discount due to our ability to produce surveys much more quickly and accurately than was previously possible. Even when I was in my 20s that did not make sense to me. The same thing occurred when the company purchased the first distance meter, total station, and computer. The company is out of business now (can you guess why?).

We professionals are getting a bit better now and at least price our surveys so that we can pay off the equipment purchased within a reasonable amount of time. However, most of us are still pricing surveys based on man hours and not value. It would seem more realistic to price our surveys based on the value of the land because nothing can be designed without our surveys. How is it that other professionals get a percentage of the property value for their fee? However, even if we managed to have our fees associated with the value of the property, there are those surveyors who would continue to offer surveys at a lesser percentage. Unfortunately, surveyors can be their own worst enemy. My hope is that as younger surveyors come into the profession, they begin to work toward changing the fee structure for surveying services to better represent the required knowledge and professionalism that all of us provide to our clients.

continued on pg 7
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In early May I attended a two-day State Executive Directors meeting in Denver. Becky Roland, Executive Director for the Professional Land Surveyors of Colorado organized the meeting which attracted ten state surveying association Executive Directors from across the country. As in the past, the meeting was extremely productive with all of us sharing successes and failures on various initiatives. The agenda was full of many topics like membership recruitment/retention, board development/leadership, and education however the conversation kept finding its way back to … What is your state doing to attract students into the surveying profession? What has been successful and what has not for your state?

Most of the states have started to exhibit at conferences like the Professional School Counselor Association, Family, Career and Community Leaders Association and the Industrial Vocational Professional School Counselor Association, Family, Career and Community Leaders Association as we have done. Many also participate in career days or job fairs at local schools to introduce surveying as a career choice. We have all had some success with this approach and for Texas one such visit led to students seeking surveying internships in the San Antonio area this summer.

Some other ideas that were presented are:

1. Workforce Development and the success of the Maryland program was quite interesting. An extensive article about the steps Maryland took to develop their program was printed in the July 2017 issue of Point of Beginning magazine: www.pobonline.com/publications/3/editions/1296. NSPS has a sample letter to write to Workforce Development Boards and links to all the state and local organizations at www.nsps.us.com/page/WorkforceDev. I would encourage members to use the sample letter and mail to your local workforce board. Communicate the need for a trained workforce with the goal of these people earning their CST Level 1 certification.

2. To build a “sandbox” like the one NSPS had at last year’s convention. Use this very interactive tool at the various events where TSPS exhibits to attract more people to stop at the booth. Colorado has provided a sketch of their plans.

3. Create a word search with surveying terms for younger students – simply enough!

4. Consider exhibiting at the State Home School Association and other related organizations.

As we move forward with recruiting students into the surveying profession please remember the resources that are available to you through TSPS. We have a PowerPoint presentation you can use when visiting schools, recruitment brochures and posters to leave with the school counselors, and the becomeatexassurveyor.com website for students to view. It will take all of us working together to increase the number of young people going into the profession.

The Texas Young Surveyors are an active group within TSPS. They plan events throughout the state over the year, but their most popular event is held during convention. If you are new to the profession and just getting to know TSPS, I encourage you to attend. The Annual Convention & Tech Expo is great opportunity for you to meet others; take a look at the complete schedule on page 17 to see what is planned for Galveston. With 72 exhibits, 16 different educational offerings and various social events and receptions the convention will be fun, fun, fun … Surveying USA! 

OK. I am off the soapbox now.

My second topic is the Texas Society of Professional Surveyors (TSPS).

I was lucky. “A long time ago in a galaxy far, far away,” my college professor, Milton Hanks, “strongly suggested” that I attended a TSA (Texas Surveyors Association) meeting. At my first Chapter meeting, an “old” surveyor approached me and introduced himself (keep in mind that I was 21 years old so “old” was a relative term). This “old” guy spent the evening with me, asking me questions and getting input from me on a variety of subjects. More than once during the evening, I thought, “Why in the world is he talking to me, much less asking my opinion about things? I’m just a kid. I don’t know anything from anything.” Throughout the evening he talked about the TSA and its benefits to me and all surveyors. That “old” guy was Ken Gold … like I said … I was lucky.

The decrease in the number of licensed surveyors in our profession is subsequently leading to a decrease in TSPS membership. While we can’t all be the doyen that Ken Gold is, I challenge everyone to follow Ken’s lead and seek out the younger members at Chapter meetings and especially at the Annual Convention to engage them in meaningful conversations. The younger generation is the future of our profession and our professional organization. One of the many benefits of our society is that our members’ years of experience span many decades, thus, we can all learn from each other. We should work toward bringing young surveyors into our professional society for the betterment of us all. In other words, we need to be effective stewards of our profession.
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Surveyors, young and seasoned – if you have not attended a TSPS Convention before, this year is an awesome year to go! Beautiful location, excellent speakers and courses, fun and fellowship with surveyors from across the state!

If this is your first convention and if you are able to attend the Grand Opening and Annual Membership Meeting on Thursday, I encourage you to do so. First, there is a Keynote speaker, then the Annual Membership Meeting. At this meeting, you will hear about what TSPS has been working on in the past year and for the upcoming year. The first TSPS Annual Membership Meeting that I attended was the first year that I became involved on the state level of TSPS. Through this simple act of attending the meeting, I gained insight to the many benefits that TSPS offers. Prior, I had no idea about many of the committees, activities, and outreach efforts of TSPS, not just at the chapter level, but the state level as well. From this meeting, I found TSPS to be a great resource to surveyors across the state and was able to see how it protects and promotes the profession.

The festivities continue Thursday evening, with a social for new members and new attendees. Be sure to stop by and say “hi” and find out about some of the benefits that TSPS has established for you. Following the New Member and First Time Attendee Social, is the TSPS Open House/Presidents Reception for more fun and fellowship. Then, we close out Thursday with the Young Surveyors Social!

Last year the Texas Young Surveyors took over The Green Gator in Frisco, with nearly a hundred guests attending the Young Surveyor Social. This year, we have reserved the Rum Shack (a rooftop cabana) at The Spot, and will be providing appetizers and drinks. Like last year, we will also be providing transportation. You do not want to miss this event! Free transportation, food, drinks and an amazing atmosphere on the coast - what better way to kick off the TSPS Convention!

This is sure to be a fantastic weekend of networking and learning. I hope to see you there!

TYS Sponsorship Opportunities Available!
The Texas Young Surveyors are looking for sponsors for our Fall Events. If you are interested in sponsorship opportunities, please contact Anna Rios (annaintx@hotmail.com) for more details.

Texas Young Surveyors’ Officer Team

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2018 Regional Calendar

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<tr>
<td>Jul 20</td>
<td>Austin - TENTATIVE General Land Office Tour &amp; Happy Hour</td>
</tr>
<tr>
<td>Aug 3</td>
<td>Georgetown - TSFI Ray Wisdom Auction</td>
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<tr>
<td>Aug 4</td>
<td>Georgetown - Happy Hour (following TSPS Board Meeting)</td>
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<tr>
<td>Sep 15</td>
<td>Dallas TBD</td>
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<tr>
<td>Oct 4</td>
<td>Galveston - Young Surveyor Social</td>
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2018 State/National Calendar

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<td>TSPS Convention, Galveston, TX</td>
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<tr>
<td>Oct 17</td>
<td>3rd FIG North American YSN Meeting, Maryland</td>
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<tr>
<td>Oct 18</td>
<td>NSPS YSN Meeting, Maryland</td>
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Be sure to follow Texas Young Surveyors on Facebook for event information and details.

Learn more about Texas Young Surveyors, visit www.tsps.org/TYS.
1. Home Equity Lending

Santiago v. Novastar Mortg., Inc.,

The Santiagos obtained a home equity loan from Novastar. When their payments doubled after six years, the Santiagos defaulted. They sued Novastar seven years after the initial closing.

Among their claims were that two documents signed at closing contained blanks, which is prohibited by § 50(a)(6)(Q) of the Constitution. “Luis Santiago testified that the copies of the Certificate and the Election he received in the course of this litigation bore a date of May 19, 2004, while the copies he received at closing did not bear a date. Instead, the copies he received had a blank for the date to be filled in.

The Certificate and the Election, however, were documents regarding the three-day period during which the Santiagos could rescind the loan without penalty, and should have remained blank until the three-day period had elapsed. . . . In fact, each document bore a warning in all-capital letters instructing borrowers not to sign until three business days had elapsed from the closing.” Id. at 6-7. Thus, “there was no violation of section 50(a)(6)(Q)(iii) regarding the blanks on the Certificate and on the Election at the time of closing.

Second, the Santiagos argue that they raised a fact issue that their signatures on the Affidavit were forged.” Id. at 7. “The residual four-year statute of limitations applies to claims that a lender violated constitutional provisions governing home equity loans. . . . A claim accrues ‘when a wrongful act causes some legal injury, even if the fact of injury is not discovered until later, and even if all resulting damages have not yet occurred.’” Id. at 9. In the context of a home equity loan, “a legal injury occurred when a lender made a loan in excess of the amount allowed by law.” Id. The Santiagos argued that the statute of limitations was tolled because of the discovery rule. Neither the Texas Supreme Court nor any courts of appeals have decided the question.

“[]esfar as the period of limitations exists to preserve evidence and create settled expectations, it would essentially be nullified by allowing parties to wait many years to demand cure.’. . . The legal injury here ‘occurred when the [borrowers] created the lien, and there was nothing that made the injury undiscoverable.’” Id. at 10.

“‘For the discovery rule to apply, the nature of the injury must be inherently undiscoverable and the evidence of the injury must be objectively verifiable.’” Id. at 11. “‘[I]nherently undiscoverable’ does not mean ‘merely that a particular plaintiff did not discover his injury within the prescribed period of limitations.’ . . . ‘[D]iscovery of a particular injury is dependent not solely on the nature of the injury but on the circumstances in which it occurred and the plaintiff’s diligence as well.’ . . . An injury is ‘inherently undiscoverable’ if ‘it is by nature unlikely to be discovered within the prescribed limitations period despite due diligence.’” Id.

“The nature of the injury alleged by the Santiagos is that they did not receive a copy of the Affidavit as required by subsection (v) of Article XVI, section 50(a)(6)(Q) of the Texas Constitution, and therefore were unaware that they could be liable personally on the entire loan in the event of any fraud on their part. They argue that a copy of the Affidavit was not provided to them, and instead was filed of record bearing forgeries of their signatures. They argue that no diligence was required of them to discover their injury because they had no reason or obligation to search the deed records after their loan was closed.

There is no dispute that the allegedly forged Affidavit was a matter of public record upon its filing on May 25, 2004, or that the alleged constitutional violation was apparent from a review of those records. Luis Santiago discovered the alleged violation when he reviewed the records in 2010. In some circumstances, a party may have constructive notice of matters filed in the public record. . . . Even when a party does not have constructive notice of matters filed in the public record, however, ‘a cause of action for failure to provide that information is not inherently undiscoverable.’” Id. at 11-12.

“We conclude the Santiagos’ injury was not ‘by nature unlikely to be discovered within the prescribed limitations period despite due diligence.’ . . . The Affidavit was a matter of public record. . . . As the Santiagos themselves point out, the Affidavit was specifically referenced in the security instrument and other documents they signed at closing. Although as the Santiagos argue, they may not have had any ‘obligation to perform periodic random searches of recorded instruments associated with their property,’ they did have an obligation ‘to protect themselves by reading what they sign’ and disclosing any discrepancies to the lender.” Id. at 14-15.
Wood v. HSBC Bank USA, N.A.,

The fundamental question in this case “is whether a home-equity lien that violates section 50(a)(6) of the Texas Constitution is void or voidable.” Id. at 5. “’A void act is one entirely null within itself, not binding on either party, and which is not susceptible of ratification or confirmation. . . . A voidable act is . . . binding until disaffirmed, and . . . may be made finally valid by failure within proper time to have it annulled, or by subsequent ratification or confirmation.’” Id. at 7.

“Keeping this distinction in mind, if . . . a noncompliant home-equity lien is void from the start, then the lien would not be susceptible to correction, ratification, confirmation, disaffirmation, or even cure. While this may have been the case prior to the 1997 constitutional amendment that added the section 50(a)(6)(Q)(x) cure provisions, it is not the case now. The 1997 home-equity loan amendment affords lenders the means to correct mistakes in order to validate a noncompliant home-equity lien. The section 50(a)(6)(Q)(x) cure provisions place noncompliant home-equity liens on the voidable side of the void-voidable scale.” Id. at 8.

Accordingly, the court held “that because a cure provision exists in the Texas Constitution, homestead liens that do not comply with the constitutional requirements are voidable.” Id. at 9.

“Having determined that noncompliant home-equity liens are voidable, and because such liens are subject to limitations,” the court held that the four-year statute of limitations in Civil Practice & Remedies Code § 16.051 applies. Id. “‘Every action for which there is no express limitations period, except an action for the recovery of real property, must be brought not later than four years after the day the cause of action accrues.’” Id.

“Anticipating the possibility that section 16.051 would apply to their constitutional claims, the [borrowers] assert that section 16.051 does not apply to their declaratory judgment action to cancel [the home equity] lien because it constitutes an action for the recovery of real property. An action for the recovery of real property is one that would support a trespass to try title suit without first invoking the equitable powers of the court to cancel a deed. . . . A trespass to try title suit is ‘the method of determining title to lands, tenements, or other real property’ . . . It is generally used to clear problems in chains of title or to recover possession of land unlawfully withheld from a rightful owner. . . . A declaratory judgment action, on the other hand, provides an efficient procedural method for seeking a declaration of rights regarding the construction or validity of deeds by those whose rights are affected by such instruments.” Id. at 10.

The borrowers’ “claim for forfeiture of principal and interest is an action to recover money damages. As such, it is not an action for the recovery of real property. Nor is the [borrowers’] declaratory judgment action to void the home-equity lien—which does not implicate any of the issues resolved by a trespass to try title suit—an action for the recovery of real property.” Id.

“Citing the general principle that the legal and equitable estates in real property are severed when a mortgagor executes a deed of trust, . . . the [borrowers] contend that their suit to invalidate the home-equity lien is an action to recover ‘equitable title.’ Therefore, it is an action to recover real property.” Id. at 11.

The court rejected this argument. Here, the borrowers “are not attempting to impose a constructive trust on the home-equity lien and do not allege that the lender has acquired legal title through wrongdoing. To the contrary, the [borrowers] have merely asserted a cause of action to cancel their home-equity lien, which will not support an action in trespass to try title and which requires the equitable powers of the court to determine.” Id. at 12.

“Because the [borrowers’] declaratory judgment action to cancel their home-equity lien would not support a trespass to try title action and requires the equitable powers of the court to cancel their lien, their declaratory judgment action to cancel the home-equity lien is not an action to recover real property.” Id. at 13.
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September 20-22, 2018 – Concan, Texas

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Referred to as “the best RPLS exam prep course available, this unique interactive experience is presented and led by some of the state’s most highly experienced practicing Licensed State Land Surveyors.

Participants who attend will:

- Participate in the determination of the gradient boundary of the Frio River.
- Capitalize on techniques for determining corner search positions learned over years of experience.
- Appropriately apply the field evidence to final original survey construction to legally establish missing or obliterated corners.
- Review landmark court cases that were the basis for the current dignity of calls in regard to retracing original survey corners.
- Examine ancient trees in search of survey witness marks called for in the original survey field notes.
- Seek and find original rock mounds set in the 1800s that remain virtually undisturbed and in their original position.

Schedule of Events

Thursday, September 20
12:00pm - 1:00pm  Registration
1:00pm - 5:00pm  Intro, LSLS panel, and field exercises

Friday, September 21
7:00am - 8:00am  Breakfast
8:00am - 5:00pm  Field exercises and discussion (hour lunch break included)

Saturday, September 22
7:00am - 8:00am  Breakfast
8:00am - 12:00pm  Field exercises and discussion

Requirements

Each seminar participant should bring:

- Clothing/footwear suitable for rough terrain
- Personal field gear
- Calculator (any type)
- Scratch pad
- Triangles
- Scale
- 24” straight edge
- Comfortable, casual wear for evenings

Accommodations

Accommodations are provided by Neal’s Lodges in Concan, TX. To reserve your cabin, contact Neal’s Lodges at 830-232-6118 or reserve@nealslodges.com. All cabins are reserved and paid for on an individual basis by each attendee. Mention the TSPS seminar to receive a 30% discount on cabin rates. Visit www.nealslodges.com for more details and directions.

Instructors

C.B. (Ben) Thomson, RPLS, LSLS
Bill O’Hara, RPLS, LSLS
Garey Gilley, RPLS, LSLS
Davey Edwards, RPLS, LSLS, CFedS
Don King, RPLS
Mark Logbrinck, RPLS

September weather in southwest Texas is unpredictable, please be prepared for any eventuality. Those having personal GPS equipment may bring portable units if they so desire. Participants should be physically able to hike steep grades on unimproved routes in varying weather conditions, which may include temperatures in the 90-105 degree range.

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Accommodations are provided by Neal’s Lodges in Concan, TX. To reserve your cabin, contact Neal’s Lodges at 830-232-6118 or reserve@nealslodges.com. All cabins are reserved and paid for on an individual basis by each attendee. Mention the TSPS seminar to receive a 30% discount on cabin rates. Visit www.nealslodges.com for more details and directions.

Register online at www.tsps.org/LOC or complete the form below and fax or email to Brenda at 512-327-7872 or BrendaN@tsps.org.

The TSPS Cancellation Policy allows for a refund less a $50 processing fee. Cancellations must be sent via email or in writing, and received in this office by Monday, September 17.

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Paraprofessional (no CEUs)  □ $185  □ $210

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Paraprofessional (no CEUs)  □ $235  □ $260

**NOTE: meals and lodging are not included in registration fee**

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Name on Card____________________________________________

Payments made to TSPS are not deductible as charitable contributions, however, they may be deducted as a trade or business expense. Consult your tax advisor.
Earn your CEUs while meeting with surveyors from across Texas and surrounding states. Classes fill up quickly, so surf on over to the TSPS website and secure your favorites!

**Schedule of Events**

*All events will be held at the Galveston Island Convention Center unless otherwise indicated.*

**Wednesday, October 3**

12:15 pm–3:00 pm  **Skeet Shoot** - Texas City Municipal Shooting Range  
Registration is limited to the first 20 shooters.

1:00 pm–6:00 pm  **Golf Tournament** - Moody Gardens Golf Course  
Green fees, cart and buffet dinner included.

3:00 pm–6:00 pm  **Registration Open**

6:30 pm–9:00 pm  **Past President’s Dinner** (Invitation Only)  
Willie G’s Seafood & Steaks

8:30 pm–11:00 pm  **TSPSA Open House** - The San Luis Resort  
Drinks and snacks available. All TSPS/TSPSA members and guests are invited. Hosted by Texas Society of Professional Surveyors Auxiliary

**Thursday, October 4**

7:30 am–5:00 pm  **Registration Open**

9:00 am–10:00 am  **Grand Opening and Keynote Address**  
Featuring Texas State Senator Larry Taylor (District 11)

10:00 am–5:00 pm  **Annual TSPS Membership Meeting**

12:15 pm–1:15 pm  **Lunch on own**

3:00 pm–6:00 pm  **TSFI Delegate Election** *  
**Nominating Committee Meeting** *

5:00 pm–6:00 pm  **New Member & First-Time Attendee Social**

5:00 pm–7:00 pm  **RTKNET Customer Appreciation & Reception**  
Hosted by the new AllTerra Central

5:00 pm–7:00 pm  **Leica Geosystems Reception**

5:00 pm–7:00 pm  **TJC Survey Alumni & Friends Reception**

6:00 pm–8:00 pm  **Blucher Institute Alumni Reception** (Invitation Only)

7:00 pm–10:00 pm  **TSPS Open House/President’s Reception**  
Entertainment by Luxury Trio

8:30 pm–12:00 am  **Young Surveyors Outing** - The Spot/Rum Shack

* Begins at conclusion of Annual Membership Meeting
Schedule of Events continued

All events will be held at the Galveston Island Convention Center unless otherwise indicated.

Friday, October 5

6:30 am–7:45 am  LSLS Breakfast Forum
7:00 am–5:00 pm  Registration Open
8:00 am–10:00 am  Educational Session - 2 CEUs
        Managing the Development of Surveying Staff
        Presented by Joe Paiva, PhD, PS, PE
8:00 am–10:00 am  Educational Session - 2 CEUs
        Millimeter Metrology at UT/NASA’s McDonald Geodetic Observatory
        Presented by John Griffin, RPLS
8:00 am–12:15 pm  Educational Session - 4 CEUs (includes 3 hrs Rules)
        2016 ALTA/NSPS Standards
        Presented by Gary Kent, PS
8:00 am–12:15 pm  Educational Session - 4 CEUs
        Tidal Boundaries, an Overview
        Presented by Stephen Blaskey, RPLS, LSLS; Mike Hoover, RPLS, LSLS, CFM; and Dr. Gary Jeffress, RPLS
10:00 am–10:15 am  Break
10:15 am–12:15 pm  Educational Session - 2 CEUs
        Focusing Professional Practice for Tomorrow’s Environment
        Presented by Joe Paiva, PhD, PS, PE
10:15 am–12:15 pm  Educational Session - 2 CEUs (includes 2 hrs Rules)
        Words Mean Things
        Presented by Doug Turner, RPLS
12:15 pm–5:30 pm  Exhibit Hall Open
12:30 pm–2:00 pm  Annual Luncheon with speaker, Dr. Gary Schwantz

2:00 pm–5:30 pm  Exhibit Hall Grand Opening and Reception
6:30 pm–11:00 pm  Annual Awards Gala & Dinner - The San Luis Resort
        With entertainment by Jerry Diaz & Hanna’s Reef

Follow TSPS on social media! #TSPS2018

facebook.com/TSPS.org  twitter.com/texassurveyor
linkedin.com/company/texas-society-of-professional-surveyors  instagram.com/texassurveyor
Saturday, October 6

6:30 am–2:00 pm  
Registration Open

7:30 am–9:30 am  
**Educational Session** - 2 CEUs  
*Sales, Marketing and Business Development*  
Presented by Joe Paiva, PhD, PS, PE

7:30 am–12:00 pm  
**Educational Session** - 4 CEUs (includes 2 hrs Ethics)  
*Parish Line Sequel*  
Presented by Frank Willis, PLS, PE

7:30 am–12:00 pm  
**Educational Session** - 8 CEUs (includes 3 hrs Ethics)  
MUST attend both am & pm sessions for CEU credits  
*Mock Trial: Harper v. Sunshower Resort*  
Presented by Gary Kent, PS

7:30 am–12:00 pm  
**Educational Session** - 4 CEUs  
*Coordinates & Geodesy*  
Presented by Jan Van Sickle, PhD

9:00 am–1:30 pm  
**Exhibit Hall Open**

9:30 am–10:00 am  
Break with Exhibitors

10:00 am–12:00 pm  
**Educational Session** - 2 CEUs  
*Surveying Business Communications*  
Presented by Joe Paiva, PhD, PS, PE

12:00 pm–1:30 pm  
**Lunch** with Exhibitors

1:30 pm–3:30 pm  
**Educational Session** - 2 CEUs  
*Pathway to 2022: The Ongoing Modernization of the U.S. National Reference System*  
Presented by Daniel Prouty, PhD

1:30 pm–3:30 pm  
**Educational Session** - 2 CEUs  
*The Natural Hierarchy of Surveying*  
Presented by Frank Willis, PLS, PE

1:30 pm–5:45 pm  
**Educational Session** (continued from morning session)  
*Mock Trial: Harper v. Sunshower Resort*  
Presented by Gary Kent, PS

1:30 pm–5:45 pm  
**Educational Session** - 4 CEUs  
*Error Analysis & Least-Squares*  
Presented by Jan Van Sickle, PhD

3:30 pm–3:45 pm  
Break

3:45 pm–5:45 pm  
**Educational Session** - 2 CEUs (includes 2 hrs Ethics)  
*Mr. Ethics*  
Presented by Frank Willis, PLS, PE

3:45 pm–5:45 pm  
**Educational Session** - 2 CEUs (includes 2 hrs Rules)  
*Moderated Discussion on the Proposed Revisions to the Manual of Practice*  
Presented by Doug Turner, RPLS

5:45 pm  
**Convention Adjourns**

For session descriptions and speaker information, please visit tsps.org/convention.
TSPSA Schedule of Events

All events will be held at The San Luis Resort unless otherwise indicated.

Wednesday, October 3
8:30 pm – 11:00 pm  TSPSA Open House

Thursday, October 4
9:00 am – 12:00 pm  Community Service Project with Breakfast
Attendees will help make baby blankets for a pregnancy outreach program for mothers and children in need (no skill or expertise needed). The group will also sign cards to send to Operation We Are Here showing support and appreciation to our deployed troops. The afternoon is on your own to enjoy all that Galveston has to offer.

2:00 pm – 4:00 pm  TSPSA Hospitality Suite open

Friday, October 5
9:00 am – 9:30 am  Auxiliary Coffee
9:45 am – 3:00 pm  A Day in Galveston
A Day in Galveston will start with a guided tour of The Grand 1894 Opera House with its amazing architecture, beautiful decor and interesting history. Attendees will enjoy lunch as a group and then have time to Shop on the Strand. The historic Strand boasts art galleries, candy shops and other unique stores for your enjoyment. The day will end with a wine, cheese and cookie reception before returning to the hotels.

Saturday, October 6
11:00 am – 3:00 pm  Annual Business Meeting/Luncheon - Reach for the Stars/Make a Wish on a Starfish
Attendees will make memories with friends while creating Lighted Glass Art and unique Wine Bottle Art. This fun and interesting event will give attendees an opportunity to express themselves as they learn a new way to turn trash into treasures. Easy hands on fun making a piece of art that you will cherish for a lifetime. Lunch, Elections and the Installation of Officers will also be included in this memorable day. Door prizes will also be given away during this event.

67th Annual Convention & Tech Expo Exhibitors

Advanced Geodetic Surveys, Inc. (AGS)
Aerial Services, Inc.
Aerotas, LLC
AeroTech Mapping, Inc.
Alamo Valley Geosystems
AllTerra Central, Inc.
ANCO Insurance
Berntsen International, Inc.
Capital Surveying Supplies
Carlson Software
Courthouse Research Specialists
CourthouseDirect.com
Dallas Aerial Surveys, Inc.
GeoShack
Hayden Consultants, Inc.
Leica Geosystems
NSPS
Phoenix Geosystems
Precision Aerial Compliance Solutions
PRO-TERRA Aerial Mapping, Inc.
Quantum Spatial, Inc.
Silicon Benefits
Smart Vent
Stewart Engineering Supply, Inc.
Survey Equipment Services
Surveying And Mapping, LLC (SAM)
Surveying History
Surveyors Source
SurveyStars
SURV-KAP, LLC
Texas General Land Office (GLO)
Texas Surveyors Foundation, Inc. (TSFI)
Texas811
TexasFile
TSPS Publications
Tuck Mapping Solutions, Inc.
TxDOT COGS
United Geo Technologies, LLC
Who Owns It
Young Surveyors Network
Attendee Information (One form per attendee. Please print or type.)

First Name _________________________________________________ Last Name _______________________________________________
Company ___________________________________________________ Preferred phone # (___________)____________________________
Address ___________________________________________________ City _________________________ State ______ Zip _____________
Email _____________________________________________________________________________ RPLS/SIT# _______________________  

Auxiliary Member Information

First Name _________________________________________________ Last Name _______________________________________________
Address ___________________________________________________ City __________________________ State ______ Zip ____________
Preferred Phone # (__________)___________________________ Email ________________________________________________________  

Registration Fees (please check one)

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<th>Description</th>
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<th>Non-Member $</th>
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<td>All Educational Sessions and admission to Tech Expo</td>
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<td>190 by 9-5</td>
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<tr>
<td>Tech Expo Pass</td>
<td>Admission to Tech Expo both Friday and Saturday</td>
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<td>35 by 9-5</td>
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You can also register for classes online at tsps.org/convention
### Auxiliary Events & Registration Fees

- **Auxiliary Annual Membership Dues** (required to attend Auxiliary Events) $10 = _______
- **Auxiliary Convention Registration** (includes admission to Tech Expo) $35 = _______
- **Thursday, 9:00 am–12:00 pm** Community Service Project w/Breakfast # of Tickets ____ @ $20 = _______
- **Friday, 9:45 am–3:00 pm** A Day in Galveston # of Tickets ____ @ $40 = _______
- **Saturday, 11:00 am–3:00 pm** Reach for the Stars - Annual Business Meeting & Luncheon # of Tickets ____ @ $45 = _______

### Cancellation Policy:
Cancellations minus a $50 administrative fee will be made if written request is received by Wednesday, September 19th. No refunds will be made after that date.

### Payment Information

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Billing Address _______________________________
Billing C/S/Z _______________________________

**Total from previous page** = __________
**Auxiliary Total** = __________
**GRAND TOTAL** = ___________

Payment Information:
- **Check # _______**
- **VISA**
- **MC**
- **AMEX**
- **DISCOVER**

Card # ________________________________
Exp Date ______________________________
Name on Card ________________________________
Billing Address ________________________________
Billing C/S/Z ________________________________

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**TSPS Convention Hotel Information**

There are two hotel options for the 67th Annual Convention & Tech Expo:

**Hilton Galveston Island Resort** - $149/night
*Located right next door to the Galveston Island Convention Center*

- Book online at [tsps.org/convention_hilton](http://tsps.org/convention_hilton)
- Call the hotel directly at 800-392-5937 *(please mention TSPS)*

**San Luis Resort Spa & Conference Center** - $164/night
*Located 0.3 mi or a 7-minute walk from the Galveston Island Convention Center*

- Book online at [tsps.org/convention_sanluis](http://tsps.org/convention_sanluis)
- Call the hotel directly at 800-392-5937 *(please mention TSPS)*

Hotel reservations must be made no later than Monday, September 10 in order to guarantee the group rate.

**Mobile Event App - Coming Soon!**

The 2018 TSPS Convention & Tech Expo app will be available for download in iTunes and Google Play this September! Be in the know at this year’s convention:
- Save your sessions and events to your agenda to view at a glance
- View exhibitor information and booth location
- Connect with other attendees

Watch your inbox for the email announcement in September!
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How to Choose Sunglasses

Joe Breaux, RPLS, TSPS Safety Committee Chair

Summer is here and so are the long, hot summer days with the blazing sun. It’s time to begin preparations for dealing with the sun baking just about everything – us, our skin; the bright sun blinding us with the glare. Bright sun is hard on our eyes, and causes strain and damage. What does one do?

Protecting your eyes from the strain and harmful effects caused by the sun is extremely important. Long term damage can occur. Besides, without sun glasses the glare can be unbearable. Just travel into the sunset driving down any highway. The sun is glaring right in your eyes so you grab those dollar store, cool looking, fashion statement, fishing “Shades.” Not so fast. Better than nothing, but think about it. Inexpensive sunglasses usually do very little to protect eyes from the harmful rays of the sun, although they can give some protection against flying debris.

Quality sunglasses are essential in protecting the health of your eyes and the surrounding tissue.

How does one pick out the features of quality sunglasses that actually protect the wearer’s eyes for a price that doesn’t break the bank? Several things are important to know in selecting quality sunglasses that do protect. Experts recommend that anytime you’re outdoors, wear sunglasses. That is especially true during summer since UV radiation can be up to 3 times greater than in winter. Sunglasses should also be worn when around water or at the beach; at high elevations and during snow sports during winter; and if you have eye disease, are taking photosensitizing drugs or have had cataract surgery.

UV protection is extremely important when choosing sunglasses and can be found in all prices of sunglasses, though less likely found in those in the lower price range. UV radiation can damage skin and can increase the odds of getting cataracts and other eye disease that diminishes eyesight. Look for lenses that block 99% of UVB and 95% of UVA rays. Look for lenses that meet the ANSI Z 80.3 blocking requirements. Also look for UV 400 protection, meaning your eyes are shielded from the smallest UV rays. UV protection is a clear coating, so it is not related to lens color or if sunglasses have polarized lenses. The type of lens materials and the lens manufacturing process do affect cost, durability and weight of the sunglasses.

Glass lenses are superior in optical clarity and offer superior resistance to scratching, but are heavier than other materials and will crack or “spider” upon impact. They are also expensive.

NXT Polycarbonate (polyurethane) lenses have superior impact resistance, are flexible, light weight and have excellent optical clarity, but are expensive.

Polycarbonate lenses exhibit excellent impact resistance, very good optical clarity, are light weight and low on bulk, but have less optical clarity and are less resistant to scratching.

Acrylic lenses are inexpensive compared to polycarbonate, work well for occasional use, but are less durable and have less optical clarity. These can also exhibit some image distortion.

Lens construction and quality can also be a function of the manufacturing process. Glass lenses are ground and can be made with or without a prescription to fit an individual’s eye correction needs. Plastic lenses can be made by an injection process which offers the better clarity, or by bending a sheet of material. Better sunglasses of the plastic lens type use a longer process while less expensive ones use a simplified bending process that usually results in less clarity. To check for optical quality, the FDA recommends wearing the sunglasses and focusing on a vertical line or vertical edge of a tall object. Move your head from side to side and allow your eyes to sweep across the lens. If the line exhibits any bending, then there may be lens defects, so it is best to choose another pair.

Hue or color. Sunglasses are colored or tinted to cut down brightness and to enhance definition of features and objects. Lens color affects the amount of visible light that reaches the eyes, how well other colors are seen and how well the wearer sees. Dark colors or shades do cut glare and reduce eye strain, but darker lenses are not always better protection. On the other hand, lighter lenses do provide better visibility but may be less effective at glare reduction.

Brown, gray, green- these colors or variations of them, are considered color neutral. They exhibit less color distortion and reduce eye strain and glare in bright conditions. Gray (smoke) reduces light intensity. Brown partially enhances contrast by blocking some blue light.

Cost, expensive sunglasses vs. low priced ones. The difference is in the technology used in lens construction as well as durability and comfort. When sunglasses are worn year-round for work or outdoor sports, or if worn in hi-performance sports the durability of better, more expensive sunglasses may be worth the extra cost. And there are specialty glasses for specific action sports or activities that offer better impact protection.
Yellow, gold, amber—these colors or variations or them are superior in low level light conditions by providing good distinction, enhanced contrast and excellent depth perception.

Polarized lenses filter out reflected sunlight that bounces off reflective surfaces, so choose these to reduce glare when on water or around other smooth, flat, reflective surfaces such as pavement (or snow in the winter). A downside is that polarized lenses can make reading the display of a cell phone, total station, data collector or a dashboard difficult. Also, polarization does not affect UV protection, so when choosing polarized lenses, make sure that these also are UV protected.

Fit and lens shape. As for the size of lenses, more is better when it comes to protecting your eyes as well as the surrounding tissue. Small lenses that cover only a small portion of the eyes and area around the eyes do less good. Larger lenses that cover more obviously offer more protection. Frames can also be important in the fit. Wrap around frames and lenses offer more protection from reflected light and can offer some protection from dust and blowing debris.

Lenses and frames should fit snugly on the nose and at the ears to keep from slipping, but not too tight to be uncomfortable. Frames should also fit reasonably close to the face to keep more reflective light from reaching the eyes and area around the eyes. Frames that have no slip nose and ear pieces offer better gripping on sweaty skin, too.

A few other tips. When carrying or storing sunglasses, keep them in a hardcover case for the best protection. Loose glasses are easily broken or scratched, or lost. Keep your glasses clean by wiping often with a micro-fiber cloth only. Dirt and grit build up on lenses can cause scratches. Cleaning by wiping with paper/wood products such as tissue or a paper towel can also scratch lenses, especially plastic types. Warm water or spray on lens cleaner can also be used occasion with good results.

So, why does all this really matter? Reducing the sun’s harmful effects is a must to maintain good eye health. Whether working or playing in the sun, our eyes are exposed to strain and harmful effects of the sun. Knowing what to look for to select sunglasses that provide the quality and the recommended features for protecting your eyes from the sun’s harmful effects as well as wearing your sunglasses when in the sun is extremely important safety for your eyes.
SURVEY SALES SPECIALIST – AUSTIN & HOUSTON, TX

SURVTEX (with Texas registration) is seeking a talented Survey Sales Specialist to sell Topcon GPS, surveying instruments and robotic total stations.

The successful candidate will possess:
- Minimum 2-5 years sales experience
- Exceptional organizational and communication skills
- Strong achievement drive and positive, sales-oriented personality
- Must be computer literate
- Knowledge of survey, engineering and/or governmental markets
- Willingness to learn about the products we sell
- Business-like, professional appearance
- Prefer Bachelor’s Degree or equivalent

Benefits:
- Competitive Salary with commissions, Paid Time Off, Holiday Pay
- Vehicle allowance, Travel expenses covered
- Medical, Dental and Vision Insurance & Employer paid Life Insurance, and Short and Long-term Disability
- 401(k) Retirement plan with company match
- Laptop Computer and Cell Phone

If interested, please apply online at geoshack.com/careers.

MULTIPLE POSITIONS – AUSTIN, TX

CUNNINGHAM ALLEN, INC.

Cunningham Allen, Inc. is seeking:
- RPLS (with Texas registration) – Responsibilities include management of survey crews and survey technicians and preparation of survey products. Candidate must have knowledge in boundary, design topographic/tree and construction staking surveys and preparation of metes and bounds descriptions.
- Survey Technician - 3+ years experience. Responsibilities include preparation of Tree/Topographic and Land Title Surveys, metes and bounds descriptions and subdivision plats.

Proficiency in the use of AutoCAD Civil 3d, Trimble Business Center, and Microsoft Office Word is required. You must be able to pass a background check.

Cunningham Allen, Inc. is an EOE. We offer a competitive benefit and compensation package, including medical, vision and dental insurance, 401K, paid sick and vacation leave, and paid holidays.

Apply at: https://cunningham-allen.com/careers/

RPLS – LEON VALLEY, TX

SINCLAIR LAND SURVEYING, INC.

Sinclair Land Surveying, Inc. is seeking a Registered Professional Land Surveyor for a fast growing and fast paced office. Candidate must be highly motivated, detail oriented and a self-starter. Candidate must be registered in the State of Texas and have a strong knowledge of all types of surveys.

Responsibilities:
- Manage the day to day survey work that’s assigned
- Preparing scopes of work and pricing competitive proposals
- Quality assurance and quality control – Provide clear and organized description of field data. Verify the accuracy of survey data, including measurements and calculations conducted at survey sites
- Aid in planning, organizing, directing and mapping survey projects from field to finish within required time frame to meet deadlines
- Review project contracts to ensure that surveys are in compliance with contract requirements
- Collect information - Search legal records, survey records, and land titles in order to obtain property boundaries in areas to be surveyed
- Sign and seal surveys and plats

Qualifications:
- Civil 3D and Autocad knowledge and experience
- Ability to think analytically and solve complex problems
- Ability to work independently and manage multiple projects with limited supervision
- Excellent communication skills
- Attention to detail
- Problem solving skills - – ability to recognize discrepancies and make prompt decisions
- Organizational skills
- Time Management
- Decision making

Interested candidates can submit their resumes to jrodriguez@sinclairsurvey.com.
SURVEY FIELD ASSISTANT – MIDLAND, TX  
DUNAWAY ASSOCIATES, LP

Dunaway Associates, L.P. is a professional services company with a solid, results-oriented history. The firm provides civil engineering, structural engineering, planning, landscape architecture, environmental services, traffic and parking engineering, hydraulics/hydrology, and land surveying services to a wide variety of public and private clients. Dunaway has over 60-years of offering a high level of client service and responsiveness and currently has 5 offices in Texas: Austin, Fort Worth, Midland, Prosper and San Antonio.

Responsibilities: Under the direct supervision of the Party Chief, conduct all preparatory work for daily surveying as well as assist in performing all surveying functions, including field staking and compilation of survey field data.

Education/Experience
- High school diploma or GED
- Valid driver’s license and acceptable driving record

Technical Knowledge, Skills, and Abilities
- Understanding of and proficiency with mid-level math skills (as confirmed with a passing score on applicable pre-employment testing)

Soft/Other Skills
- High attention to detail
- Good communication and analytical skills
- Ability to work with a team or independently as needed
- Ability to meet “Physical Demands” section of this document, including lifting up to 50 lbs.

Preferred Qualifications
- One year or more experience in land surveying
- Knowledge of general field surveying methods and use of surveying equipment

To apply for this job, please go to the “Careers” tab on our website (http://dunawayassociates.com/) and select “Opportunities.” Here you will be able to view open positions and submit a resume.

MULSTIPLE POSITIONS – TEMPLE, TX  
RONALD CARROLL SURVEYORS, INC.

Ronald Carroll Surveyors, Inc., a professional land surveying firm established in 1979 has immediate openings in its Temple office. As experts in boundary, construction surveying, topography maps, site planning and development services we offer competitive salaries and benefits.

- RPLS: Candidates must be licensed in Texas. Have excellent project management skills to manage and lead staff responsible for producing surveying projects for clients, with direct accountability for on-time, high quality project delivery. Be hardworking, multi-talented with at least 3 years surveying and CAD experience.
- Sr. Party Field Crew Chief: Candidates should have 3-5 years experience as a Crew Chief. GPS and robotics experience required.
- Sr. Survey CAD Tech: Candidates should have 4 years experience producing quality drawings in the survey profession. Must be efficient making boundary and topography maps and experienced working with construction plans. Knowledge of Carlson using an AutoCAD engine preferred.

Send resumes to hr@rcsurveyors.com.
Be prepared.

FS & RPLS LIVE TEST PREP

FS August 3, 2018
RPLS August 4, 2018

HOUSTON, TX

ENROLL NOW:
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1905 East 7th Street - Odessa, TX 79761

Houston Location: 23111 FM 1462, Damon, TX 77430 Email: tps@agsgps.com Web: www.agsgps.com
List your card here! Send a digital copy of your business card to communications@tsps.org or call 512-327-7871 for pricing.
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**Coming Events**

View more details and register for coming events at [www.tsps.org/calendar](http://www.tsps.org/calendar).

### August

- **Aug 3-4**  
  *3rd Quarterly Board & Strategic Meeting*  
  Sheraton Georgetown Texas Hotel & Conference Center  
  1101 Woodlawn Avenue | Georgetown, TX 78628

- **Aug 10-11**  
  *Ruidoso: Golf & CEUs*  
  Inn of the Mountain Gods Resort and Casino  
  287 Carrizo Canyon Rd. | Mescalero, NM 88340

### September

- **Sept 20-22**  
  *Locating Original Corners Seminar*  
  Neal’s Lodges/Annandale Ranch  
  Concan, TX

- **Sept 21-22**  
  *El Paso Annual Seminar*  
  Wyndham El Paso Airport Hotel  
  2027 Airway Blvd. | El Paso, TX 79925

### October

- **Oct 3-6**  
  *67th Annual Convention & Tech Expo*  
  Galveston Island Convention Center  
  5600 Seawall Blvd. | Galveston, TX 77554

- **Oct 4**  
  *Annual Business Meeting*  
  Galveston Island Convention Center  
  5600 Seawall Blvd. | Galveston, TX 77554

### December

- **Dec 1**  
  *TSPS December Seminar*  
  Omni Hotels SouthPark  
  4140 Governor’s Row | Austin, TX 78744

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**New Members**

**Registered**

- Michael Baitup #4574 - Chapter 5  
  Jacobs Engineering Group
- Jeff Douglas #5757 - Chapter 4  
  Stanger Surveying
- Joel Hiller #5522 - Chapter 9  
  RODS Surveying, Inc.
- Jeremy Katerberg #6620 - Chapter 5  
  White Hawk Engineering & Design, LLC
- Ernesto Navarrete #6642 - Chapter 13  
  Bowman Consulting Group

**Associate/SIT**

- Cole Carpenter - Chapter 2  
  G & A Consultants
- Bryan Foster - Chapter 5  
  LTRA Engineers
- William Foster - Chapter 3  
  All County Surveying
- Philip Kleiman - Chapter 13  
  Surveying And Mapping, LLC (SAM)
- Kevin Marquez - Chapter 9  
  Gorrondona & Associates, Inc.
- Joey Nelson - Chapter 1  
  AMD Engineering, LLC
- Benjamin Purser - Chapter 3  
  Purser Industries, LLC
- Harry Scheulen - Chapter 5  
  Surveying And Mapping, LLC (SAM)

**Affiliate**

- Kristie Arendt - Chapter 7  
  All American Surveyors
- Colin Bromley - Chapter 13  
  Ramsey Land Surveying
- Blake Pellerin - Chapter 9  
  Civil Search Consultants, Inc.

**Student**

- James Barnes III - Chapter 9
- Jacob Hayes - Chapter 9  
  Bleyl Engineering
- Gailen Hood - Chapter 6  
  Orange County Drainage District
- Adrian Rangel - Chapter 17

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