

Chapter News

Volume 7, Issue 1

Spring 2002

Famous Quotations:

Aristotle:

Quality is not an act; it is a habit.

George Bernard Shaw:

The only way to avoid being miserable is not to have enough leisure to wonder whether you are happy or not

Bill Vaughan:

Suburbia is where the developer bulldozes out the trees, then names the streets after them.

Herb Caen:

Cockroaches and socialites are the only things that can stay up all night and eat anything.

Lester J. Pourciau:

There is no monument dedicated to the memory of a committee.

Henry Ward Beecher:

The strength of a man consists in finding out the way God is going, and going that way.

Winston Churchill:

I am prepared to meet my Maker. Whether my Maker is prepared for the great ordeal of meeting me is another matter.

Inside this issue:

Cover Story	1
President's Column	1
Chapter Representative's Report	4
Minutes of Meeting	5
Calendar of Events	6



In The Heart of the Big Thicket

By Nedra Foster (email: nedrajo@exp.net)

The most interesting project I've ever worked on began with the question, "Are you sure you want to be a part of this? It will be hot, dirty work and long hours!" Indeed, it lived up to its billing, even adding a few of the usual snake experiences for good measure. Our mission was to survey 82 miles of the beautiful Big Sandy and Village creeks, which wind their way through the lush, semi-tropical climate of Southeast Texas and range from 20 to over 200 feet in width. The area is a major source of recreation for residents of the region—offering fishing, canoeing, swimming and sunbathing, all in a setting that includes one of the most biologically diverse ecosystems in the world.

It had long been a dream of Texas Congressman Charles Wilson to include a corridor of land adjoining

Village Creek into the Big Thicket National Preserve. His dream finally came to fruition in 1993 after legislative battles that spanned seven years.

82 Miles of Back Line

It was determined that a corridor approximately one-quarter mile on each side of the creeks and extending through Hardin, Tyler and Polk Counties would be included in the National Park System. It begins at the mouth at the Neches River and extends up into Polk County. Tracts of land that belonged to private citizens at that time would be excluded from the park. Timber companies owned the remaining lands and

(Continued on page 2)

Editor's Note: This article first appeared in Professional Surveyor in April 1997. It is being reprinted here by permission of the author.

President's Column

By W. Joe Breaux (email: wjbreau@yahoo.com)

At our last chapter board meeting in February there were lots of ideas and opinions, on nearly everything. Lengthy discussion of many different topics and ideas about what was expected. I don't mention this to be critical, for that

is what these meetings are for, to discuss procedure, policy and future business matters and to plan activities. It did make me begin to wonder and think about something. What do we, the chapter members,

(Continued on page 2)

Big Thicket

(Continued from page 1)

were willing to work out a land swap with the U. S. Forest Service. In order to determine exact sizes of the “take” tracts, it was necessary to determine the boundary line along the creek, as well as the lines extending back. It was also necessary for everyone to agree on the value of the lands being swapped, which meant that both the timber companies and the Forest Service would need to place a value on the timber and appraise the land. The Cadastral/Geographic Sciences Division of the Department of the Interior, Bureau of Land Management, supplied crews to survey the 82 miles of back line, which in some places strongly resembled a tropical

jungle. The department was also responsible for establishing the first-order surveying control from which everyone worked.

In Texas, the ownership of beds of navigable streams is retained by the state. Land rights may have been granted by any of four different governments: Spain, Mexico, Republic of Texas and State of Texas. The early Spanish influence on the land system still prevails, with the result that Texas has a metes and bounds system instead of the more common U. S. Public Land System. And it was under Spanish law that the sovereign retained ownership of streambeds. Darrell Shine, a noted water boundary surveyor, was chosen to perform the gradient boundary survey. The gradient boundary is a method of determining water

boundaries that is unique to Texas. This boundary was determined from seven qualified banks scattered throughout the project. The banks met the characteristics as set out by Colonel Arthur Stiles, who developed the gradient boundary method of surveying water boundaries in 1923. A datum was established on the creek in 1993, when it was at a very low stage and had been flowing at a stable level for a week. Benchmarks were set at each point where we planned to set a gauge. When we were ready to begin the project, simple gauges were constructed from two-by-fours and old tapes, then installed at each location on a common datum. This enabled us to read the gauge in the vicinity of our work, and to

(Continued on page 3)

President's Column

(Continued from page 1)

expect from our chapter and what do we do about it? To paraphrase a quote that I heard just recently from an unknown author- our lives are shaped by our expectations, and we always live up to our expectations. That too, made me think. I'm don't think that I fully understood that statement fully in my younger days, but as I age, it does begin to make a little sense. And, I believe it.

How does that apply here? Do we know what we expect from the chapter? Our expectations may have changed over time and maybe it's time that we re-define (or maybe just remind ourselves)

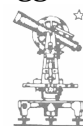
what we do expect from the chapter and ourselves. We have done a number of admirable tasks and projects, raised the money to offer scholarships and other things. But, are we still willing to continue with them? Are we handling our business in the best interest of ourselves and of those who receive the benefit of our efforts? I'm not saying that we are off course. After all, who better to figure out directions than a surveyor?

I, for one, am proud of our accomplishments and growth over the years. I hope that our service and accomplishments of the past are but a few of many things that we do over the course of time. There are many more college students out there that could use our help, many more

high school students and clients that can be told about what a surveyor does, or must do to properly perform his or her job.

My hope is that each of us will re-evaluate things and take on a refreshed sense of purpose for our chapter. My expectations of TSPS Chapter 6 are high and I'm expecting to reach more things that reach out to the community.

Your input and suggestions are most welcome so, lets all do some reassessment and then continue the good work, in even bigger and better ways.



Big Thicket

(Continued from page 2)

use the flowing water as the datum for meander shots on the gradient boundary. For example, we knew that gradient boundary on the gauges was 4.25. If the water was flowing at 4.00, then meander shots would need to be 0.25 feet above the water surface.

159 Miles of Meander Lines

When faced with the formidable task of meandering 159 miles of creek bank, Shine began to research available technology with the goals of accuracy, speed and ease of operation. Use of GPS equipment was desired, but the Big Thicket is aptly named—dense foliage over the entire project. After testing various products, it was found that Trimble Navigation's Pro XL System could operate under the canopy with sub-meter results. For the creek meanders, it was decided this level of accuracy was acceptable; however, all incoming property lines were established as first-order positions.

Once the Pro XL system was obtained, we did extensive field checking on known control points to assure ourselves of the accuracy. The clients wanted the project to be in NAD 27 datum, since all their existing land records were in that datum. We encountered some problems in transforming the data from NAD 83 to NAD 27. The positional accuracy went way down! Trimble personnel helped out at this point by performing a "7 parameter shift," which

amounted to taking first-order control surrounding the area of interest and creating a localized datum from that information. This datum would not be of use anywhere else, but it solved our problem on this project. The lesson here is that if there is a choice of datum, always choose to begin in NAD 83.

Laser Coupled With GPS

Coupled with the GPS, we chose an instrument designed by Criterion called the Laser Walkabout. It operates with a laser that, when aimed at a solid surface and using Laser Walkabout software, gives azimuth, distance, slope, etc. This equipment enabled us to set up in one spot (often in the middle of the creek) and choose the meander points that needed to be shot in order to depict the sinuosities of the stream. We entered a data dictionary into the CMT MCV data collector that was used with the laser gun. This dictionary included an "origin" question. The data collector for the GPS receiver also allowed the entry of an "origin" name. The key was to have the same unique name for both the laser gun and the receiver on each setup. When both data collectors were downloaded, the name used in each separate file allowed the two files to "find each other." The most essential shot made in any set up was from the laser gun to the GPS receiver, the origin shot. This gave position to the laser gun and hence to the remainder of the shots—left bank, right bank, pipeline,

survey corner, etc. The laser gun can be used as an auxiliary attachment to the GPS receiver, with laser shots being made from the "origin," then fed into the same data collector. However, it was more efficient for our operation to be able to move the laser gun around independently. We could then shoot the same GPS setup from as many positions as we had line-of-sight for. When you're dealing with many bends and turns in a creek, this is a definite advantage!

The weakest link of the laser gun equipment was the magnetic azimuth, which had a digital readout to one-tenth of a degree. We found it to be very sensitive to metal attractions. This was not a significant problem on this project due to the rural setting. Any metal present was usually being worn by the people. However, on measurements of 100 feet or less it made practically no difference. On measurements of several hundred feet, it would at times make some difference. Magnetic azimuth was adjusted to read grid azimuth. Since the project lay mainly in an east/west direction, the grid azimuths were adjusted throughout the project. The laser gun measures to any solid surface—such as a twig, leaf or limb—so it was important to be sure the shot had no obstructions between the laser instrument and the shot desired on the bank. Even though this instrument will read up to 1,500 feet, it was sometimes difficult to discern some little obstruction on long shots, so we tried to

Chapter Representative's Report

By Lequin Hilderbrand (email: lequin.hilderbrand@lpcorp.com)

The Board of Directors of the TSPS Deep East Texas Chapter No. 6 held its quarterly meeting on February 14. Aside from the typical business items, i.e., Presidents Report, Financial Report and Chapter Representative Report, the Board went about the business of strategizing and prioritizing activities for the year.

Items of particular interest and need include a continuing education seminar to be held in August, revising our existing scholarship policy and finalizing the calendar of events and meetings for the remainder of the year. As to the seminar, we strive to prepare a learning experience that is enlightening and of sig-

nificant value to our local members and other surveyors that attend. Our plans are centered on suggestions, comments and thoughts that you, our members, have shared and expressed. In that light, should there be any suggestions that you would like to share, please feel free to do so by contacting any of our Directors or Officers. You may do so at our Chapter website.

We have also decided to visit our existing scholarship policy and to revise or amend same in any form that is deemed beneficial. To outline our current policy, we offer a total five scholarships per year; two \$500 scholarships for qualifying can-

didates to the TSPS Surveying I and Surveying II courses, and three \$500 scholarships to qualifying students entering one of three particular schools of higher learning in the State of Texas. Some proposed amendments, which will be up for consideration at the next Chapter Board meeting, include an annual contribution to TSFI and adding a new scholarship geared for students already in an approved college or university.

Another joint meeting with our neighboring TSPS Chapter 8 (Lufkin area) has been tentatively scheduled for June 15 so etch that date in your planners and personal organizers. Other activities and events will be outlined in our soon to be released Chapter Calendar of Events.

Big Thicket

(Continued from page 3)

keep the meander shots short to avoid these problems.

9,632 Meander Points

This job began just below the Alabama Coushatta Indian Reservation, from which the waterway derived its early name, Big Alabama. As time passed, the same creek was called Big Sandy on the upper end and Village on the lower end. No one seemed to be sure where the dividing line was between the two, and it was unclear on the quad sheets; however, Shine determined to settle the question for posterity and declared Kimble Creek

to be the point of change between Big Sandy and Village creeks. The water boundaries measured 159 miles, including both banks, and required 9,632 meander points (not to mention the shots on control points, survey corners, etc.). The creek meanders were accomplished between February and July of 1996 in 89 field days. For this amount of work to be completed in this time frame by just two people is a recommendation for new technology and a good plan (the weather also cooperated). The project was mapped at a scale of 1"=1000' and covered eight 24"x36" map sheets with eight additional sheets required

for the listing of the meanders of the creek.

This project involved the National Park Service, Bureau of Land Management, U. S. Forest Service, three timber companies, real estate appraisers, and private-sector surveyors. Anytime this many federal agencies and private-sector entities are involved on a project, there's room for contention and delay; however, once past the legislative process, this project proceeded with notable smoothness and speed. The addition of this beautiful creek into our National Park System should be a source of pride and gratification for everyone.

Minutes of Meetings

The Chapter held its first quarterly meeting January 17, 2002 at the Red Onion Restaurant in Lumberton. Present were 14 Chapter members along with special guests Allen Pelloquin, Brianne Savory, Lynne Savory, and Jerry Goodson. There were 10 students and parents attending and 9 other guests for a total 37 people in attendance.



The purpose of the meeting was to provide information on educational opportunities for young people considering surveying as a career. Speakers were Brianne Savory and Allen Pelloquin, two students currently enrolled in the surveying program at TAMU-CC. This topic was timely in that the chapter participated in the recent Career Fair in Beaumont for area high school students. The chapter identified approximately thirty students that had a significant interest in surveying as a career. Each was invited along with their parents to attend the meeting and gain insight into the college programs and scholarships available.



Region V Career Fair Coordinator Bertie Standley attended gave both students and employers present information on Job Shadow Day where students visit the workplace to "shadow" a mentor and have interaction in the business environment.

Special guest Lynne Savory of Austin gave members and students a report on the Trig*Star program and encouraged the chapter to participate this year.

The Deep East Texas Chapter No. 6 held its second quarterly members meeting April 18th in Silsbee, Texas. Twenty-six members and guests attended to hear Bud Thompson of Houston explain the revamped Technician Certification Testing Program along with the exam schedule. Area Chapter Representative Michael Parker was present as well. Other state-wide issues important to all surveyors were discussed including 1) Sunset committee; 2) SURPAC; 3) Use of copyright and original signature to protect surveyor; and 4) Use of survey contract on all surveys. It was also mentioned that TBPLS is becoming

concerned about dwindling number of new applicants for RPLS. Currently, there are 2908 surveyors registered in Texas as of 4/02.



The chapter has also finalized plans for a local seminar to be held August 17th at the Beaumont Hilton. Darrell Shine and Nedra Foster will present "Boundary Retracement" which will cover the various aspects of record research including GLO records, organization of records, sketches, field reconnaissance, evaluation of ground conditions, boundary line and corner reconstruction, and report writing. The seminar is approved by TBPLS for 8 CEU's. Cost is \$175.00 for registered surveyors, \$75.00 for SIT and non-registered surveyors, and free for full-time students. Registration forms and additional information can be obtained from the chapter website at: <http://tsps-6.org>



TSPS DEEP EAST TEXAS CHAPTER No. 6

Presents

“BOUNDARY RETRACEMENT”

COURSE DESCRIPTION

The seminar will cover the aspects of record research including the Texas General Land Office, organization of records, preparation of working sketches, field reconnaissance, evaluation of ground conditions, boundary line and corner reconstruction, and report writing.

INSTRUCTORS

This seminar will be presented by Darrell D. Shine, LSLS, RPLS and Nedra Foster, LSLS, RPLS who have extensive experience with water boundaries, large private and public land boundary retracements and many litigation cases. Mr. Shine is the author of numerous technical papers and has presented seminars across Texas for the past 20 years. Ms. Foster is the first woman to be licensed as a Licensed State Land Surveyor in Texas and has written articles for the Professional Surveyor and ACSM Bulletin.

DATE: Saturday, August 17, 2002

TIME: 8:00 AM – 5:00 PM

LOCATION: Beaumont Hilton
2355 I-10 South,
Beaumont, TX 77705-2631
Tel: 1-409-842-3600 Fax: 1-409-842-1355

COURSE APPROVAL

This seminar is approved by the Texas Board of Professional Land Surveying for 8 CEU's.

COSTS:

\$175.00 for registered surveyors

\$75.00 for SIT and non-registered survey technicians

Free for full time surveying students.

We encourage support and membership in the Texas Society of Professional Surveyors. However, membership is not a requirement to attend this seminar.

A full refund less a \$25 administration fee will be made if cancellation notice is received at least 72 hours prior to the seminar date.

REGISTRATION AND PAYMENT

Complete the registration form below and submit with payment to:

TSPS Chapter No. 6
C/o Ron Davis
5580 Cole Road
Beaumont, Texas 77708
Ph: 409-892-0865 Fax: 409-892-6219

Confirmation notice will be provided by email or fax to registrants received prior to August 7, 2002. Payment must be submitted with registration form to assure reservation for seminar. Visa, Mastercard, and American Express will be accepted.

NAME: _____

COMPANY: _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ FAX: _____ EMAIL: _____

Registered Surveyor? RPLS NO: _____ Full-time Student SIT Survey Technician

MasterCard Visa Amex Check Enclosed **Amount \$** _____

CREDIT CARD INFORMATION:

NAME (as it appears on card): _____

CARD NUMBER: _____ EXPIRATION DATE: _____

**TEXAS SOCIETY OF PROFESSIONAL SURVEYORS
- DEEP EAST TEXAS CHAPTER NO. 6**

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Beaumont, Texas 77720

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www.tsps-6.org

Calendar of Events

June 5; Chapter Board Meeting

Time: 11:30 AM
Place: J&J's Steakhouse in Beaumont

June 15; Joint Chapters 6 & 8 Meeting

Time: 12:00 PM
Place: LNVA Facility, Lake Sam Rayburn
Speaker to be announced. For directions and details see the website www.tsps-6.org.

August 14; Chapter Board Meeting

Details to be Announced

August 17; Chapter Seminar - Boundary Retracement

Time: 8 AM—5 PM
Place: Beaumont Hilton Hotel

September 19; Annual Chapter Meeting

Time: 6:30 PM
Place: Don's Seafood in Beaumont
Installation of Officers.

October; Chapter Sporting Clays Shoot

100-in-1 Gun Club in Lumberton
Details to be Announced

November 13-14; Region 5 Student Career Fair

Beaumont Civic Center

December ; Chapter Christmas Party

Details to be Announced

Note: Dates and details of some scheduled events for 2002 are still in the planning stages. Final calendar details will be published in futures issues of the Chapter News.



OFFICERS

President	W.J. "Joe" Breaux
Vice-President	Steve Butz
Secretary-Treasurer	Richard Worthey
Past President	Nedra Foster
Chapter Representative	Lequin Hilderbrand

DIRECTORS

Bill Westbrook	Lester Landgraf
Jack Meaut	Jimmy Verrett

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