

August 2010

SIDE SHOTS

Professional Land Surveyors of Colorado

Volume 41, Issue 3



Four Corners — A Brief History

page 7



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SIDE SHOTS

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On the cover: Photo by Jan Kronsell, 2006, from wikipedia.com

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Dear Fellow members:

I hope the summer is serving you well. All indications are that the economy in Colorado has yet to pick up substantially, so the PLSC is still trying to keep afloat in these tough economic times. We have suffered an understandable loss of membership this year, and as we plan our newly combined annual conference in early 2011, the lack of a technical session in 2010 also has a negative effect on this year's budget.



I am pleased that the legislative committee has met most of their goals for the year. The PLSC board of directors has elected to suspend the use of a lobbyist for the time being because of our economic status and since we do not have any proposed laws pending. One other service the lobbyist always provided was watching the current proposed legislative bills and notifying us when anything that might be of concern to land surveyors comes up. We have lost that service from our lobbyist, and hope we can keep our own eye on the respective legislative issues for the time being. Additionally, the PLSC is participating in the rule-making process of the State Board, as well as gearing up for working with the State Board next year for the 2013 sunset review. If you see any problems with the current laws or rules, please let us know. You may contact me or any director on the board you choose and let us know your concerns. We can add your topic to the agenda if it seems appropriate. Roger Nelson is the chair of the legislative committee and is always on the lookout for legislative issues that should be addressed.

Please keep in mind that we have a new election coming up for the PLSC Officers and Directors at the end of this year. If you have ideas or things you would like to see the PLSC pursue, you can contact one of the directors and/or you should consider running for a position on the board. It is an all-too-common misconception that state societies like PLSC are some kind of public agency. Not true. The officers and directors (besides the executive director) are all volunteers, men or women like you who are trying to make a living at our day jobs, while working to make a difference for the profession on the side. You too can make a difference. If you know of something you think the PLSC should be doing, then step up and see if you can help get it done.

I urge all of our current members to encourage their fellow employees or associates to become new members. Non-licensed surveyors can also become associate members. If you have any other ideas of how we can increase membership, contact Mike Bouchard, who is the chair of the Membership Committee. And please keep in mind, our profession would not be where it is today without years of PLSC representation at the State Legislature to protect both land surveyors and Colorado consumers. Let's keep up the support of the PLSC to maintain our progress into the future.

Sincerely, Tom Adams, PLSC

DEDICATED TO THE IMPROVEMENT OF LAND SURVEYING EDUCATION AND PRACTICE.

We all have persevered through a very difficult economy, and I hope that you are seeing at least some of the normal, seasonal pickup in surveying activity in your area.

There has been a decline in membership renewals for this year, and the Board of Directors is cutting spending and trying to find ways to raise revenue to close a budget gap. These cuts threaten our mission of delivering educational opportunities and services to our membership. One of the ways that the PLSC can raise some additional revenue is to encourage more corporate sponsorships to support PLSC initiatives that would otherwise go unfunded. Some examples would be for a lobbyist, paying the fees for quality speakers, or for public awareness initiatives like the Four Corners re-monumentation project. In return, a corporate sponsor receives recognition in our highly specific market of professional surveyors.

If you work for a company, or

know of an appropriate vendor, please consider asking them to become a Sustaining Member. You can see the current list on the last page of this issue. If you do business with them, or may do so in the future, it's always a great idea to mention to them that you saw their listing in *Side Shots* and appreciate their support of the PLSC. Contact Di Askew, our Executive Director, for details.

Either way, their support helps our members, it helps their business, and helps us to continue our mission of education and networking for those of us in the profession.

In this issue, our featured story by Earl Henderson is about the history of the Four Corners, a timely topic because of recent news coverage, and also because the monument itself is undergoing a renovation. Warren Andrews continues his excellent Control Points series, featuring *The Metre*. And Dean Glorso and Jim Sommerville have provided

us with some personal insights on the profession.

There is also an important update from Carol Svendsen on changes to the Metro State Surveyor Program, and a report from the Department of Regulatory Agencies (DORA) by Angie Kinnard Linn. Our Executive Director, Diana Askew, has also contributed minutes from four Board of Directors meetings that were held since our last issue – be sure to read those to see the latest topics and issues under discussion.

As always, your comments and contributions of material for *Side Shots* are always welcome. Enjoy the rest of the summer!



JB Guyton
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WELCOME TO FOUR CORNERS U.S.A.

Four Corners

A Brief History

By Earl F. Henderson, PLS

On April 19, 2009 a story made it onto the Associated Press that was picked up by almost every major news network, indicating that the Four Corners monument isn't in the correct location. The Four Corners monument is certainly one of, if not the most famous survey monument in our country. It appears as though this story started with an article in the Deseret News of Salt Lake City, UT written by Lynn Arave. Lynn makes some very extravagant claims based on Google Earth measurements and Geocachers which should make every land surveyor feel insulted. I know I do.

I personally saw news broadcasts in Denver, CO featuring my friend, Randy Zanon, who was at that time the Chief Cadastral Surveyor for the BLM Denver Office. Randy, who has since retired, stated in no uncertain terms that the monument marked the very point of the intersection of the state lines, yet the local reporter insisted on trying to feed the flames of controversy at the end of the report, stating that the monument was still 1500' off. Even after repeated attempts by myself to contact the news desk at the local TV station, no one was interested in correcting their poor reporting of the story. I take this as an example of the current state of affairs, and the value of current news reporting. But that's just my opinion and not the subject of this article.

In addition to not understanding the concept of original monumentation the way surveyors are supposed to, Lynn didn't do his homework. But then none of the

reporters of this story did, they simply picked it off the wire and repeated it. The story claimed that the intended location for the monument was 109° west longitude and 37° north latitude. Neither of these is correct.

The story of the Four Corners monument begins in 1868 when Ehud Darling surveyed 37° north latitude as described in the enabling act of 1864 describing 37° north latitude as the south boundary of Colorado. Darling surveyed to a point west of the present location of the Four Corners monument by about 1 mile & 45chs. Darling didn't do an exemplary job on his survey, but his survey was upheld in a Supreme Court decision between the states of New Mexico and Colorado in 1925 because it was the original survey.

In 1875 Chandler Robbins was contracted to survey the west line of New Mexico. Interestingly, on the title page of his notes, Robbins describes himself as "US surveyor and astronomer". He was directed to set an initial monument at 32° west longitude and "on the Darling line". As you can see, and as surveyors, we know the difference between 37° north latitude and "on the Darling line". Darling's survey was the original survey of the south line of Colorado, after all, even though it wasn't exactly on the 37° north latitude line.

The difference between 109° west longitude and 32° west longitude isn't as immediately apparent other than the numbers varying considerably. The Greenwich Meridian, from which 109° is measured, was not



UTAH

HISTORICAL QUARTERLY

SPRING 1998/VOLUME 66/NUMBER 2

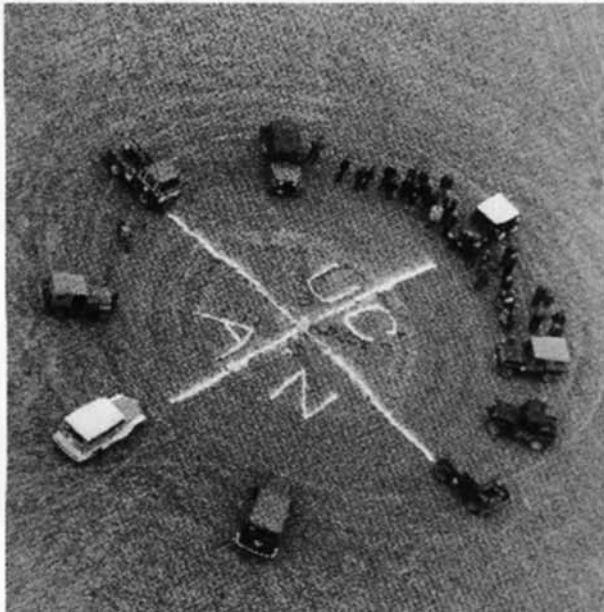


Image from the Utah Historical Quarterly



The Jefferson Stone, Washington, DC

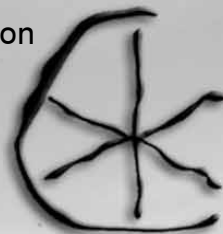
accepted as the Prime Meridian by the United States until 1912 after the International Meridian Conference held in Washington, DC in 1884. Until that time each country established their own "prime meridian" from which measurements were made within their borders. Anyone who is a fan of Dan Brown's *The Da Vinci Code* like I am remembers Robert Langdon following "The Rose Line" monumented through the center of Paris at the end of the story. These monuments mark France's prime meridian. The Greenwich meridian was chosen as the Prime Meridian at the conference though because of the superiority of the British shipping and navigational charts which most countries had been using for decades, and which were all based on that meridian. So Chandler's monument predated the use of the Greenwich meridian as the Prime Meridian. It was in fact based on the Washington, DC prime meridian. However, there have in fact been four prime meridians in DC.

The first prime meridian of the USA was proposed by Charles Pierre L'Enfant, the designer of DC, to go through "Congress' House". This meridian was never implemented. The second prime meridian of the USA and the first to actually be put to use was defined by Thomas Jefferson and established at the right angle point of the triangle with hypotenuse drawn between the White House and the Capitol Building. This point is currently marked by the "Jefferson Stone" just NW from the Washington monument. The Jefferson Stone has a unique and interesting history that was fully described by Silvio Bedini in his wonderful book *The Jefferson Stone*. This USA prime meridian was used until 1850. At that time the US Naval Observatory (now called the Old US Naval Observatory and located near the west end of the mall in DC) was being used for making longitudinal measurements and apparently it was decided to move the USA prime meridian to the dome of the Old US Naval Observatory building for simplicity in reducing measurements. That USA prime meridian was used until the Greenwich meridian was adopted by the USA in 1912. Sometime later the current US Naval Observatory was built and the USA Prime Meridian was moved to there for measurement purposes even though all measurements were converted to Greenwich.

So, the upshot is that Chandler's monument was set based on the USA Prime Meridian (at the Old Naval Observatory) at 32° west longitude and that does NOT correspond to 109° West from Greenwich as Lynn Arave seems to think. Of course this is not the first time that someone has looked at a map and made that assumption. In fact, in an attempt to thwart just such a misunderstanding, Chandler Robbins himself published an article in the *Santa Fe Daily New Mexican* on November 1, 1875, just a few months after he set the monument, saying this: "It seems to have been the general impression that the line was the 109° of longitude west from Greenwich. Such is not the case, as the law makes it the 32° of longitude west from Washington, which corresponds to 109°2'59.25" west from Greenwich, and which places the line as a small fraction less than three miles farther west than would have been the case if it had been run as the 109° of longitude west from Greenwich." Oddly enough, the very same newspaper, now

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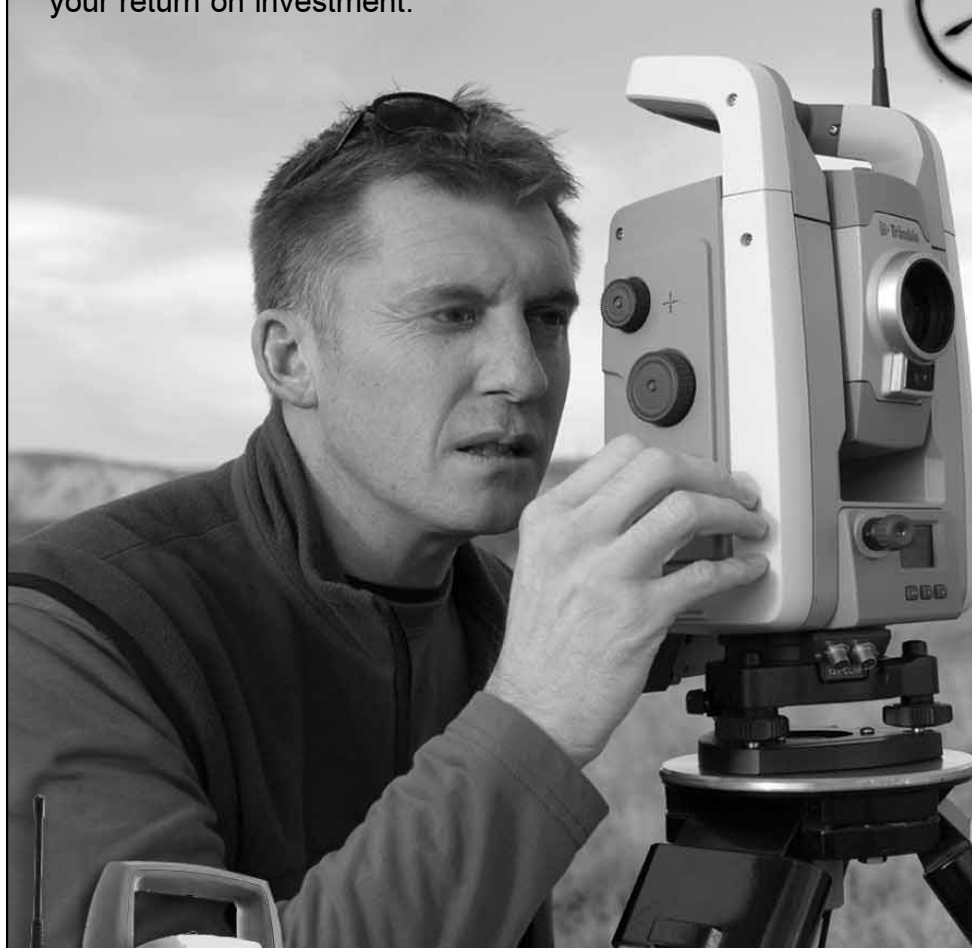
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called *The Santa Fe New Mexican*, published an article on February 26, 2010, fueling the flames of the controversy which in reality doesn't even exist. They indicate in that article that some New Mexico legislators may even be considering claiming additional territory from Arizona based on the false information spread about the location of the Four Corners monument.

Measuring longitude in 1875 was often based on a time measurement using the telegraphic services. But out in the wilds of the west there were no telegraph lines. Chandler's notes say: "In the absence of available telegraphic facilities for the determination of the longitude I was directed by the Hon. Commissioner of the General Land Office to adopt the Southwestern needle point or crestone, otherwise named Wilson's Peak, situated in Township 11 North, Range 3 West of the Navajo Special Meridian." The location of Wilson's Peak had been established under the U. S. Geographical Surveys West of the 100th Meridian, led by First Lieutenant George Wheeler (one of the Great Surveys of the American West which also includes King's survey of the 40th Parallel, Powell's survey of the Grand Canyon Region and Hayden's Geological and Geographical Survey of Colorado and

Adjacent Territories). Wilson's Peak has since been renamed Ship Rock. Robbins then describes the geographical position he was given for this point and how he ran a line due west after triangulating on that point to establish 32°W. Then he ran due north and intersected "Darling's Line" and established his initial point. He monumented his initial point with "a shaft of hard sand stone 7 feet long 12 inches wide and 6 inches thick; set 3 feet in the ground and marked on the N.E. "Col, 37° N.L", on the S.E. "N. Mex 32° W.L"; on the SW "Arizona"; on the N.W "Utah 1875". This is the monument that would eventually become the Four Corners monument.

Now as surveyors we know that the Four Corners monument isn't exactly where it was intended to be. No one can measure exactly, not even now, not even me. But given the instrumentation available at the time, the terrain, and the many other challenges to survey well in that area and era, the level of both precision and accuracy they were able to achieve is remarkable. But just as importantly we as surveyors understand the concept of original monumentation better than the average reporter. Monumentation of land is so important that laws against moving or removing monu-

mentation have been instituted since prior to the writing of The Bible and are included in The Bible. The removal of survey monumentation continues to be a criminal offense today. Retracement surveying, in which most of us participate, is by definition the re-establishment of monumentation in its original location, not where it was intended to be. Chief Justice Cooley wrote, "We all know that when purchasers (in this case States) take lands from the general government, they ascertain the boundaries by going upon the land and tracing out the lines and stakes. No one supposes that if an error shall chance to have occurred in the survey, he is liable to have the corner post removed, and perhaps the portion of his purchase, which he regarded as most valuable, taken from him by a resurvey." (Thanks to Jeff Lucas for providing this quote.)

Since the Four Corners monument was set it has gone through several upgrades described in a circular titled Field Notes of the Remonumentation of the Corner Common to the States of Colorado, New Mexico, Arizona, and Utah, of the New Mexico Principal Meridian, Gila and Salt River Meridian, and Salt Lake Meridian" executed by Darryl A. Wilson, Supervisory Cadastral Surveyor for the BLM and dated October 17, 1992 (R-573). At the time of this writing it is going through yet another rendition transition and has been closed since late February 2010, with the hope that it will re-open again in the late spring or early summer of 2010. This reconstruction is being monitored by both the NSPS and BLM to be certain that it remains in its original location, as it should be, once the construction is completed. Additional information about the history of this monument and its location can be found at www.ngs.noaa.gov/INFO/fourcorners.shtml

Just as the circular states, the monument marks the corner common to the four states. It has been there since they became states and I expect and hope that it always will.



*Four Corners Monument before renovation
(Photo: Staplegunther at en.wikipedia)*

Control Points – Number 9

By Warren Andrews, PLS

The Metre

As some of you know and as I have mentioned in previous Control Points, I'm a little nuts on the spelling of the present internationally accepted unit of length, the metre. The reason is to keep away from the confusion factor. In English a gadget for measuring water is a water meter, for measuring electricity is an electric meter, and for measuring gas is a gas meter. If you spell metre "meter," then what are you talking about? If you spell the unit of length "metre" then it is unique and specific. If you don't like French you're in trouble anyway.

How was the length of the metre determined? A few may know the answer to that. Because the standards of weights and measures had deteriorated so badly in Europe by the time of the French Revolution that each town had its own system in many areas, it was a mess that badly needed fixing. It was estimated that in pre-Revolutionary France there were over 250,000 different units of weights and measures.

The French Academie had looked at the problem in great detail for years. In fact, the 1792 measurement of the earth's meridian north from Paris to Dunkirk was a redo of the 1740 measurement by Cassini III. The measurement south from Paris to Barcelona in Spain had not been done before. The older measurements were only to 15 seconds of arc while the newer measurements would be to one second of arc by means of the newly invented Borda repeating circle theodolite, usable both in a horizontal and vertical position. The picture shows it for measuring horizontal angles.

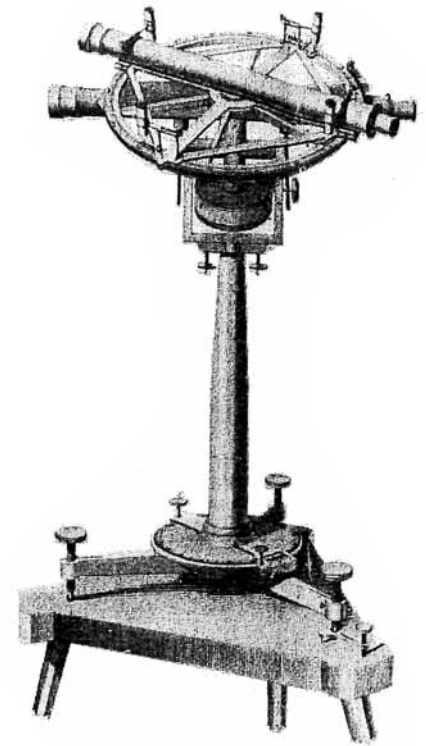
In 1792 the French astronomers, Delambre and Mechain started out to triangulate the Paris Meridian north and south respectively. Unfortunately, they were right in the middle of the French Revolution and they were detained and their equipment taken,

which immensely complicated their job. It was not finished until after Napoleon took over. The final triangulation is shown in the figure. The intent of extrapolating their resulting distance on the surface of the earth to the distance from the Equator to the North Pole along the Paris Meridian and then taking on ten-millionth of that distance for the length of the metre turned out to be unattainable. The hidden error that still exists in the length of the metre is a shortage of about 0.2 of a millimeter. Mechain did his best to find that hidden error and almost committed suicide over it when he couldn't find it. The real problem was that the shape of the earth is irregular and not a curve of revolution. (Delambre and Mechain knew that the earth was not a sphere and was flattened at the poles but didn't know the curvature varied in an irregular way and didn't fit their mathematics!)

Delambre covered up the error when he published the results and it exists to this day. Because each segment of the Paris Meridian had a changing curve, it was not possible to make an accurate extrapolation. Finally, Cassini's 50-year-old data had to be used to get an approximation of the earth's size even though Delambre knew it to be inaccurate.

But one good thing came out of it. Their colleague, the French mathematician Legendre, later using Delambre's published data, came up with a way to best fit a curve to the data which is the least squares adjustment, the origin of the statistical method used today.

If the reader wishes to read more of the fascinating story about Mechain and Delambre and their trials and tribulations, I recommend Ken Alder's book, *The Measure of All Things*.



Top: The Borda Repeating Circle Theodolite.
At right: The Paris Meridian.
From *The Measure of All Things: The Seven-Year Odyssey and Hidden Error*, by Ken Alder, Simon & Schuster, 2002.

State Board Update

By Angie Kinnaird Linn, Program Director
State Board of Licensure for Architects,
Professional Engineers, and Professional Land Surveyors

PASSAGE OF HOUSE BILL 10- 1085 LEADS TO SEVERAL CHANGES

HB10-1085 puts in place a number of changes that may affect you or your employees...

1. It requires the Board specify appropriate surveying course work through the rulemaking process that would meet the statutory requirements for a 2-year surveying curriculum, a 4-year engineering curriculum, or a 4-year non-surveying curriculum in order to qualify to take the Principles and Practice of Surveying licensing examination. This must be done and in effect by January 1, 2011.
2. The bill eliminates the ability to become licensed as a Professional Land Surveyor without education beyond graduation from high school on July 1, 2020.
3. The bill also specifies procedures for issuance of a surveyor's affidavit of correction.

Rulemaking

Regarding the rulemaking process to determine the appropriate coursework to qualify to take the licensing examination to become a Professional Land Surveyor, a subcommittee has been meeting since early June and is presenting its recommendations for the Board's consideration at the August 13, 2010 meeting. This group is made up of Surveyor Board members, PLSC representatives, and other interested Land Surveyors. They are writing these rules as well as reviewing other existing rules that need clarification. In addition, policies that concern the practice of land surveying may be adopted as rules.

Once the Board reviews the proposed rules, which will also include the revision of some rules regarding the practice of architecture and engineering, and application and enforcement processes, they will publish them in order to hold a public hearing. The anticipated hearing date is October 8, 2010. If you would like updates on the rulemaking process, to review the proposed rules when they are published, attend the hearing, or provide written testimony, please check out the information at <http://www.dora.state.co.us/aes/rule-making.htm>

Elimination of Apprenticeship Path to Licensure

The option for anyone to become licensed based on experience only will end on July 1, 2020. Please spread that information far and wide to all of your colleagues and employees to ensure they understand if they do not have surveying education, they now have only 10 years to become licensed.

Surveyor's Affidavit of Correction

This portion of the bill doesn't require any action by the Board at this time.

HAVE YOU CHANGED YOUR MAILING OR EMAIL ADDRESS LATELY?

It is imperative you keep your contact information updated with the Division of Registrations. The Division mails renewal notices and other information to you at the last address furnished to us. Failure to receive a

renewal notice does not relieve you of your obligation to timely renew your license.

Once you have logged into Registrations Online Services, check your mailing address and update it, if it is not correct. If you received your renewal notice due to a forwarding order it is important you change your address on file with us since we cannot change the information based on the forwarding order.

You should also add or update your email address. The Division wants to keep you abreast of legislation, events, and other information that impact your profession. We have recently implemented "eUpdates" and look forward to providing more of these in the future.

REGISTRATIONS ONLINE SERVICES

Registrations Online Services makes it easier for all licensed Professional Land Surveyors to renew and update their contact information after a simple registration process. Check it out at www.dora.state.co.us/registrations and then click on Online Registrations Services. For detailed instructions on how to use the online system go to www.dora.state.co.us/registrations/FAQs.htm.

Update from Metropolitan State College of Denver's Surveying Program

By Carol Svendsen, Assistant Vice President, Extended Campus

The Surveying program at Metropolitan State College of Denver has moved to its new home under the Earth and Atmospheric Sciences Department in the School of Letters, Arts, and Sciences! Surveying will become an Area of Interest under the Geographic Information Systems (GIS) Concentration in the Land Use Major. This connection with GIS will give Surveying students broader academic preparation and open additional career opportunities. Likewise, the Surveying Area of Interest will enrich the GIS Concentration and provide another career direction for Land Use Majors. Additionally, these courses will help students qualify for the Colorado Fundamentals of Land Surveying Exam. The courses will also be open to students all over the nation who seek professional development or fulfillment of their state's requirements for education of professional surveyors. Students may choose from the following courses to complete the 19-credit-hour minimum required for the Surveying Area of Interest:

- SUR1510 Surveying I
- SUR2520 Surveying II
- SUR2530 Route Surveying
- SUR2550 Surveying Computations
- SUR3100 Survey Data Adjustment and Analysis I
- SUR3150 Astronomy for Surveyors
- SUR3220 Real Property Descriptions
- SUR3300 Photogrammetry
- SUR3540 Boundary Law I
- SUR3700 Geodesy I
- SUR3800 Public Lands Survey System
- SUR4510 Map Projections and Coordinate Systems
- SUR4540 Boundary Law II

The Earth and Atmospheric Sciences Department is in the process of requesting formal approval of these changes.

Metro State's Extended Campus is hiring expert faculty to rede-

velop and teach these selected distance courses, improving their teaching quality and currency. I am pleased to report that the first class will be developed by Dennis Moulard, the BLM Cadastral Training Coordinator at the National Training Center in Phoenix. Mr. Moulard will develop SUR 3800 Public Lands Survey System, an area in which Mr. Moulard has special expertise and in which he believes there is strong interest around the nation. The text for the course will be the 2009 edition of The Manual of Surveying Instructions published by the Bureau of Land Management.

For those of you who may be new to the state, a little history -- Metro State's Surveying and Mapping Program was founded in the early 1980s. Over the years, because of low on-campus enrollment, the program gradually shifted from on-campus instruction of degree-seeking students to "distance" education of students in Colorado and the nation. More than

half of the current distance students reside outside the state of Colorado, and many of the Colorado residents do not live in the Denver metropolitan area.

Unfortunately, a gloomy budget picture for Colorado higher education prevents us from hiring a full-time professor to lead the program. However, we have several excellent part-time faculty who teach a number of our Surveying courses. For the most part, these faculty come from the professional surveying community, which gives them real world experience in addition to their academic credentials.

We continue to appreciate the strong support for Metro State's Surveying program that we have received from the Professional Land Surveyors of Colorado. We look forward to reporting on our ongoing progress, and welcome any questions or comments you have.

Carol Svendsen can be reached at svendsec@mscd.edu

GLO/BLM Plats Online! Coming To A Computer Near You

www.glorerecords.blm.gov

The Bureau of Land Management has been scanning the old General Land Office plats and notes for over a year. The rectangular plats are now on line and in color. The Bureau scanned the original plats from the National Archives through a contract with Premier Data Services in Arvada. The images are high quality TIF and SID file formats. The detail is sharp and the colors bring character to the plats. Over the next few months you will see the mineral surveys come on line too. We are still scanning the original field note volumes and will serve the field notes on line over the next couple of years. So check us out and if you have any questions please call, Paul Lukacovic (303) 239-3818.

Call for Nominations

**The Nominations and Elections Committee of the PLSC
is now accepting nominations for the following positions:**

- 1 – President, for a 2-year term (2011-2012)
- 1 – Vice President, for a 2-year term (2011-2012)
- 1 – Secretary-Treasurer, for a 2-year term (2011-2012)
- 4 – Directors, for a 4-year term (2011-2014)

The terms for the following individuals will conclude after the election in February/March of 2011:

Tom Adams, President (2009-2010)
Mike Greer, Vice President (2009-2010)
Diana Askew, Secretary-Treasurer (2009-2010)
Douglas Berling, Director (2007-2010)
Michael Bouchard, Director (2007-2010)
Russ Clark, Director (2007-2010)
Roger Nelson, Director (2007-2010)

Directors Gary Gable, Peter Kent, Patrick Green
and Stan Vermilyea will continue until 2012.

Your nominations can be sent either by mail or email:

Douglas Berling
11536 Community Center Drive, #87
Northglenn, CO 80233
drberling@earthlink.net

Deadline for nominations: December 15, 2010

Please include name of nominee, position nominated for, and their contact information.

Ballots will be sent to the membership 36 days prior to the annual meeting, to be held in February, 2011.

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Western Federation of Professional Surveyors Board of Directors Meeting Report

June 12, 2009 in Portland, Oregon

by: David C. DiFulvio, PLS, Colorado Delegate

PLSC Delegates Dave DiFulvio and J.B. Guyton attended this Board meeting held in Portland Oregon. The meeting was attended by delegates from 12 of the 13 WFPS states, with only Hawaii absent. Guests in attendance included Curt Sumner, representing ACSM and NSPS; Roger Galles & Brian Pottwood, Professional Land Surveyors of Oregon (PLSO); Denny DeMeyer, North American Land Surveyors & Team Canoe Captain; and Tim Kent, NSPS.

There have been several new delegates this year. Please refer to the WFPS web site, www.wfps.org, for a listing of current officers and delegates.

In addition to State Reports, a large portion of the meeting was spent discussing the situation with **NSPS** and their vote to "initiate the process of separating from **ACSM**, while charging a committee to study and make a report, by Sept. 15, 2010, on the financial and membership impacts of this action if it were to go full term". Some of the WFPS delegates were in attendance at the NSPS meeting in Phoenix, and Curt Sumner provided much background information which helped to understand a number of events that led up to the NSPS vote, as well as an expression of the need for input and feedback on member state's feelings on this important matter. It was understood that this situation will greatly affect the profession of land surveying in the United States for the rest of our careers. A summary of the major elements of the discussion, as well as the general feeling and consensus of delegates, as I understood it to be, is as follows:

The NSPS committee charged with studying the proposed withdraw is to report back to the NSPS Board of Governors by September 15, 2010. The study is supposed to include:

- Review of both positive and negative financial impacts to NSPS
- Review of both positive and negative membership impacts to NSPS
- Input from general membership through Area Directors and State Governors

Curt Sumner expressed a plea for input from the membership regarding what they want from their national society – either NSPS, ACSM, or both. The time is critical as the two year notice is ticking down and any restructuring takes time. There is a keen desire by both NSPS and ACSM leadership to know what the membership wants from their national society.

During the discussions, it also became clear that very few people understand the operational functions of NSPS and ACSM and that confusion and lack of understanding is leading to misinformed assumptions and conclusions with respect what each organization is responsible for. A (very) brief tidbit of history also was

provided by Curt to better understand the events that led to where we are today.

History: In 2004 Each MO became independently incorporated entities

- Each MO maintains their own finances
- CSM serves as an implementation body – providing governmental affairs, conferences, publications, and staff
- Anything beyond programs implemented by ACSM (e.g., CST) ACSM is paid an hourly rate
- Each MOU contributes to ACSM financially based on membership to run the activities Issues

The following Areas of Concern/Interest were identified and discussed by the WFPS Board:

- ABET Accreditation – maintain influence
- ACSM/ALTA Standards
- NCEES Representation
- A more responsive national organization to action items
- Governmental affairs program
- Influence nationally in the political arena
- Representation in new organization (governance)
- Membership retention
- Develops a vision & action plan to address the question, "Why Should I Join"
- Impact on relationship with agencies (e.g., BLM, NGS, USGS, FEMA, HUD, etc.) and Universities
- Cost & structure of administration
- Public Relations
- Conference Identity & attendance
- Delivery of Programs
- Streamline the operational structure of NSPS

It was requested that each state society carefully discuss this situation and formulate an opinion on the situation that can be brought forward and discussed at WFPS, as well as with NSPS leadership. After much discussion, the WFPS Board decided to table the discussion until we hear back from our member state societies and also have a chance to review the report from the NSPS Committee in September. In general, however there was a tentative feeling among Delegates that there should be only one national society representing Land Surveyors, however a consensus as to whether or not that one society should be NSPS or ACSM was not determined and will likely wait until our September meeting, after we have had a chance to review the NSPS committee's report. WFPS Chairman Ray Mathe (CA) will draft a letter to NSPS and ACSM stating that we will weigh in on the issue and the process, and also request to participate with the subcommittee studying the proposed withdraw.

It was clear that this issue and the future existence of ACSM is the most important issue facing surveyors today and should be carefully studied and considered before formulating opinions either way. At a minimum, everyone should read the document "The Evolution of a National Voice", The Future of the National Society of Professional Surveyors, which has been widely distributed and summarizes the situation, and access additional information on the web sites for ACSM and NSPS.

ACSM Report: Curt Sumner briefed the WFPS Board on various activities of ACSM. Notable items include their 2011 joint Conference with ESRI User's Group Conference in San Diego. ACSM has been a co-sponsor of the ESRI Survey Summit in the past and this is the first time the two major organizations will host a major joint conference together.

Selected highlights from WFPS member states' reports:

Alaska: The ASPLS 2011 Conference will again be in Feb. in Anchorage.... their 2013 Conference will be a major event commemorating the Alaska/Canada Boundary, with a series of events that will culminate with a Centennial Celebration of the setting of the last International Boundary monument of the United States.... They are starting the process to review the Standards of Practice Manual, which has not gone through a review since 1993.... Their focus for their 2011-2012 legislative session will be to pass a statute for protecting the signed and sealed documents from being altered and copied without authorization, and a statute change lifting the eight year experience and education limit required of an applicant for becoming licensed.... Their BRAELS board is considering a new regulation to lower the required Continuing Education Units from 30 to 24, and they are also considering a regulation to adopt the ASPLS Standards of Practice Manual.

Arizona: The APLS joint conference with ACSM was a success

by all accounts except for finances largely due to a significant drop in attendees attributed to the recession. Their contribution to the Four Corners Monument Display was noted and appreciated.

California: The CLSA web site, www.californiasurveyors.org allows members the opportunity to manage their own Professional Development Hours.... CLSA has developed an effective tri-fold for their current and potential membership outlining all the benefits of being a member.... CLSA was recently asked to participate in an Amicus Curiae in the appellate decision of a major case between UDC v. CH2M Hill in regards to indemnity, and a hold harmless clause in a contract. The case involved a decision for payment of fees to defend and hold harmless even though there was no determination of negligence. The CA Supreme Court has denied the petition to hear the case and has denied the de-publishing of the ruling.... Their Trig Star program involved 42 different high schools reaching approx. 650 students who participated in the exam.

Colorado: JB Guyton presented a report summarizing the activities and matters of PLSC.

Hawaii: Their 2011 Conference is February 3 & 4 in Waikiki.... Their Trig Star program involved 22 schools. Their program was started in 2008.... Our HA delegate Kevin Kea has started investigation and discussion to strengthen their statutes, specifically with regards to the definition of a Land Surveyor, and is reviewing similar statutes from other WFPS states and input from other delegates.

Idaho: No report at the meeting due to a last minute family emergency. A report will be provided with the minutes, which were not available yet at the time of this report.

Montana: MARLS committed \$10,200 for scholarship awards in 2009, with an additional \$5,500 being distributed to high school students participating in the Trig Star program.... Their 2011 conference will be Feb. 24 – 26 in Billings.... Their proposed by-laws change to include NSPS and WFPS delegates as voting members was approved by their membership.... It was noted that their state worker's comp.

underwriters moved Land Surveyors into the geophysical surveying group and out of the architects & engineer's group.

Nevada: Their membership has seen a decline of about 30% from last year.... Their 2010 Conference was held with CLSA for the first time since 2005 and was a great success.... Their 2011 Conference will also be held with CLSA in March, in Las Vegas.... NALS is sponsoring 4 hour seminars on the 2009 Manual of Instructions in Reno and Las Vegas.... 9 high schools participated in their Trig Star program this last year.

New Mexico: Their membership saw a 15% drop in 2010.... In their legislature this year, SB 41 passed and was signed into law. As stated in the first sentence of the bill, the "Act, Relating to Land Grants; requiring notice to the Boards of Trustees of certain community land grants before conducting boundary surveys of lands within or bordering the Land Grant; requiring the filing of proof of notice." The bill requires a surveyor shall give proof of the notice required by having the tracking number of the certified mailing and the address of the land grant as recorded with the county clerk acknowledged and recorded on the boundary survey or plat." This legislation was passed because Land Grant Board members claim (incorrectly) that these surveys are being used as an element of adverse possession and are being conducted without their knowledge or consent (although not necessary).

Oregon: PLSO's 2011 Annual Conference will be January 19 – 21, again in Salem.... Their ever popular TwiST program is cancelled this year due to only one person responding.... Oregon is in the process of moving toward a low distortion projection State Plane Coordinate System statewide, through ODOT and is looking forward to enabling legislation next year, called the OCRS – Oregon Coordinate Reference System.... Their OSBEELS is continuing their efforts to develop a Standards of Practice for Land Surveying, establishing minimum levels of competency for Land Surveyors.

Utah: UCLS is currently work-

ing with the Utah Assn. of County Surveyors on making changes to the Right of Entry statutes that were adopted in 2008 to improve access rights for surveyors on private property.... The Board of Directors voted to support the requirement of a four year degree for licensure as a Surveyor in Utah and to start to move on getting the requirement put into their statutes.... The update to the UCLS Model Standards of Practice for Boundary Surveys has been completed, for the first time in 10 years.

Washington: The Washington Council of County Surveyors (WCCS) is supportive and has recommended that APWA develop standard specifications for all Public Works projects that require all construction surveying to be done by or under the direct supervision of a professional land surveyor. Included in this recommendation is the request that GPS machine control networks be established and maintained during the project by or under the direct supervision of a professional land surveyor regis-

tered in the State.... LSAW Chapters have provided funds sufficient to support 12 teachers in their TwiST program.

Wyoming: The next PLSW annual meeting will be February 2 in Cheyenne.... PLSW President Mark Rehwaldt, PE/LS has taken a position with the University of Wyoming in the Dept. of Civil and Architectural Engineering as the Director of the Land Surveying Program. Its Certificate of Land Surveying program (all on line) is growing and the proposed future curriculum includes course work that is required by varying state boards across the United States and requested by students. They plan on becoming self sufficient in three years.

Other items of interest:

- The 2011 WFPS Conference will be held in association with the Washington and Idaho societies in Spokane, Washington on March 2 - 5, 2011.
- A report was provided on the status of the CFedS program from

the CFedS Panel meeting at the ACSM Conference in Phoenix. As of April of this year, there are a total of 342 certified CFedS, including 50 in Colorado, and 486 Trainees

- The WFPS Board approved the award of two scholarships for the 2010 – 2011 academic year in the amount of \$2,000 each to students at OIT Klamath Falls and CSU Fresno. It was also noted that since WFPS began awarding scholarships for the 2002 – 2003 academic year, a total of \$56,800 in scholarships have been awarded.
- The WFPS Board voted to donate \$2,500 to the Four Corners Marker project being championed by Warren Ward of Colorado.
- A report on NCEES was provided, stating that license examinations are down approx. 25% and that NCEES is moving to computer based national testing

Our next meeting will be held in Reno, Nevada on September 25th, 2010.

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PLSC Board of Directors Meeting Minutes

**May 7, 2010 –
in conjunction with the
WCLS Spring Session
Grand Vista Hotel, 2790
Crossroads Blvd.,
Grand Junction, CO**

Call to Order: 7:15 PM

Recognition of PLSC Board Members and Officers Present:

Present: Tom Adams, Michael Greer, Diana Askew, Micheal Bouchard, Doug Berling, Patrick Green, Stan Vermilyea, Peter Kent, Gary Gable, Warren Ward

Absent:

Russ Clark, Roger Nelson

Welcome of Guests:

Pam Fromhertz, Tom and Sheila Sylvester, Michael Murdock, Rick Mason, Brian Bowker, Mark Young, James Sommerville, Louis Buettner

Approval of Minutes from Previous meeting:

Motion: Patrick Green moves to approve the minutes from 3-31-2010. Gary Gable seconds.

Discussion: Ex-officio directors have been invited to join the Board of Directors. Parker Newby will represent the Southwest chapter and Ron Perkins will represent the Northern chapter. *Vote: Unanimous approval.*

Reports (full version of the minutes with all attachments and reports are available online at www.plsc.net)

Secretary-Treasurer, Diana Askew

Diana provided a copy of the 2010 budget to the Board for consideration. The membership is down substantially in relation to this time last year. Because we are moving the annual conference to 2011 we will not have conference income for 2010, however, we will have up front expenses for the venue in 2010. Diana suggests holding off on any unnecessary expenses for the remainder of 2010 and to keep costs to a minimum (travel, sup-

plies, other). We may need to use all of our savings to cover the 2010 mandatory expenses.

NSPS Governor – Warren Ward

Four Corners monument discussion: NSPS is going to put a display with an explanation of how the monument was set so the public will be able to read the story of the survey. Warren has gotten permission for the Navaho Parks. The construction has to be completed by July 1. He has raised about \$30,000 in donations, including \$5000 from Utah. The initial design concept is 4 3x3 plaques, one in each state, carved with a story about the survey.

Motion: Mike Greer moves to authorize Warren to proceed with the Four Corners history display for service in kind up to \$5000. We authorize up to \$500 in travel and lodging expenses at this time. Stan Vermilyea seconds. *Vote: Unanimous approval*

The **Final Point** for Chic Chichester to be coordinated by Dan Griggs

Warren will get a **Final Point** for Bob Stollard as well.

Warren requests the PLSC Board authorize funds to send him to Orlando, FL in the fall for the NSPS meeting.

Tom thanks Warren for the time he has put in as the Colorado Governor for the NSPS.

Chapter Reports

WCLS - The session was good; they felt the economy impacted attendance and thanked the PLSC Board for coming over.

SCPLS – The Annual Golf Tournament is on August 7.

Legislative Committee, Roger Nelson, Chair

The Monument Record time increase was not accepted by the legislative committee. Suggest adding lat and long, adding photos, increase the number of ties. References need to be set at an appropriate distance.

Machine control: Roger was in contact with the AES Board to see

what has been passed by other states.

Awards committee, Stan Vermilyea, Chair

Stan Vermilyea is looking for some volunteers to help him rewrite the requirements so they are more current. Chapter level awards could be nominated at the state award level. WCLS is considering a monthly award. Tom Sylvester and Micheal Bouchard are going to help Stan.

Stan has the list of awards.

Action items: Di will find the list of recipients and start a binder to keep the list of awards in.

Nominations and Elections Committee, Doug Berling, Chair

Doug Berling has an article in the *Side Shots* and hopes to get a few people to run. Mike Greer announced that he is not running for VP again

Ethics and Fair Practices, Patrick Green, Chair

Discussion: most of the changes to the PLSC Code of Ethics were to change the male references to his/her and then they beefed up some of it. They are asking for comments and questions. Is this too high of a standard for us? Rick Mason suggested that it may be a good idea to have an attorney look at it. Also, there was a discussion regarding the references to land surveyor or surveyor or professional land surveyor.

Action items: Patrick will check with Ed Bristow and ask him to look for items that may cause problems and will tweak the language accordingly.

Education Committee, Peter Kent, Chair

Peter Kent: We have been doing the phone conferences. Mike has the facility reserved, the Arvada Center. The rooms are nice and there is plenty of free parking. The PLSC is merging with CCPS and the SCPLS to combine efforts and save costs. We will hold our annual meeting.

Tom Adams: The Southern and Northern chapters were contacted and they agreed immediately to join or merge with us. Pam and the NOAA/NGS speakers are invited to speak. Possible topics are Dave Doyle and Pam presenting the NGS 10 year plan. Pam can do a dog and pony show regarding tools available that some folks may not know about. There are new developments coming down the pike with OPUS and CORRS. Bill Henning can talk about the GPS derived heights. Other possible topics include training for airport surveys with the FAA as a two day workshop which conjunction with the conference. Airport surveys are complicated. Positive train control in Pueblo may be able to come and talk.

Special Committees

QBS Colorado representative discussion: Dave DiFulvio, Russ Clark, and Gary Gable have volunteered to represent the PLSC on the QBS Colorado Board of Directors.

Next Meeting Date and Location:

4:30 PM, Wednesday, June 9, 2010 via conference call. Tom or Di will send a notice to the president of each chapter.

Adjourn: 10:00 PM

Respectfully submitted:

Diana E Askew, PLS
PLSC Secretary-Treasurer

June 9, 2010 Through June 24, 2010 via Conference Call

Call to Order:

4:30 PM

Recognition of PLSC Board Members and Officers Present:

Present: Tom Adams, Michael Greer, Diana Askew, Micheal Bouchard, Doug Berling, Roger Nelson, Patrick Green, Stan Vermilyea, Peter Kent, Gary Gable, Warren Ward, JB Guyton

Absent: Russell Clark

Secretary-Treasurer, Diana Askew *See Treasurer's Report below (updated)*

NSPS Governor – Warren Ward

Do we approve of the NSPS decision to separate from the ACSM? Warren indicates that if we do nothing and nobody does or says anything and the NSPS withdraws for the ACSM in two years – if someone was to go to the meeting in two years and ask that the process stop, it may not stop, maybe by the board of directors? We need a report to get more information to give us better reasons to make the decisions. Warren would like opinions or otherwise Warren will make a motion in November to reverse the decision. Warren says in his opinion and every surveyor in America benefits NSPS and ACSM

whether they are members or not or whether they are licensed or not. Peter – what does it cost the PLSC to be members of the NSPS? Nothing, we are affiliates. Warren says it costs \$2,500 per year to travel to the meetings. There are an overwhelming number of surveyors and there are not enough geodesists and mappers. There are 3000 surveying members and the others have 500 members together, so they are getting more funding from the NSPS for the ACSM. Warren suggests a straw poll because time is not an issue at this point.

Following a discussion the members of the Board feel there is not enough information to make a decision at this time. Conclusions: Warren will not say anything and not make a motion to reverse the decision.

Warren requests \$1300 to go to Orlando in November for the NSPS meeting. Discussion tabled.

Legislative Committee, Roger Nelson, Chair

Tom asks if we want to renew the contract with Peg. Roger feels that if we don't have a contract with a lobbyist there is no point to continue with legislative committee meetings. Lobbying is a process that takes time. They need to watch others out there as well. Tom asks if the lobbyist can be hired if we have something to take through the legislature. Roger needs to know if Peg would be willing to offer different

PLSC Treasurer's Report Last Quarter 2010 - As of 6/30/2010

(Includes unrealized gains)

As of 6/30/2010

Account	3/31/2010 Balance	4/30/2010 Balance	5/31/2010 Balance	6/30/2010 Balance
Bank Accounts				
Checking at Wells Fargo - Main	44,593.31	40,311.95	35,498.60	31,957.68
Merchant Checking at Wells Fargo	6,643.38	16,193.58	3,153.03	5,367.18
PLSC Savings at Well Fargo	40,184.91	40,193.17	40,201.71	40,209.97
PLSC Scholarship Fund Inc	3,011.46	3,011.57	3,011.68	2,503.78
PLSC Scholarship Fund Savings	50,297.14	50,313.67	50,330.77	50,347.32
TOTAL Bank Accounts	144,730.20	150,023.94	132,195.79	130,385.93
Investment Accounts				
ICA	24,290.33	24,290.33	24,481.47	23,474.92
Investment at Merrill Lynch Investments	27,347.60	27,347.60	29,287.01	25,030.42
WMIF	24,034.62	24,034.62	24,469.47	22,791.42
TOTAL Investment Accounts	75,672.55	75,672.55	78,237.95	71,296.76
OVERALL TOTAL	220,402.75	225,696.49	210,433.74	201,682.69

levels of service at a different fee schedule. Stop start may not be such a good deal and he has some experience with what happened last year.

Conclusions: Roger will get a fee schedule and get it back to the board for discussion later. A lobbyist is necessary in order for the PLSC to approve the legislative committee to proceed with possible legislation. If not we could possibly ask Peg to watch out for our interest at a different fee.

Ethics and Fair Practices, Patrick Green, Chair

Discussion: Tom asks if there are any comments on Ed's comments on the code of ethics. Patrick suggests that we table this to the next meeting – we don't have enough time to go through the list line by line and it will take more than 15 minutes.

Conclusions: Tom asks everyone to read the comments made by Ed and discuss the document at the next meeting.

Unfinished and New Business

Case Law Book, Ed Bristow, PLS, ESQ

Discussion of three options offered by Ed for a Case Law Book – Tom offered an overview of the options and the CEU's for other disciplines together with the book. JB – big pool of attorneys, agency of the Supreme Court in the state of Colorado, at least one attorney has to be in the audience, need 6 months to get approved. Need approval of the subject material. We may be too late if we want to attract attorneys. Possible option is to have a seminar in a hotel venue or similar after the conference. Once we make a decision from the three options we would like to pursue, Tom and Di would approach Ed for the details.

Motion: Gary moves that the board authorizes Tom and Diana to further investigate item 2 and report back to the board for further approval. Patrick Green seconds.

Discussion: Stan asks how it fits into our budget. We will not make an inquiry to clear up the details and not obligate ourselves to purchase any of the options. How

many copies would Ed include in the price or is that just the cost of the research? *Vote: Unanimous approval*

Conclusions: Di and Tom will investigate option with Ed and get answers to the questions – if there are more please send them to Di and she will add them to the list

Next Meeting:

4:30 PM, Thursday, June 17, 2010 via conference Call

Adjourn:

5:55 PM

June 17, 2010 - Conference Call

Call to Order:

4:35 PM

Recognition of PLSC Board Members and Officers:

Present: Tom Adams, Michael Greer, Diana Askew, Micheal Bouchard, Roger Nelson, Patrick Green, Stan Vermilyea, Peter Kent, Gary Gable, Parker Newby, Ron Perkins, JB Guyton

UNDERGROUND UTILITY LOCATING



Diversified Underground is a Denver Based DBE-certified Company providing Subsurface Utility Engineering (SUE), Utility Locating, Hydro Vacuum Excavation throughout Colorado and the surrounding states.



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Absent:

Russ Clark, Doug Berling

Approval of Minutes from Previous meeting(s):

Motion: Roger Nelson moves to approve the June 9 (change date of the next meeting from November to June) Stan seconds. Discussion: none *Vote: Unanimous approval*

Motion: Roger Nelson moves to approve the May 7 minutes. Pete seconds. Discussion: remove the extra W in Warren Legislative committee discussion. *Vote: Unanimous approval*

Legislative Committee, Roger Nelson, Chair

Discussion regarding the Basis of Bearing statement revisions suggested in the rulemaking process:

Motion: Patrick Green moves to direct the legislative committee to look into the BOB statement to see if it should be added to other types of surveying documents. Roger Nelson seconds. Discussion: Mike B asks if the statute needs to be changed or if it just needs to be looked at. BOB purpose is to help other surveyors follow in the footsteps of another surveyor. The statute only addresses adding a basis of bearing to be added to LSP's. The Statute is obsolete. Sunset will begin next year and needs to be done by 2013. Do we want to wait two years or address it now? Roger – you want us to do research and report back to the board for further direction. Roger said it may be too late to craft language and have it ready for the upcoming legislative session. The rules committee can hammer it out and see what can be addressed in the rules before we start thinking about changing the statute. *Vote: yes MB, no MG, yes Gable, yes Patrick, yes Peter, yes Parker, yes Ron Perkins, yes Roger, Stan yes; approved*

Discussion regarding Machine Grading: We were directed to do research and find information from other states, and the board would read it and see if the legislative committee would attempt to find ways to legislate that or if we should stand down.

Motion: Roger moves to advise the legislative committee not to develop statutes to regulate



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machine control grading and to ask the legislative committee to stand down on this issue: Michael

Bouchard seconds. Discussion: Gary said it was discussed at the QBS and it is a problem for the engineering discipline as well. The issue is big and needs to be coordinated with multiple disciplines. Patrick found the report to be comprehensive but the subject is still in its infancy. Gable suggested an ad hoc committee to work with ACEC and other groups. Vote: Unanimous approval (for the committee to stand down on the issue)

Discussion regarding lobbyist (continued from 6-9-2010): If we run hot and cold with the lobbyist we run the risk of the lobbyist not being willing to represent us or may fill her "dance card". Diana shared the budget considerations to take into account. We are 120 or so members short from last year if you take into consideration the number of freebie members and the membership to date is down 60 members. Stan suggests that Roger check with Peg and see if we can get a lower level of service and possibly upgrade it if necessary during the legislative session. Ron seconds:

Gary asks that Di reevaluates the budget with actual income and emails it out to everyone. Parker noticed that in Peg's estimate she said she would work with us. Vote: unanimous. Roger indicated that since we have moved our conference

to next year it makes sense that we would be in a deficit this year.

Next Meeting Date and Location:

4:30 PM, Thursday, June 24, 2010 via conference call.

Adjourn:

6:10 PM

**June 24, 2010 –
Conference Call**

Call to Order:

4:35 PM

**Recognition of PLSC Board
Members and Officers:**

Present: Tom Adams, Michael Greer, Diana Askew, Micheal Bouchard, Patrick Green, Stan Vermilyea, Gary Gable, JB Guyton

Absent:

Russ Clark, Doug Berling, Roger Nelson, Peter Kent, Parker Newby, Ron Perkins

**Legislative Committee, Roger
Nelson, Chair**

Comments on hiring Peg – we can go a year without a new bill and ask the legislative committee to watch the legislation. We will send her a nice letter.

Motion: Patrick moves that we do not hire a lobbyist this year and send a nice letter to Peg and let her know that if we are in better shape next year we'll be in touch. Mike Bouchard seconds. Vote: Unanimous approval

Secretary-Treasurer, Diana Askew

Di sent an actual income budget to the board following the meeting on June 17 for the board to review and consider.

NSPS Governor – Warren Ward

Tom indicated that Warren asked for up to \$1,200 for a trip to Florida for his next and last meeting.

Motion: Diana Askew moves to offer Warren \$600 to cover his expenses to go to Florida. Patrick Green seconds. Discussion: The PLSC is in financial trouble – we have sent Warren to one conference per year for the past few years. Asking for funding for two conference trips in one year considering our financial situation puts us in a difficult situation. This will be Warren's last conference as the Colorado NSPS governor. We did some online research during the meeting and found that \$600 would be more than adequate to cover his expenses. Vote: Askew, Greer, Bouchard and Green for – Vermilyea and Gable oppose; approved.

Next Meeting Date and Location:

4:30 PM, Wednesday July 28, 2010 via conference call. Next physical meeting: 6:00 PM dinner and meeting, Saturday, August 6, 2010 in conjunction with the SCPLS Golf Tournament on August 7, 2010.

Adjourn:

5:46 PM

Respectfully submitted:

Diana E Askew, PLS
PLSC Secretary-Treasurer



House Bill HB10-1085

Governor Ritter signed House Bill HB10-1085 on April 15, 2010, regarding land surveyor's affidavits of correction and education requirements for licensure. Standing, left to right: Senator Abel J. Tapia, Randy Reeves (Pueblo County Surveyor candidate), Pueblo County Commissioner (District 1) Anthony Nuñez, PLSC Executive Director Diana Askew, Steve Balcerovich (Strategic Partner of Ackerman Information Corporation), and Colorado State Representative Jim Kerr. Seated, Governor Bill Ritter.



GIS



IN THE ROCKIES • 2010

ENDLESS OPPORTUNITIES FOR THE NEXT DECADE

Please join us September 14-17th in Loveland, CO for the 23rd annual GIS in the Rockies Conference. The main conference program will be September 15-16th. We will have pre-conference workshops on September 14th and post-conference company tours on September 17th.

This year's conference focuses on examining the growth opportunities for geospatial technology in our information-dependant world. The geospatial industry has come a long way in the first 10 years of the 21st Century. Our world has become more geo-enabled than ever. As we close out one decade and start a new one, we want to celebrate the accomplishments of our industry and look forward to new opportunities for growth in the technological boom that is upon us. Join us in learning, sharing, and networking with some of the industry's best and brightest individuals and cutting-edge companies, right here in our own backyard.

For the complete program, and registration information, visit: www.gisintherockies.org

CCPS

The next CCPS general membership meeting is to be convened at 7:00 PM on August 26th at the Doubletree Hotel at Iliff and I-225. The featured presentation will be on the status of and developments concerning the NGS Colorado State Geodetic Advisor's program in Colorado. The presenter will be Pam Fromhertz, Colorado State Geodetic Advisor from NGS. NGS is introducing a new vertical datum and we will learn how that will impact our surveying choices. The featured vendor will be Hixon Manufacturing and Supply. Dinner will be served prior to the meeting at 6:30 with cash bar at 6:00. All CCPS members are cordially invited.

The CCPS scholarship committee has received 4 applications for scholarships for the fall 2010 semester. The committee is reviewing the applications and will decide the recipients soon. Rob Snodgrass will present the scholarships at the CCPS general membership meeting on August 26th. CCPS is partnering with PLSC in financing the scholarships this year.

The CCPS communication committee is working on a new look and content for our web page. Presently there are overlaps in content with the award winning "PLSC.net" page and we would like to make it less repetitive and more efficient in presenting information. CCPS also now has a Facebook presence. Search for Central Colorado Surveyors on Facebook and join us for meeting notifications and updates. You can also email chris.raml@woolpert.com for more information.

CCPS wishes to thank Gaby Nuenzert for his presentation on roads and bridges of Switzerland at the last CCPS general meeting. The presentation was entertaining and informative and Gaby's efforts are greatly appreciated.

CCPS is looking to fill 4 Director Positions, a Vice President, and a Secretary position for next year. The offices are filled by an election of the membership held in October.

We are looking for 12 volunteers this year so elections are competitive. You do not have to be a licensed surveyor in Colorado to hold office, but you do need to be a CCPS member. If you are interested in serving the central Colorado surveying community in any of these vital capacities, email Earl Henderson, earl@zenithls.com. The time commitment is only 4-8 hours per month and your services are needed. It is an honor to be elected.

The copies of the Hayden Atlas on hand are running low. Order yours before they are out of print. Email Joe Conway at joeconway@comcast.net to order yours for \$75 which includes shipping costs. You can purchase a copy of the Hayden Atlas at any of our meetings in person for \$70.

Michael Greer made a special presentation to the family of Chic Chichester at our last general membership meeting. Michael presented the family a very special "Final Point" survey monument from the Professional Land Surveyors of Colorado to express gratitude, appreciation and thanks for the contributions Chic made to the PLSC.

Hope your summer is successful and enjoyable.

Joe Conway
CCPS President

CSRN

The Colorado Spatial Reference Network will hold its first Summer BBQ / Potluck on July 31, 2010, at Bayou Gulch Regional Park in Parker, CO. We hope to make this an annual event. Photos of the event will be posted on the CSRN website.

The CSRN has partnered with the PLSC to present two topics at GIS in the Rockies on September 14 – 17, 2010. Bill Henning, RTN Program Manager with NGS/NOAA will present GNSS Real Time Networks – The Next Generation Infrastructure for all Geospatial Data; and Daniel Akin, PE/PLS, will present Legal Descriptions – A Primer for GIS Professionals and Land Surveyors. Information about these

and other topics may be found at www.GISintheRockies.org.

The CSRN elections committee is seeking input from individuals considering running for the position of President; Vice President; Secretary; or Director for 2011. Elections for these positions will be held in the fall of 2010. Minimum requirements for each position may be found in the bylaws posted on the CSRN website.

In cooperation with the PLSC the CSRN has begun collecting annual membership dues from PLSC members effective January 1, 2010. Dues for sustaining and non-PLSC members (i.e. geospatial industries) will continue to be waived for the year. Please consider becoming a member of the CSRN in addition to your regular chapter.

If you are interested in learning more about the CSRN please contact us through our website at www.CSRN.us or you may contact me directly at 303-512-4401 or daniel.a.smith@dot.state.co.us.

Dan Smith
President – CSRN

NC

Because the Northern Chapter is currently on summer break there is little news to share that has not been mentioned in previous issues. The Chapter will resume meetings in early September and we are considering different days and times in order to boost attendance. The Mid-Year Economic update hosted by the Northern Colorado Business Report on July 14 that featured three keynote speakers from the region affirmed what we already know: First, that the recession is over and second, that recovery will be a slow and painful process. We have seen several companies close their satellite offices here in Northern Colorado as well as a few others closing their Civil Engineering or Surveying Departments. With that said I feel that the worst is behind us and have seen indicators that point to a brighter future. Although new housing got off to a slow start

this spring we have seen several builders begin construction on pre-sold homes. Windsor, Fort Collins and Loveland have fared better than most municipalities and are still spending money on capital improvement projects. CSU has begun the design process for several large projects on their main campus, which will breathe life into the construction sector. We are very optimistic about the future.

Larry Pepek, PLS
Northern Chapter

NW 1/4

The NW 1/4 met March 22 in Craig, Colorado at the Holiday Inn. The meeting was called to order by John Noonan, V.P., attending were Tom Effinger, Walter Magill, Brian T. Kelly, Lloyd Powers, Jim Joy and Dave Ginther. Treasurer's report revealed we have \$1,316.56 in our account, and the report and minutes were approved with minor revisions.

New business primarily concerned the database for the plat deposits in Routt County. Tom Effinger and John have been working hard on this and there are over 2500 records so far. The County has tentatively agreed to keep the database updated once it is complete at a point in time, but Skidgie Moon, County Surveyor, needs to confirm.

Tom let the members know that the biggest disciplinary action by the State Board concerns failure to pay licensing fees, and essentially practicing without a valid license.

Dave Ginther, BLM surveyor for NW Colorado, Craig office, led the program for the evening. His program concluded an earlier presentation from December concerning the confluence of three principal meridians-the Ute, New Mexico and 6th P.M. in Section 36, T15S, R98W, 6th P.M. This area is now commonly known as the Dominguez-Escalante National Conservation Area which is about 220,000 acres. There is private land in Section 36 and also along the Gunnison River. The sur-

veys in the area started with an 1883/1884 Third Correction Line South, followed by a survey by Edwin Kellogg in 1895. Treece and Fuller also did surveys in the township, and there was even a suspended survey - the government refused to recognize the survey work due to large errors. A subsequent survey directed the surveyors to remove all evidence of the suspended survey, such as removing the stone corners, but apparently they missed at least one, because Dave Ginther found it. The country is extremely rugged and none of us have ever done this, but the 1890's surveyor probably looked at the probable corner location and said, "Oh, they wouldn't set that." But of course they did, it was invalid, and Ginther's crew pulled the stone 110 years later. The meeting concluded at nine o'clock.

Brian T. Kelly
Sec.-Treasurer, NW 1/4

SCPLS

The 22nd Annual Paul Grout Memorial Golf Tournament & Picnic will be held on Saturday, August 7 at the Hollydot Golf Course in Colorado City. It is an 18-hole, 4 person scramble tournament. It is always a great time to get together with other surveyors from around the region to play golf and catch up with each other at the picnic afterwards.

Look for information to appear in either your inbox or mailbox.

This year the Southern Chapter took a look at the state of the economy and decided to join forces with the Central Chapter and with PLSC and have a combined workshop. We are hopeful that the economy will recover enough next year to allow us to have our regular Fall Workshop in 2011.

Thank you,
Mark Johannes
President, SCPLS

SWC/PLSC

The SW Chapter had its regular meeting on May 11th at Christina's Bar and Grill at the Best Western Motel in Durango. Members in attendance were Rob Trudeau, Richard Harrison, Dave Seiler and Parker Newby.

The 2010 Seminar will not be held. Discussion was held on how to organize the 2011 seminar. Dave S. will discuss the 2011 available dates with FLC.

Dave Seiler reviewed the attached PLSC BOD's report as of 5/5/2010. This is the report that was presented at the Western Chapter's seminar on 5-7-2010. Dave also reviewed the SW Chapter's financial statement. Parker Newby reported on House Bill (HB) 1085 regarding surveyor's licensure and affidavit of correction. Parker also reported on the recent BOD meeting in Grand Junction. Items of note included the proposed NSPS break away from the ACSM.

Old business included an acknowledgement of the continuance of Roberts Rules of Order for SW Chapter meeting procedures. The chapter will also strive for inclusion of all chapter members during discussions of items requiring formal chapter decisions.

Suggestions for speakers and events for chapter meetings in 2011 are always welcome.

Chapter and member contact list update - This is an ongoing project. Please let us know if your information changes.

The next SW Chapter meeting will be Tuesday July 13th at 6:00. The location will be determined and a notice sent out.

Rob Trudeau
President, SWC

WCLS

Western Colorado Land Surveyors had a very successful Spring Seminar on May 7, 2010 with Geoff Anderson discussing Quiet Title Actions in Colorado and Bob Green, Chuck Hutchins, and Matt

Nawrocki presenting Thinking Outside the Box. We want to thank everyone that attended and hope that you all benefited from the excellent presentations. It was nice to see several of the PLSC Board of Directors in attendance.

We also hosted the PLSC Board meeting in the evening after the seminar was over. I want to thank the Board for traveling so far for their meeting. Those of us that were able to attend found the meeting very informative.

At the seminar, the WCLS in

conjunction with the PLSC presented a \$1,000.00 scholarship to Ryan Reed who is enrolled in surveying at Westwood College. He is a very deserving recipient. It was nice to have a good slate of very rounded and talented applicants from which to choose.

Because of the close proximity of our regular May meeting to the seminar, we had a light turnout, but we were all intrigued by Peter Krick's presentation on surveying in Florida. We also had an informal discussion of the new laws passed

by our State Legislature that affect our profession.

We are planning our Summer Picnic the evening of July 14, 2010 at Canyon View Park. This provides us a nice mid-summer break from our surveying activities with an agenda of visiting with good friends, eating heartily, and having a good time. Families are invited and everyone is encouraged to invite a friend.

Thomas W. Sylvester,
P. E. & P. L. S.
President/WCLS

WCLS Surveyor Appreciation Award Letter To Peter T. Krick, PLS

Dear Peter:

On behalf of the Western Colorado Land Surveyors, I want to award you our March 2010 Surveyor Appreciation Award.

Because of a potential conflict of interest, you have understandably elected not to be involved in key leadership roles within our chapter. However, you have gone out of your way to give back to our organization, profession, and community in many other ways.

You have made arrangements for our chapter to meet at the City Hall and provided us with the dinners at our chapter meetings for several years and have been an active participant in our meetings. You continually and diplomatically work with our local surveyors in assisting them to meet City standards on their surveying submittals. As such, I believe the caliber of final surveys in the Grand Valley is of the highest order in the state. You work with the City planning staff and City attorneys to ensure they understand the various nuances of boundary law which in turn helps the surveying community resolve many of the issues that arise during an application review process.

You have graciously offered your time and your crew's time in many of the outreach efforts our chapter has put forth in the local schools and have been an active participant in the Math Counts competition for several years. And you encourage and mentor your crews to improve their skills and gain the status of Professional Land Surveys.

Please accept our heartfelt thanks for the effort and dedication you have given to our community.

Sincerely,
Thomas W. Sylvester, PE & PLS,
President, Western Colorado Land Surveyors

Survey Stories

By Jim Sommerville

When hiring someone on the spur of the moment, say in a bar at midnight, you never know what you are going to end up with. Talking to someone in a social setting does not always give you the true capabilities of that person. I came to this realization early in my surveying career.

While conducting a power line survey in the mountains of Colorado between Dillon and Georgetown, it became necessary to add on an additional helper. No experience was needed, they didn't need to think, just be able to carry heavy loads up steep mountains. We held a short, productive search that evening to the bar of which we made nightly visits. The interview was short and we asked questions while we drank beer and played pool. We chose the one that could still talk coherently when we left the bar.

That next morning at daybreak, we all met at the condominium to discuss the plan for the day. My job was to take the new man and hike up to a PI on top of a bald knob and turn the reciprocal vertical and horizontal angles to the control it had been tied from. This survey took place in 1976, so there was a considerable amount of equipment to haul up the hill. The PI was a little over a half mile with an 1100 ft. vertical difference from the truck, through sage brush and small stands of dense timber. It was a beautiful mountain day, no clouds, with the temperature in the low 60's, making the hour-long hike almost enjoyable. Upon reaching the PI, I instructed my help to start trimming the branches on a large evergreen that was on line with two of the control points I needed to survey. One fell on each side of the tree, so I told him to cut all of the branches off flush with the tree trunk, as this was required by the forest service, up to a branch I pointed out that was about 20 ft. above the ground. As he was doing this I got the instrument set up and did my calculations.

A half hour or so had passed when I heard my new, no experience needed, help call my name. As I looked over to where he had

been trimming branches, I could see that he had done exactly as I had instructed. The branches had been sawn off at the trunk of the tree up to the branch I had told him to stop at: The one and the same branch he was sitting on! With his feet dangling, the saw in his right hand and holding a branch at head level with his left hand, the look on his face was a mixture of emotions. He had done such a great job of trimming off the limbs that there was no way for him to climb down. The slope that the tree was on was too steep for him to jump and I didn't have a rope, so there he sat. Personally, my urge to throw rocks at him was almost unbearable. My only option was to hike back to the truck, grab a handful of spikes and a hammer, and hike back to the tree and pound in the spikes as a makeshift ladder. This I did, except, prior to the pounding of the spikes, I negotiated payment for the grief his lack of common sense had caused me. Three steak dinners would be enough compensation, of which he agreed with little hesitation. Three plus hours sitting on the branch was a great bargaining chip. After many years of telling this story and thinking about it, most of the fault lies with me. While his lack of common sense did contribute, he did exactly what I told him to do.

This is only one of the memories I have accumulated over the many years I have been surveying. All these memories become stories that are repeated over and over, a history, for the most part, that has gone unwritten and lost forever. We have all read the stories of the great surveyors of the past, but there are no books conveying the personal stories of the everyday surveyor. We tell of our exploits to family, friends, peers and anybody who will listen. Stories are how we build our self esteem and fortify our reasons for being surveyors.

Over the years I have had the opportunity to sit and listen to stories being told by people from a variety of occupations, including railroad engineers telling of their near disasters, old miners recount-

ing their hardships, old, and I mean really old, cowboys telling tails of encounters with the Indians, cattleman vs. sheepherders, homesteading and so on. Every occupation has their stories. Some are more exciting than others while others don't mean anything to anyone outside that particular occupation, or profession.

Surveying encompasses a vast number of other occupations and professions. To the surveyors reading this list, try to think of how many times you have had to apply some of the skills of these other professions: trucker, EMT, cowboy, lawyer, mediator, mechanic, outfitter, detective, miner, engineer, construction worker, environmentalist...and the list is as long as one's mind can imagine.

The stories that all people tell are a small part of their personal histories. We have all read stories of the famous surveyors of the past and may even know some of the renowned men and women in the profession now. The stories about these people are history. These are the people who have written the books and manuals by which we conduct our surveys. They are part of our overall professional history. But what about all the unwritten personal stories by the thousands of surveyors across this vast country? Are they not part of our professional history, though less famous, but just as much a rich part of it? The finding of an interesting land corner, the three and one half foot rattlesnake who's fangs got caught in the cuff of a pant leg after a missed strike, losing a wheel and axle on a trailer loaded with 4x4 claim posts on the highway, cross-sectioning the Colorado river at high water, getting caught in a railroad tunnel by the Amtrak train, hanging off a 90-ft cliff to set power pole anchors, ...these are a small number of memories of just one surveyor. If we got together and compiled a book of our experiences, exploits and conquests, we could establish an impressive historic record of our personal experiences.

'All Experience Counts'

Advice to Young People Entering the Profession of Land Surveying

By: Dean F. Glorso, PLS

In 1967, I was working in an automotive garage just outside Chicago, Illinois where we serviced a fleet of construction vehicles for a land development and home building firm. It just so happened, one of the survey crews were in for an oil change one day, and a buddy had recommended me for a rodman job on their crew. I didn't know it then, but this was the beginning of my "40 year plus" career as a land surveyor.

Learning the field work was wonderful, but the Chicago winters were brutal. So I decided to learn everything I could to qualify myself for work in the office during the winter months. If I saw that blueprints needed running, I volunteered to scurry them through the old Diazo machine. When I observed the men at the drafting tables complaining about drawing so many plot plans, I told my boss about my mechanical drafting class in high school, and volunteered to help. I also noticed the secretaries' spite, in the front office, for typ-

ing the complex legal descriptions. So I told my boss about the typing class I had in high school, and wanted to take a shot at that job too. He soon put me to work on a drafting table and a manual typewriter where I continued to observe, ask questions and struggle to type those crazy legal descriptions. I was slow at typing, but as accurate as I could be, and soon found a regular position in the busy engineering office for the winter.

Being 19 years old, not in college, and holding a 1-A draft card in the spring of 1968, made me fresh meat for the military. My Greetings from Uncle Sam came on my 20th birthday only a few weeks after the start of the TET Offensive in Vietnam. The War was escalating and the "Greeting" told me to report to the Chicago Induction Center in the next 30 days. I attempted enlistment in the Navy Sea Bees (construction arm of the U.S. Navy & U.S. Marine Corps), so I could continue my love for surveying, but the recruiter told me it was too late once I received the draft notice. I was poised to go into the Army, or so I thought.

On the day of my induction they asked for volunteers into the United States Marine Corps. Of course none of us 300 inductees in the room jumped at that chance, as the battle for Khe Sanh was stacking up big lists of Marine casualties on the front pages of the newspapers every day. As I stood in line waiting to take the physical exam, it seemed like an even grimmer situation when an Army Sergeant placed a pink slip of paper on the top of my stack of documents indicating I would be one of the so called Marine Corps "volunteers". I knew nothing about the Marine Corps, other than Lance Corporal Richard R. Mullin, a Marine from my hometown had been killed serving in Vietnam a year earlier. I would soon learn that all Marines are, first and foremost, Riflemen. Or as they fondly call themselves, "Grunts".

Four of us on the plane to the Marine Corps Recruit Depot in San Diego held special travel orders. We were set apart from the rest of the traveling group as "Inductees". Because we didn't actually volunteer, we four especially didn't want to be there, and were branded with an "SS" next to our service numbers. The "SS" stood for "Selective Service". Seeing this next to our service numbers, the Marine Corps Drill Instructors would soon give us a "special" attitude adjustment during the next 10 weeks of Marine boot camp.

At one point during the week long initial aptitude testing, I was asked if I wanted to take a typing test. "Yes sir!" was my reply and I proceeded to nervously type only 19 words a minute on an old manual Underwood typewriter. For the remaining 10 weeks of hell, I did my best to adjust my outlook and accept the fact that I would probably die in the jungles of Vietnam. "It was just a matter of time", I thought.

Upon graduation from Boot Camp, the 65-man platoon huddled together in one of the quonset huts while



PFC Dean F. Glorso, All Weather Marine Attack Squadron 242, Marine Air Group 11, 1st Marine Air Wing, Republic of Vietnam – 1969 (A6A Aircraft #7)
web site FYI: www.vma-aw-242.com
Photo by Capt. K.C. "Kit" Corcoran

the Drill Instructor (D.I.) read off names, numbers, and destinations. Soon I heard him say, "Glorso, 0141, WestPac". "Sir, what does that mean?" I asked standing at attention. "WestPac means you're going to die, Maggot", he scorned as his evil eyes met mine. "West-Pac is Vietnam, Private, you got orders for the First MARDIV (First Marine Division). You'll be up north where the action is."

After more months of training, I soon found myself on an airplane to Vietnam in November 1968. We stopped in Okinawa for 5 days of more processing before our final approach to DaNang. For some unknown reason a clerk stamped my original orders with a big red "CANCELLED" stamp. Then changed "1STMAR DIV" to "1STMAW". Having no idea what that meant, I asked around until someone told me that I was going to the First Marine Air Wing instead of the First Marine Division. Once in DaNang, I was instructed to board a truck loaded with South Vietnam civilians and get off at a place called MAG 11 (Marine Air

Group 11). Traveling alone in the back of that 6X6 truck in the monsoon rain, in a foreign land with people I could not communicate with, was the loneliest time in my life. Soon the driver stopped and yelled out the window, this is MAG 11. As I got out of the back of the truck, his arm pointed out the half rolled down window toward a tin roof covered hut. "Report in there", he said.

Holding my sea bag in the downpour, trying to keep it out of the mud, I made my way to the dimly lit hut. After bumping my head hard on the low cut doorway, I could see there were 4 Marines in the building sitting behind crates for desks with typewriters. I stepped up to the Sergeant's desk and presented my documents. He opened them, and said excitedly, "Hey Gunny, we got a '0141' here!" Soon I was surrounded by Marines wanting to shake my hand and the word was spread to the adjacent hut where a Lieutenant came over to greet me. When I was greeted by a Lance Corporal called "Ski", I learned I was his replacement and

this hut would be my duty station for the next 365 days.

Every skill learned, even though not perfected, will count in your career. My ability to type 19 words a minute in the United States Marine Corps kept me out of the jungles of Vietnam and probably saved my life. As a clerk at this duty station, I continued to observe, ask questions, and learn as much as I could about the operations of a Marine Attack Air Squadron in the Republic of Vietnam. Soon my superiors put me in charge of the squadron mail room, a job that gained the respect of both junior and senior alike. Before E-mail and a cell phone, the U.S. Mail was the life line to loved ones back in "the world". The Mail Clerk job prepared me to accept responsibility and gave me organizational skills to later run a land surveying business. Soak in the knowledge, for you never know what skill may just someday save your life.

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Published by the Colorado Professional Land Surveyors Educational Foundation, Inc., a non-profit foundation, Initial Points of the Rectangular Survey System is undertaken in the spirit of, and dedication to, Mr. White's remarkable contributions to his field. Net proceeds from its sale will be returned to the Professional Land Surveyors of Colorado Inc. Scholarship Fund.

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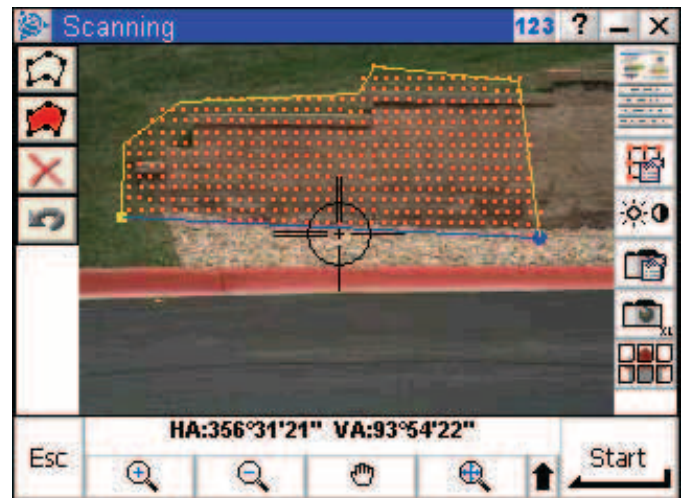
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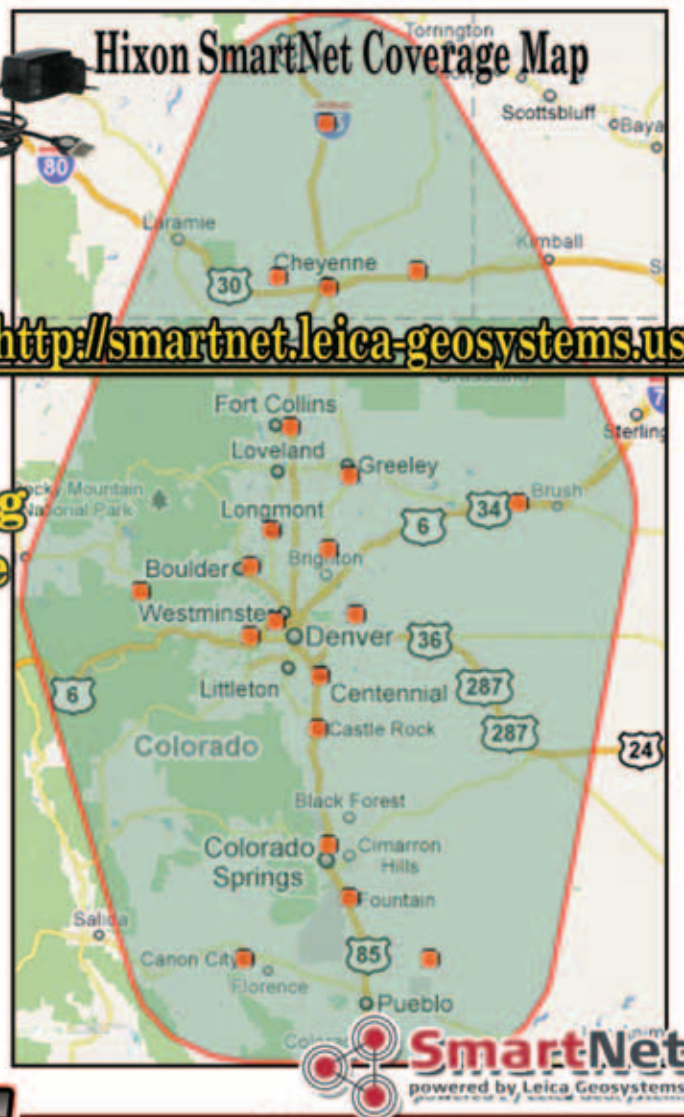
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