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Cover: Collage of Silas Reed's works by Mike Flaim

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PLSW (Professional Land Surveyors of Wyoming) is a statewide organization of Registered Land Surveyors licensed to practice in the Equality State of Wyoming. PLSW is dedicated to improving the technical, legal, and business aspects of surveying in the State of Wyoming. PLSW is affiliated with the National Society of Professional Surveyors (NSPS) and the Western Federation of Professional Land Surveyors (WestFed).

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### PRESIDENT'S MESSAGE



Greetings from the southeast corner of the State! It's a great day to be a surveyor in a good friend's words. As we move into spring and summer, work in our corner of the State has continued to be busy with the recent play on oil and gas. I'm not sure we know what we're in for as some of you well know in areas that have been long established.

Following NSPS Survey USA day around the country, the Southeast Chapter had a good turnout for the event. A group of 10-12 individuals and one faithful friend started with a photo opportunity on the south steps of the Capitol and then off to collect data on various points around Cheyenne. I hope the other

chapters around the State had equally as good a turnout as we did. I should have a complied list of how many did participate in Wyoming and around the country by the next issue.

Since our Annual Meeting, I have attended the Montana Association of Registered Land Surveyors Annual Conference. It was held February 23-25 in Billings and other than being cold, they had a great turnout. The conference had multiple business meetings and some very interesting as well as educational sessions from multiple presenters. I was also able briefly to attend the California and Nevada Annual Conference in Las Vegas as personal travel plans and their conference dates coincided with the NASCAR weekend March 5-9. I would like thank all three organizations for the opportunity to be their guest and look forward to next year's events if time allows.

Well, until we meet again I hope everyone's spring and summer are busy and profitable. Our next Board of Directors will be via teleconference on May 7. If anyone has any ideas, suggestions or concerns please address them to your Directors before the meeting.

Thank you for allowing me to lead your organization for the next year and look forward to achieving the goals we set.

Respectfully,

Cotton D. Jones, President Professional Land Surveyors of Wyoming

# ANNOUNCEMENTS/MISC.

- CONGRATULATIONS!! The members of the Professional Land Surveyors of Wyoming would like to recognize the achievement of the following new registrants and encourage you to join our society.
  - Craig Shavlik, PELS #12309, Buffalo, WY
  - o Steven Earl, PELS #11946, Logan, UT
- The Wyoming Board of Registration is now offering Professional Land Surveyor candidates the opportunity to take the 2-hour State Specific Examination on a given day each month during the year.
- The University of Wyoming Land Surveying program is assembling an Advisory Board, and is looking for volunteer Board members. Interested parties should contact Mark Rehwaldt at (307) 766-1700.
- The Bureau of Land Management respectfully requests that readers of the Manual of Surveying Instructions (2009) report any errors found. Email with the details to blmsurveymanual@blm.gov. For information and to view postings of reported errata visit the BLM Manual website at: www.blmsurveymanual.org.
- Check out the educational resources available at the NGS Online Learning Center with Online Modules, Presentations with Audio, and the Upcoming and Past Classes at: www.ngs.noaa.gov/corbin/online\_learing.shtml

# From the Prexy Pasture Party Chief:

We are two weeks from Spring Break. Prexy's Pasture is covered with snow, and yes, the surveying lab was chopping through the ice and digging through the snow to locate the traverse points that the students will use in their traverse lab. There was the required amount of moaning and groaning that they were cold and they couldn't feel their feet. My comment was that if they had been up hunting and they had the granddaddy bull elk in their rifle sights and they couldn't remember when they last felt their feet and their fingers were so cold they only had enough left to squeeze off "the" round, what would they tell their buddies when they brought the trophy back? Would they mention that their feet were frozen and their fingers were so cold they only had enough left to squeeze off "the" round? One responded that they might mention in passing to their buddy that it was a little bit cool. Yes they had my most sincere and deepest sympathy.

The Land Surveying Program is going to hold a strategic planning session. The purpose of the session will be to determine what the goals of the program are and how to achieve them.

This is exciting, yet scary. This is exciting in the sense that there has never been a "plan" for the Land Surveying Program; any goals for the program have never been formally shared. What is important for the program has never been stated in writing, and the direction for the program will now be established. To date, the program has developed without direction. It's scary in that the goals may not be achievable; or the goals be not be "in line" with the goals of the University, or the College of Engineering and Applied Science, or the Civil and Architectural Engineering Department or with the goals of Sheridan College. It's also scary in the sense that hopes and dreams may feel the harsh tug of reality.

My goal is to help the up and coming surveyors achieve their dream or goal of becoming licensed as a Professional Land Surveyor. Some days helping is an honor and a privilege, other days it is a huge responsibility.

Sincerely,

Mark Rehwaldt The Prexy Pasture Party Chief



### Demystifying the Professional Surveyors Exam

Raymond G. Jacquot, PE & Peter J. Hutchison, PE, PLS

#### Introduction

Your past president has asked us to write a brief article discussing the specifications for, composition of and scoring of the professional surveyors exam. Much of what is written here will also apply to the FLS, FE and PE exams.

#### Why a National Exam?

There are several reasons to have an exam that is composed and scored on a national basis. The first and most important is the issue of comity, whereby the applicant who is registered by exam in one state may be registered in a second state without taking the complete exam again in that state. In the second state the applicant will only have to take the state portion of the exam provided he/she has met all other requirements for licensure in the second state.

A second reason is the issue of quality control of the exams. On a national basis there are sufficient numbers of exams given that careful review of potential exam questions can be justified. Also considerable effort can be devoted to gathering of statistical data on the performance of specific exam questions referred to as items.

Thirdly, since exams are given nationally on the same day under carefully controlled conditions there is sufficient security to assure that all candidates are treated equally, that no one has an unfair advantage and that high quality questions can be used on subsequent exams albeit after an idle period. The national part of the exam is composed by a committee of the National Council of Examiners for Engineering and Surveying (NCEES).

#### Nature of the Exam

The exam is a one day, eight hour exam with six hours devoted to 100 question national exam of a four option multiple-choice nature. The last two hours of the afternoon session is a Wyoming state-specific exam composed of essay questions the candidate must address. In addition Wyoming requires a take-home exam in which the candidate must address Wyoming issues.

#### **Exam Specifications**

Before an exam can be composed a set of criteria must be written specifying the subject matter areas to be examined and how much of the exam will be devoted to each area. The specifications are formulated by polling a large number of practitioners asking them to choose from a very large list the areas in which a candidate for registration should demonstrate competence. A blue-ribbon committee then processes the poll results and writes the exam specification. The specifications for all the NCEES exams are public and available on the NCEES website at neces.org.

#### **Gathering Exam Questions**

Once the specifications are approved by the NCEES Committee on Examinations for Professional Surveyors then candidate questions are solicited from practitioners around the country and from item writers' workshops where a

group of practitioners gather to write and review potential exam items. In these workshops a given item is reviewed six times by participants other than the author who are asked to formulate an answer, check the subject matter classification, the time required and whether the key given by the author is, in fact, correct. When approved by six reviewers the question becomes part of the item bank and is filed by its category in the specification.

#### **Exam Composition**

An initial draft of a given exam is first assembled from the item bank by an NCEES staff member carefully observing the exam specification. Then the exam composition committee meets and each member is asked to work through the exam. After this the committee discusses the exam item-by-item and items are replaced or modified, if needed. After an item is used on an exam it must then sit out three exam administrations. Any particular exam is reviewed at two consecutive meetings of the exam composition committee.

#### **Exam Uniformity and Quality Control**

In order to assure that examinees are treated uniformly from exam to exam there are a group of questions called equators that have been used previously for which the performance is of high quality. The performance on these equators is compared with known past performance and the pass point for the exam is adjusted to compensate for differences in competence of the candidates as a group and for the total exam being easier or harder than past exams.

Statistics are also gathered on the performance of each question on each exam. Several statistical parameters are used to measure the difficulty of an item and its ability to discriminate between the marginally competent candidates and those of lesser competence. Problems which do not perform well are eliminated from the item bank.

#### Scoring of the Exam

In order to be licensed in Wyoming a candidate must pass all three portions of the exam. For the national portion of the exam there is a very complicated process to establish what the pass point will be. About every 7-8 years a pass point exercise is carried out involving licensed professionals of a wide spectrum of experience who take the exam and estimate what percentage of the candidates will choose the correct option on any given question. This data is then used to formulate the pass point of the exam.

As discussed previously, equators are used to assure fairness and balance from exam to exam. Generally there are about 25 equators on a given 100 question exam and also there are about 30 new items in any exam being tested.

#### **Post-Exam Analysis**

Soon after the national exam is given the answer sheets are collected and scored, and exam items that do not perform well are identified and the following questions are asked:

- i) Is the specified key correct?
- ii) Is more than one of the option a correct answer?
- iii) Is there no correct key among the four options?
- iv) Is the item excessively difficult or obscure?

If the exam composition committee finds the item to be somehow defective then the exams are rescored appropriately. Every effort is made to be fair to exam takers.

The pass rate on the Fall 2010 exam was 64% for all first-time takers and 30% for repeat takers.



NATIONAL SYSTEM OF PUBLIC LANDS

The official cadastral surveys in Wyoming that have been accepted from April, 2010 through February, 2011, and have been published to BLM Wyoming's Cadastral Survey website.

Township and Range	Type of Survey	Meridian	Accepted
T. 47 N., R. 88 W.	Dep. Res. & Metes & Bnds.	6 P.M.	07/27/2010
T. 27 N., R. 83 W.	Dep. Res. & Subd.	6 P.M.	07/27/2010
T. 28 N., R. 83 W.	Dep. Res. & Subd.	6 P.M.	07/27/2010
T. 27 N., R. 84 W.	Dep. Res. & Subd.	6 P.M.	07/27/2010
T. 28 N., R. 84 W.	Dep. Res. & Subd.	6 P.M.	07/27/2010
T. 41 N., R. 117 W.	Supplemental Plat	6 P.M.	07/27/2010
T. 43 N., R. 92 W.	Supplemental Plat	6 P.M.	07/27/2010
T. 13 N., R. 77 W.	Dep. Res. & Subd.	6 P.M.	09/29/2010
T. 52 N., R. 100 W.	Dep. Res. & Metes & Bnds.	6 P.M.	09/29/2010
T. 53 N., R. 100 W.	Dep. Res. & Subd.	6 P.M.	09/29/2010
T. 47 N., R. 60 W.	Dep. Res. & Subd.	6 P.M.	09/29/2010
T. 22 N., R. 93 W.	Dependent Resurvey	6 P.M.	09/29/2010
T. 28 N., R. 109 W.	Dependent Resurvey	6 P.M.	09/29/2010
T. 51 N., R. 73 W.	Supplemental Plat	6 P.M.	11/29/2010
T. 21 N., R. 95 W.	Dependent Resurvey	6 P.M.	01/18/2011
T. 12 N., R. 91 W.	Dep. Res. & Subd.	6 P.M.	01/18/2011
T. 12 N., R. 90 W.	Dep. Res. & Subd.	6 P.M.	01/18/2011
T. 49 N., R. 63 W.	Corrective Resurvey	6 P.M.	02/24/2011
T. 1 S., R. 1 W.	Supplemental Plat	W.R.M.	02/24/2011
T. 28 N., R. 76 W.	Dep. Res. & Subd.	6 P.M.	02/24/2011
T. 32 N., R. 114 W.	Dep. Res. & Subd.	6 P.M.	02/24/2011
T. 16 N., R. 118 W.	Dep. Res. & Metes & Bnds.	6 P.M.	02/24/2011

Copies of these images can be viewed or printed from this website: http://www.wy.blm.gov/cadastral/plats10.php

### Silas Reed

# The First Surveyor General of Wyoming

By Herbert W. Stoughton, Ph.D., P.E., P.L.S., C.P.

Silas Reed, son of Charles Reed, was born in the State of Ohio in 1807 (exact date and location are unknown). Little is known about his youth, but records indicate that he had a brother, Charles Reed, Jr., and at least one sister (name unknown). Records indicate he had two nephews, Henry Munro Rogers and Alfred M. Rogers; and a niece Lucy Rogers. Charles Reed, Jr. had one son, Charles J. Reed, who would subsequently work in the Cheyenne office. Silas Reed, after completing his primary and secondary education, attended the Medical College of Ohio earning a medical degree. He lived in Cincinnati, Ohio, for several years, and subsequently moved to Rock Island, Illinois.

Silas married Henrietta Maria Rogers (date unknown) and raised a daughter Clara James Reed. Clara married Nathan Anthony and the union produced two grandsons, Arthur Cox Anthony and Silas Reed Anthony. The Reed - Rogers union was a long one, with Henrietta surviving. In over thirty years (28 February 1856 through 27 August 1886) 718 letters encompassing over 2,600 pages and 67 post cards were penned by Silas to his wife. Twenty-six letters and two post cards from his wife also survive.

Although no diaries or correspondence survive from his life in Cincinnati and Rock Island, it is assumed that Dr. Reed practiced medicine. In 1841, President William Henry Harrison appointed Reed surveyor general for Illinois and Missouri. C. Albert White (in A History of the Rectangular Survey System) states the date of appointment as 27 April 1841, but was replaced by J.C. Brown on 13 September 1841. There followed an intense period of activity by Reed to regain his appointment, because President Harrison died on 4 April 1841 (from pneumonia contracted during his inauguration a month earlier). Apparently, all the nomination paperwork had not been completed, lost, or misfiled. A special U.S. Senate committee investigated the matter. Apparently the matter was satisfactory resolved, because Harrison's successor President John Tyler affirmed (Harrison's selection) or reappointed Reed to be the surveyor general of Illinois and Missouri. Because of the election of James Knox Polk as president, Reed was replaced by Frederick R. Conway on 12 May 1845. In a short memoir Reed wrote about his personal relationship with Tyler. At one time Tyler asked Reed what could be done to appease Senator Thomas Hart Benton's (Missouri) continual requests. Reed recommended that the President send a military expedition to the west similar to the Lewis and

Clark expedition. He further recommended that the head of the expedition be John C. Fremont, husband of Benton's daughter. Colonel Abert, head of the topographic corps and higher U.S. Army officers, who thought poorly of Fremont's military capabilities, opposed the appointment, but Tyler's decision was final, and the remainder is history. Benton was appeased, and Fremont became a hero.

Since the office of surveyor general for Illinois and Missouri was situate in St. Louis, the Reeds purchased a home on Olive Street in St. Louis. Apparently, during his tenure as surveyor general, Reed invested in mining claims. For the remainder of his life, Silas Reed would have financial interests in mining endeavors (mostly in Missouri, Wyoming, and Utah). Little is known about Reed's personal life until the American Civil War. However, Dr. Reed was a generous person who is known to have loaned his books on mining and geology to a neighbor's son. This young man later went to California and made his fortune in mining. The young man's name was George Hearst who would later father William Randolph Hearst. Reed continued to live in St. Louis at the Olive Street address. Because of his Illinois ties, Reed became an early and ardent member of the Republican political party and supporter of Abraham Lincoln. Also, it was during his term as surveyor general of Illinois and Missouri, that Reed became familiar with Lincoln's qualifications as a surveyor and attorney. During that war he served as an assistant surgeon for the Federal Armies in Missouri and Tennessee. After the war, Reed sought a political appointment from President Andrew Johnson. At this time he wrote the final version of his will (5 February 1866), which was witnessed by Henry Wetmore and George P. Wetmore.

The Act of Congress of 25 July 1868 (U.S. 15 Stat. 178) established the Territory of Wyoming. The territory's boundaries were 27° to 34° longitude west of the Observatory at Washington and from 41° to 45° latitude north. President Andrew Johnson's appointments for the Territory's executive and judicial officers were not confirmed by Congress. Some historians believe this was due to the feud between President Johnson and Congress pertaining to Johnson's impeachment. Therefore, the Territory of Wyoming was not officially organized until 19 May 1869, after U.S. Grant assumed the presidency.

On 3 March 1869, an appropriation for \$25,000 was submitted to Congress. Subsequently, after Grant was sworn as President, additional bills were submitted in March and April 1869 to establish the G.L.O. territorial office (surveyor general) and the land offices. In early April 1869, Grant nominated Silas Reed to be surveyor general and others for several local land offices. Unfortunately, Congress adjourned without enacting any bills. On 2 March 1870, Reed was officially appointed surveyor general for the Wyoming Territory.

Reed immediately traveled to Cheyenne, and entered into his official duties. On 7 October 1870 Reed submitted his first comprehensive report to the Office of the Commissioner. This first report was forwarded to the Congressional Committee on Public Lands on 16 January 1871, and ordered printed seven days later (41st Congress, 3d Session; House of Representatives; Misc. Doc. No. 40: 30 pages). When he arrived in Cheyenne, he used personal funds to open the office, and waited for two months until appropriations were provided (\$40,000 on 15 July 1870). This report contained a detailed description of the territory. The general sections were titled: Topography; Climate; Geology; The Drift Method (geological process); Coal; Iron Ore; Gold; Silver, Copper and Lead; Moss Agates; Alkalies; Forests; Grazing - Stock Raising; Railroads; Agriculture - Irrigation; Cities and Towns; Forts; Indians; Chinese; and Game - Wild Animals. This report indicates the spirit and intensity that Reed had for his job and assignment.

On 30 September, Reed prepared his first annual report for the previous fiscal year as required. This report was no less comprehensive as the first report. Many of the topics enumerated in the first report were updated. included was a census of the ranches and livestock industry. The numbers of the herds ranged from 15,000 to 100 animals. Also, a sizeable and active sheep raising industry had been established in the territory. During the year, Reed took four extensive inspection trips around the territory. His observations of the geology indicated a keen knowledge which served him well in his mining career. In this report we gain an excellent insight into the operation of the surveyor general's office. Reed's salary was \$3,000 per annum. His staff included Alfred M. Rodgers (chief clerk, 1 July to 3 August 1870); his nephew Charles J. Reed (chief clerk, 4 August 1870 to 30 June 1871); Leverett C. Stevens (clerk for the entire period); George T. Adams (copyist to 30 September 1870); and Richard Blackstone (draughtsman, for the entire period). The report also contained a detailed accounting of the other expenses. At the end of the fiscal year, Reed returned \$63.43 (for wages) and \$680.20 (for office operating expenses) to the U.S. Treasury.

Mr. Reed's dedication to his work is witnessed in a letter he wrote on 14 June 1870 to Herman Glafcke, Territorial Secretary and acting Governor (Governor Carey was traveling outside the territory). The letter requested U.S. Army escorts for the deputy surveyors and the ability to purchase Sharps carbines. Contained in the letter was a description of the lands to be surveyed. Mr. Glafcke immediately forwarded to the request to the Headquarters of the Department of the Platte (Omaha, Nebraska). On 16 June, Brevet Major General L.C. Auger responded favorably, and forwarded the request to Headquarters, Washington for guidance. On 1 July, Assistant Adjutant General George D. Rugles communicated that the request

was granted. The troops would be furnished by General King, Fort D.A. Russell, based upon other troop requirements. Also, the carbines could be purchased after they request was approved by General Auger.

Politics in Wyoming Territory were rough and tumble. The historian Dr. T.A. Larson called the 1870's "Republicans at War". One side included Territorial Governor John Allen Campbell; U.S. Attorney Joseph M. Carey; G.L.O. Receiver Frank Wolcott; Dr. Hiram Latham (a private citizen); and James H. Hayford (editor of the *Laramie Sentinel*). The opponents were Nathan A. Baker (editor of the *Cheyenne Leader*); U.S. Marshall Church Howe; Territorial Secretary Herman Glafcke; and Surveyor General Silas Reed. This conflict started with the convention in 1870 to select the delegate to Congress, and would continue unabated through most of the decade. Numerous complaints by both factions criticized their opponents citing corruption, misappropriation of public funds, etc.

An example of this infighting is contained in a pair of letters from Silas Reed to Governor Campbell (found in the Wyoming State Archives, Governor Campbell's correspondence for 1872).

September 27th, 1872

Governor J.A. Campbell

Sir

On the 29th of June last, after I left for Utah, your organ, the Tribune, made a scurrilous attack on me and my deputies, written by one of your favorite U.S. officials, and as I am forced to believe, with your knowledge and consent.

On Saturday, Sept. 7th, four days after the election, an editorial in the Tribune of that date written by you, again attacked me. You say that certain charges made against you "at a meeting composed of Dr. Silas Reed, Surveyor General of the Territory, and a few other Congressional aspirants" were presented, &c., &c.

This is a misrepresentation of my position wholly unjustified by the facts.

I went to Laramie with a Boston friend and visitor, at his request to see Sherman and the mountain scenery. I attended the Peoples' meeting only as a spectator, and took no part.

I also deny that I was a "congressional aspirant." I never had the remotest desire to seek or accept that office in preference to the one I hold.

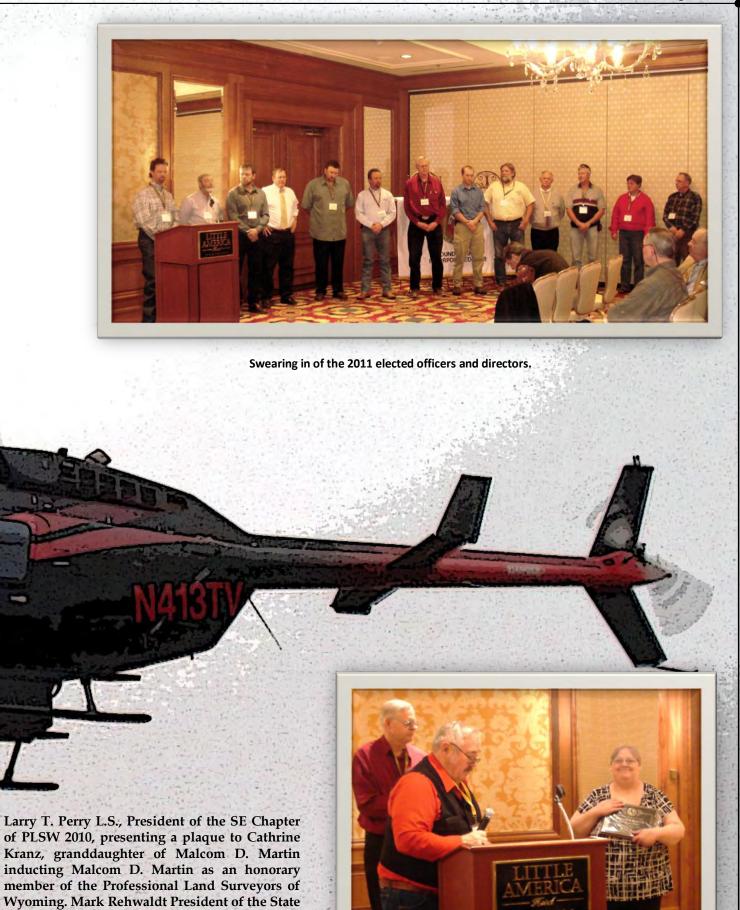
Now I should not trouble you with an allusion to these matters were they intended namely for <u>home</u> use. But coupled with the threats which your official friends make publicly, and implying your concurrence, I have a right to infer that these publications were made with a view to a raid upon me at Washington.

I therefore respectfully request you to inform me what your purpose is in making and countenancing these attacks on me, and whether it is not your design to aid or sanction movement against me at Washington?

> Very Respectfully, Your Obedient Servant

(Continued on Page 13)

Members of the Lines & Points Committee received a citation of thanks from 2010 PLSW President Mark Rehwaldt.

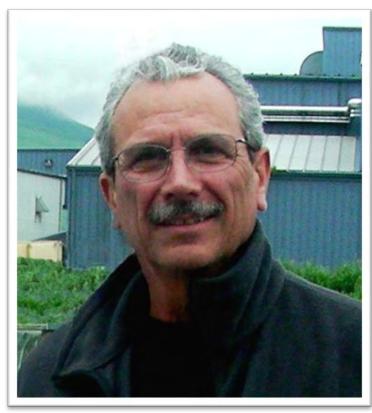


PLSW 2010 is overseeing the proceedings in the

left side of the photo.

### SOMETIMES IT HAPPENS

### A tale of a Colorado Land Surveyor By: Dean F. Glorso, PLS 16109



In the last couple of months I've been happy to have a slight backlog of land survey work. This week I had the opportunity to survey in some of the greatest surroundings anywhere. A cattle rancher at the edge of the San Louis Valley asked me to come down to survey one of his stock ponds. He wanted to document alterations, the water courts ordered him to make for the surface area of the pond. The work being a 4 or 5 hour drive from my home in Brighton, Colorado, I hit the road just before 5 AM.

With the winter sun not rising until after 7 AM, I had a couple hours of mountain driving in the dark of night. As Colorado drivers know, the morning and evening hours are when deer crossing the highway are a big hazard. I had been reminded of that fact early in my trip, with a narrow miss. Lucky the deer stopped in its tracks when I laid on my horn. After passing by with its nose only inches from my passenger side mirror, I paid closer attention to my speed and the roadway in front of me. A few more miles down the road I witnessed a driver with a smashed front end stopped, talking to a police officer. His accident was obviously the result of a deer crossing

the highway in front of him. Sometimes it happens, I thought.

Later I saw a recently killed calf in the middle of the highway, and still later I was delayed by a rolled over semi-truck blocking almost both lanes of the narrow roadway. As I drove slowly by the greasy side of the long 18 wheeler, I estimated the winds to be about 40 mile per hour. Sometimes it happens, the truck was probably deadheading empty and the gust of wind caught the driver by surprise, tipping his truck completely over.

With the unexpected delays, I was surprised to complete the 230 mile trip and meet my client at the ranch house at pretty much my expected arrival time. Larry and Ken, the contractors were in the kitchen finishing coffee with my client. Gregg, offered to brew a fresh pot of coffee for me before I went out to assess the day's work. At first I declined, but remembered my Thermos was just about empty, and a hot cup of coffee would be a nice thing to warm up to after working near the foot of the cold, windy mountain range.

Gregg started the coffee while I went to get my Thermos. As I handed him the empty bottle, I offered to get started by setting up the GPS base station. He said he'd drive out later and just put the Thermos of coffee on the seat of my truck for me to enjoy later. We both anticipated a short work day, as I had surveyed his ranch previously. We met up again, walked around the stock pond together and he pointed out key elements that needed to be shown on the survey. Then gave me the history of his water rights dispute and pointed out the creek access verses the natural spring access of water filling the pond.

The wind was still howling as I finished surveying the pond perimeter then decided to hike several hundred yards and locate some fence lines, a section corner and ranch roads, in order to give my drawing a better point of reference. I was walking near the area Gregg previously pointed out as being the spring fed water source. Most of the ground was slightly frozen and wind-swept with some minor snow cover. Having some 40 years experience surveying in the elements, I always knew how to dress for Colorado winters. One minute you can be freezing your butt off in conditions like this, and the next minute you can be basking in the bright wonderful Colorado sunshine.

I was dressed in my usual layers of clothing, with top layers tucked into alternate bottom layers to block the wind from creping in. My long underwear is a polyester type so when working up a sweat, the under garment allows moisture to pass away from the skin, to the next layer. This method of dress keeps the skin warm and dry when the temperature changes radically, as is often the case in the Colorado Mountains. For the outer-most layer, I wore *The North Face* windbreaker that I've used in these conditions for some 20 years, zipped up tight with the *Velcro* sleeves latched tight in conjunction with the *Velcro* on my gloved hands. On my feet I wore waterproof *Asolo Fugitive* boots with two pair of socks, the polyester ones under and wool socks over to keep my feet warm and dry in most every Colorado condition.

My GPS system is old by electronic-gear standards with cables running from my 25 pound back-pack to a 2 meter tall carbon-fiber antenna pole with a dinner plate size GPS antenna-dish is carried in my left hand. Also attached to the pole is a *TDS-Ranger* electronic data collection device that some refer to as a Pocket-PC (personal computer). A two foot long whip antenna protrudes from the top of the back-pack in order to receive radio signals from the base station which sits on a control point next to my parked pick-up truck, some distance away.

Walking along with head down against the stiff wind, I only looked up occasionally to keep a bearing on the distant fence line that I desired to survey. At a point when I took my eye off the ground to check my walking-line to the fence, my right foot went down through ice into a deep void. Still gripping the carbon fiber pole in my left hand, it too fell with my body to the ever deepening right side. As I went down to the right; back liquid-mud splashed my face and the right side of my body was under water, in mud up to my arm pit. As the pole crashed over to the right, the GPS antenna dish slammed down on high ground to the right of the void. Still gripping the pole in my left hand, I flung my left elbow over the now horizontal pole and rested my left arm pit on it. The pole was the only support I had to keep me from completely going under the dark colored goo. The smell was awful!

My first thought was, that I just fell into a "man size" range box. Any surveyor, who has cleaned black mud out of a fist-size range box, in order to read the survey monument cap under 6 or 8 inches of smelly mud, knows the smell I'm talking about. It is often the smell you might encounter on a cattle ranch around a stock pond. But wait a minute; I am on a cattle ranch! As Forest Gump said in his movie after stepping in dog Do-Do, "Sometimes '–IT' happens"!

Dazed, wet and smelly, I crawled from the hole, dragging the equipment and cables behind me. As I stood, I first checked to see if my ankles were still in working order, they were. Startled, cold and smelling disgusting, I made my way in the wind to my truck only

some 200 yards away. It was about that time that I took a glance at the TDS data collector still attached to the carbon fiber pole. It had so much black goo caked on to it, at first I thought I must be looking at the back side of the device. The keyboard of the collector looked like an open box of neatly packed chocolates. touching it, not because I was on a diet, but because I didn't want to press any of the wet looking "chocolate" further into the key pad. The collector must have been fully submerged in the black liquid goo, while the GPS antenna dish and cable was completely broken from the fall against the rocks on the far side of the hole. My only thought was for the data stored in the collector. I was plenty cold and wet but found that the caked-on "chocolate" seemed to insulate me somewhat from the strong 40 mile per hour wind.

Once back to the truck, I wiped down my legs and arms with my gloved hands to remove the biggest chunks of black-wet goo, and shook the large chunks of slim from my still gloved hands. Once I removed the wet crappy gloves I grabbed a bottle of drinking water and gently rinsed off the data collector the best I could. The screen was still turned on, so the data must be intact, I hoped.

I spent the next few minutes trying to remember if I had a change of clothing somewhere in the truck. Finally I remember my motorcycle rain gear behind the driver's seat. Next I removed *The North Face* windbreaker to pleasantly find that it kept most of my upper body layers free from the dark "chocolate". The denim jeans were another story, my lower body was wet through and through. The dry motorcycle rain suit was my only option, for even thinking about finishing this job today.

Although the heater in my truck would have felt good, I did not get in as the smelly cow dung would not be nice to have blended into the fabric seats for months to come. Quickly evaluating my options; I remember a block of wood I had behind the passenger seat. It worked perfect for me to stand on after I removed my black muck caked boots in the lightly snow blown surroundings. Once standing on the wood platform, I was able to remove my jeans without further damage to my almost clean, but very wet wool socks.

Finally out of the wet, dung drenched clothing; I stood on the wood pedestal in only my fast drying polyester long johns. The dry, cold, stiff wind would dehydrate them in no time, I thought. As I waited to be air dried by nature, I picked up the Thermos of hot coffee Gregg had left for me and drank cup after cup to ward off hypothermia. As I stood there counting my blessings of having the right gear, and being close to the truck when "..IT" happened, I remembered the "Forest Gump type" logic of my father: "Some people can work hard all their lives and never get ahead. Other people can fall in '..IT', and come out smelling like a rose"

(Continued from Page 8)

Apparently, no response was made by Governor Campbell, because Silas Reed wrote the following letter:

October 10, 1872

Governor J.A. Campbell

Sin

I take the liberty of stating that I addressed you a note of —------ upon personal matters on the 27th ultimo, and to which I have not received your reply.

I again call upon your attention to the subject of that note, and request a negative or affirmative answer, in writing, by the hand of Mr. E.F. Bishop, the bearer of this.

Respectfully, Your Obt. Servant Silas Reed

There is no indication that Governor Campbell responded, as there is no record of a response in the Governor's files or the Reed archives.

In 1872, the Post Office Department and the Customs Office decided to construct a combined post office customs office. The site chosen was the St. Louis home of Silas Reed, and the site was acquired by condemnation. There was subsequent litigation, which continued for several years (at least through 1876). There has been speculation that this action might have been part of the political partisan attacks that were ongoing.

On 26 March 1873 Dr. Hiram Latham was appointed the Surveyor General of the territory. Three days later G.L.O. Commissioner Willis Drummond order Reed to turn over the Wyoming Territory Surveyor General's office to Latham. Reed took immediate action, including going to Washington to seek redress. Reed's efforts, which included visiting his personal friend President Grant, were successful as he was reappointed on 18 July 1873. There was a brief statement in the following annual report about his absence.

Apparently the political bickering between the parties in Wyoming and Washington did not cease, and there is no mention in the Campbell or Reed correspondence that Campbell responded to Reed's inquiries. The charges against Reed would continue until a Congressional investigation was instituted during the First Session of the 44th Congress. More about that matter later.

On 23 January 1875, a letter was written from the Department of State to Governor Campbell by Secretary of State Hamilton Fish. Secretary Fish offered the appointment of Third Assistant Secretary of State.

### Governor Campbell wrote:

Wyoming Territory Executive Department Cheyenne, WT 5 March 1875

Sir

I have the honor to respectfully tender my resignation of my office of Governor of the Territory of Wyoming to take effect 25 February 1875 on which day I was qualified as Third Assistant Secretary of State.

It was hoped that this resignation and removal of Campbell from Wyoming politics would defuse the political bickering which had been simmering since 1870. This does not seem to be the case, as it would appear that Campbell and his associates continued the harassment. Finally on 30 July 1875, Silas Reed submitted to President Grant his resignation.

You will recollect that after my reinstatement to the office some two years ago, I voluntary stated to that it was not my desire to hold the office any great length of time, and that when the circumstances should be favorable I would tender my resignation. That time has now arrived - my multiplied private affairs demand my constant attention. I therefore herewith place my resignation in your hands. Thanking you for your long and continued kindness. . . .

#### President Grant wrote:

Long Branch, N.J., August 7, 1875

Dear Sir:

Your letter of resignation of the 30th of July was duly received, but has not been acted upon until now. I have this day forwarded it to the Secretary of the Interior, with instruction to accept to take effect on the 10th September, or as soon thereafter as your successor may qualify. In accepting your resignation allow me to say that I know of no reason to be dissatisfied with your administration of your office or surveyor general. On the contrary, I believe it has been efficiently and advantageously to the Government, filling during your entire administration.

With sincere wishes for your welfare, and assurances of my personal friendship, I am very truly, your obedient servant.

U.S. Grant

Dr. Silas Reed Surveyor-General, W.T.

THE SAME SHEET AND THE SAME SHEE

President Grant communicated to the Secretary of the Interior: "Referred to the sec. of the Int. Surveyor Gen. S. Reed's resignation may be accepted to take effect on 10th Sept. or as soon thereafter as his successor may qualify." On 21 August 1875, while at Long Branch, N.J., President Grant telegraphed:

Secretary of the Interior Columbus Delano

The appointment of Edward C. David as surveyor General of Wyoming Territory should be sent at once to enable him to qualify by the tenth of Sept. the date of acceptance of Dr. Reed's resignation.

11

Although Reed was no longer surveyor general, he was investigated under the title "Surveys in the Territory of Wyoming." His former chief clerk, Leverett C. Stevens, submitted letters taken from Reed's desk (including personal correspondence) to former governor Campbell, who in turn passed them around to political friends. The Committee on Expenditures in the Interior Department were directed to investigate "certain abuses had been practiced in the awarding of contracts by surveyors-general for the survey of the public lands, . . . The time of the committee having been occupied almost exclusively in the investigation of other matters, they found it impossible to give attention to any of the charges except those relating to surveys in the Territory of Wyoming. It having been alleged that Dr. Silas Reed, late surveyor-general of that Territory, was in the habit of compelling deputy surveyors who received contracts from him to divide the profits of their contracts with such friends as he would designate, who did no work and assumed none of the responsibilities which attached to the contractor, . . . ". The final report and all the testimony were published in Report No. 794; House of Representatives, 44th Congress, 1st Session. The report and the activities of the various persons (players) definitively illustrate the "rough house politics" of the era. Witnesses praised Dr. Reed for his work ethic and product.

Mr. Willis Drummond, Commissioner of the General Land Office from 4 February 1871 to 1 July 1874 was asked to respond to the question: "Please give to the committee whatever your opinion may be of the character and fidelity of both the office and field work of Dr. Reed as surveyor-general, and what you believe to be his fidelity to the interests of the Government as surveyor-general, and whether you ever confided to him important duties in his official capacity in other places than his own district of Wyoming."

Response: So far as Dr. Reed's record, while I was Commissioner of the Land Office, was concerned, it was unobjectionable; he holds the reputation of being a very competent and faithful surveyor-general. His work came up to my office in good shape, and always, I believe, without exception, proved satisfactory. He had the reputation of being one of the most efficient and competent surveyors-general in the service at the time I was Commissioner of the Land Office. Because of that reputation I selected him, at the instance of Mr. Delano, to make an examination of some work that was performed in the State of California in relation to a private land grant. The Secretary wanted it examined, and I selected Mr. Reed with reference to his qualifications as a surveyor, as well as his reputation as a faithful surveyor-general, to perform that work.

Mr. Stephen J. Dallas, Principal Clerk of Surveys (G.L.O.), working under the direct supervision of Commissioner Drummond, responded to: "Were those contracts all approved?"

**Response:** All were approved; there were about eighty-six or eighty-seven of them; some of them were made by your successor in 1873, I believe. Some seven or eight contracts were made by Dr. Latham, who was appointed in your place. The majority of the

contracts, however, were entered into by you and submitted to the Commissioner of the General Land Office; they were examined by myself and assistants to see whether they were within the means appropriated for a particular surveying district; whether they were in accordance with the per mileage that was allowed, and whether they were in all other respects in accordance with law. The Commissioner then approved the contracts.

Dallas was asked: "You and your clerks are very familiar with all the contracts made in Wyoming. State as to the character of the work returned to you under the contracts, the field notes, plats, &c."

**Response:** The surveys in Wyoming Territory, which was organized in 1870, you (Reed) being yourself an old surveyor, favorably known, were very satisfactory. We had no difficulty whatever with the contracts under you; everything was done in nice style, returns made, protracted in excellent, and very few irregularities discovered, those being clerical errors easily remedied.

Dallas identified two surveys which were unsatisfactory, but stated that these contracts were made by Dr. Latham and that Dr. Reed had indicated the deficiencies in the returns. Dallas further stated that Dr. Reed had personally gone to the field and rectified the problem and did not request compensation. He further stated: "You (Dr. Reed) yourself have always manifested good judgment in the selection of your deputies, in my estimation, and we have never found anything objectionable."

Dallas' response to Reed's question: "Could you judge from the accuracy and character of the field notes and plats of the surveys whether I had a competent set of deputies?"

**Response:** Yes sir, we never found any trouble as we did in other districts. All the records passed under my supervision before the Commissioner signed any letters or gave instructions. No objection was raised to your work, and nothing was found that was either fraudulent or irregular. . . Or incorrect; in all cases where you doubted whether you could approve the surveys, or doubted as to the proper way of carrying on surveying, you have applied to the Commissioner of the General Land Office, and he has given you the proper instructions for the performance of the business.

During Reed's tenure eighty-six contracts were issued. Contracts No.s 44 through 54 were not executed by Reed but by the interim surveyor general Dr. Hiram Latham.

Although Mr. Dallas recalled six or seven contracts in lieu of the eleven, the discrepancy is minor in light that Mr. Dallas oversaw the work for all the active surveying districts of G.L.O.

Dr. Reed was not indicted for any criminal activity but was subjected to severe castigation. It would appear from the previous history of events that he was the scape-(Continued on Page 17)

### 2011 ANNUAL MEETING MINUTES

(DRAFT - MINUTES MUST BE APPROVED AT THE 2012 ANNUAL MEETING)

# 1) The Annual Meeting of the Professional Land Surveyors of Wyoming, Inc.

The Annual meeting of PLSW was held at the Little America Hotel and Convention Center in Cheyenne, Wyoming. The meeting was held on Thursday 3 February 2011.

#### 2) Call to Order:

President Rehwaldt called the meeting to order at 2:00 p.m.

#### 3) Agenda Revision and Adoption of Revised Agenda:

President Rehwaldt asked for any changes or revisions to the Agenda. Item 13b should be NSPS instead of ACSM. There were no other changes or revisions.

#### 4) Introductions:

Officers and Directors: President Rehwaldt had each Officer, Director and Committee Chairmen introduce themselves.

Honorary Members, Rick Hudson and Martin Pederson were in attendance

Guests: Catherine Cranz, the granddaughter of Malcom Martin had been invited as a guest of PLSW and was in attendance to accept an Honorary Membership in PLSW for her grandfather.

Honorary Membership Presentation:

President Rehwaldt asked Larry Perry to present an Honorary Membership to Malcom Martin. Larry gave a biographical life sketch of Malcom and then presented Catherine Crantz, granddaughter of Malcom Martin: a plaque, a Certificate of Honorary Membership and the honorary membership card and thanked her for her grandfather's dedication to the surveying profession.

#### 5) In Memorial:

Bill (Rosie) Rosewarne passed away on 20 June 2010. He was a member of PLSW, working in the Worland, Wyoming area at the time of his passing.

#### 6) Last Call for Sealed Ballots:

Don Davis, Teller, gave the last call for sealed ballots to be handed in so they could be tabulated in this years election results.

# 7) Minutes of the Annual and Board of Directors' Meetings in 2010:

A motion to approve the 2010 Annual Meeting Minutes, dated 4 February 2010, as presented, was made by Larry Perry and seconded by Herb Stoughton. The motion was approved unanimously.

President Rehwaldt indicated the Board of Director meeting minutes for the year were available upon request.

#### 8) President's Report:

President Rehwaldt didn't have anything to report.

#### 9) Secretary's Report:

Secretary Scherbel requested information, required by the By-Laws, to be sent, if the Chapter had not already completed the task. These items include:

A list of new Chapter Officers reported to Secretary Scherbel.

2010 Chapter histories sent to Herb Stoughton.

2010 Chapter expenditures sent to Treasurer Scherbel.

Secretary Scherbel indicated that Chapter Histories have almost been completed and caught-up by Herb Stoughton and should be ready of inclusion in the PLSW Handbook soon.

PLSW membership includes a total of 277 Members and Associates: 172 Members, 1 Life, 9 Honorary, 80 Associate, 4 Special, 7 Student and 4 Sustaining.

#### 10) Treasurer's Report:

Statement of Bank Account balances as of 31 December 2010:

Checking Account \$ 1,002.61 Savings Account \$ 4,237.88 Investments \$108,807.41

Treasurer Scherbel reviewed the details of the budget vs actual 2010 report. He indicated the General Fund ended the year with a balance of 29,473; the Seminar Fund ended with a balance of 48,833 and the Scholarship Fund ended with a balance of 35,592.

A motion to approve the Treasurer's report was made by Herb Stoughton and seconded by Larry Perry. The motion was approved unanimously.

#### 11) 2011 Budget:

Treasurer Scherbel reviewed the 2011 budget and asked for any questions. No discussion or questions. A motion to approve 2011 Budget was made by Herb Stoughton and seconded by Jeff Jones. The motion was approved unanimously.

#### 12) Committee Reports:

a) Audit - Finance: Richard Muscio, 2nd Past President - no report. Kevin Jones will follow up and report to the Board. Following the meeting, Treasurer Scherbel communicated with Richard by email and found that he had sent a previous email which had not been received. The following was sent by Richard:

"February 7, 2011 PLSW BOD and Members 2010 Annual PLSW Financial Reports PLSW BOD and Members,

I have reviewed the 2010 PLSW bank statements, Dain-Rauscher Investment statements, and the check registers. The reports all appear to be in order to the best of my knowledge.

Richard Muscio 2nd Past President "

- b) Investment Committee: Jon Anderson Marlowe reported for Jon. Jon submitted a written report. The report indicated that investments were within policy and that good investments were hard to find. Interest rates are low and don't appear to be increasing any time soon.
- c) Legislative Committee: Mark Corbridge The new legislation has passed committee. Scott Pierson discussed the amendments.
- d) S.O.S. [Corner Record Honorarium]: Paul Reid reported the winners of the SOS Competition: 1st Rick Hudson; 2nd Karl Scherbel; 3rd Ross Turner.
- e) DVD Committee (Northwest Chapter) Rusty Blough reported on the production of the PLSW DVD, folders and flyers. Things are in motion and should be completed soon.

There were no questions for any Committee from the PLSW membership.

Other Committee reports will be presented at the BOD Meeting immediately after the Annual Meeting.

#### 13) Delegate Reports:

A one (1) minute presentation by each delegate of 2010 hilights.

- a) NSPS: Cotton Jones, Govenor Cotton reported there were problems with ACSM funding. The problem is that ACSM is broke. Cotton encouraged all to be members of NSPS.
- b) NSPS: Jeffrey B. Jones, Area 7 Director Discussed restructuring of NSPS/ACSM. NSPS makes up 96% of the membership in ACSM, so it is "us" vs "us". He reported the upcoming shows on surveying on to be aired on PBS television stations and PBS radio shows. February 23 starts the new ALTA/ACSM title survey standards. NSPS Surveying USA was introduced and Cotton will discuss more later in the meeting. New NSPS Area 7 Director is Kim Levitt from Idaho. PLSW should invite him to Fall Tech Session. Rick Hudson thanked Jeff for his service, as this is his last year.
- c) Western Federation of Professional Surveyors: Paul Reid, Delegate There are three meetings each year. The annual convention will be held on 3-5 March 2011 in Spokane, Washington.

#### 14) Straw vote:

A straw vote was held to change the annual meeting and hold it during the Fall Tech Session. The membership indicated about a 2 to 1 majority to keep the annual meeting in conjunction with the WES convention.

#### 15) Citations and Awards by President Rehwaldt:

- a) Thank you's to the following:
  - i) Lines & Points Committee Members
    - (1) Pete Hutchinson
    - (2) Joel Ebner
    - (3) Herb Stoughton
    - (4) Dennis Dawson
    - (5) Jack Studley
    - (6) Mike Flaim
    - (7) Larry Perry

- ii) Bill Fehringer Education Committee
- iii) Chris Hamilton Scholarship Fund Drive
- iv) Rick Hudson Past President's Advisory Group
- v) Randy Stelzner Membership Committee
- vi) Tom Johnson Membership Committee
- vii) Marlowe Scherbel Secretary/Treasurer

#### 16) Election Results:

Don Davis, Teller, reported the election results: Cotton Jones, President; Cevin Imus, Vice President; Marlowe Scherbel, Secretary/Treasurer. A motion to have nominations cease and officers approved as presented was made by by Don Davis and seconded by Herb Stoughton. The motion was approved unanimously. A motion to destroy the ballots was made by Herb Stoughton and seconded by Dennis Dawson. The motion was approved unanimously.

#### 17) Installation of 2011 PLSW Officers:

Jeff Jones, Area 7 Director for NSPS, conducted the installation of Officers and administered the oath.

### 18) Presentation of Past President's plaque to Mark Rehwaldt:

Cotton Jones made a presentation to Past President Mark Rehwaldt.

### 19) Seating of New Officers and President's Inaugural Address:

The new Officers were seated and President Cotton Jones conducted the remainder of the meeting.

#### 20) New Business:

- a) The NSPS Surveying USA activity was presented by Cotton Jones. This will be held on March 19, 2011. He would like everyone possible to collect points. He would suggest a primitive mark of interest be used. Mike Londe can give suggestions. This is a nationwide project and the data will be collected simultaneously. The preferred method would be rapid static data collection with NGS to reduce for solution. Directors please take this information back to Chapters and Cotton would like this to be posted on the PLSW website.
- b) A motion was made by Herb Stoughton and seconded by Kevin Jones to move the annual meeting to 1:00 p.m. The motion was not approved.
- c) John Lee, Wyoming BLM Cadastral Chief, indicated the BLM is continuing to add field notes and plats to their website. John also indicated that the new Manuel of Instruction was available.
- d) Larry Perry, from the Southeast Chapter, made a presentation of a painting, depicting the cover of one of the Lines and Points publications, to Paul N. Scherbel.

#### 21) Announcements:

Date for 2011 Annual Meeting: 2 February 2012 at 2:00 p.m. in Sheridan, Wyoming.

#### 22) Adjournment:

A motion to adjourn the meeting made by Herb Stoughton and seconded by Karl Scherbel. The motion was approved unanimously. Meeting adjourned at 3:15 p.m.

#### You might be married to a surveyor if:

- You've cooked a hot meal that goes cold before it is eaten!
- Your family's primary vehicle is a suburban!
- Family outings always include looking for survey markers!
- You've held the "zero end" of a measuring tape in public!
- You have received field boots as a Christmas gift!
- You've paid a credit card bill for surveying equipment, when you need a new washer and dryer!
- You know what business your spouse is in, but have no idea what he/she does!
- Your spouse can use complicated equipment and computers...but gets lost just driving around!
- You've driven through a snowstorm, or hot desert, to get to a meeting you cared nothing about!
- You've spent all day learning arts and crafts that you will never use again!
- Your spouse's friends are more eccentric than he/she is!
- You've waited all afternoon in a hotel lobby, after checkout, for a meeting to end!
- You've sat through endless awards ceremonies and boring after-dinner speeches!
- If the luggage with the pink flagging tape coming around the carousel at the airport belongs to you!

There may be a couple of things among these with which you can relate, but I'll bet you can also relate to being married to a surveyor if:

- Your spouse is the most caring person you know!
- Your spouse cares more about getting it right and not being perceived to have cheated anyone that about how much money is made!
- Your spouse respects his/her peers, even when he/she thinks they are Wrong!
- Your spouse cares about what happens to his/her profession, even after they've gone.
- Your spouse feels a responsibility for the lives of his/her employees.

Yes, if you are married to someone with integrity, you are likely married to a surveyor!

Contributed by Curt Sumner

#### (Continued from page 14)

goat for a series of practices which were practiced throughout the G.L.O. state and territorial offices. In the opinion of this writer, Dr. Reed did not exceed his authority and commit illegal activities.

After his resignation, Silas Reed did not seek other Federal appointments. In 1876, he was nearly seventy years old. The remainder of his life he spent on mining investments and promoting the Dallas and Wichta Railroad Company in Texas.

Dr. Silas Reed died in Salt Lake City, Utah, on either 1 or 2 October 1886.

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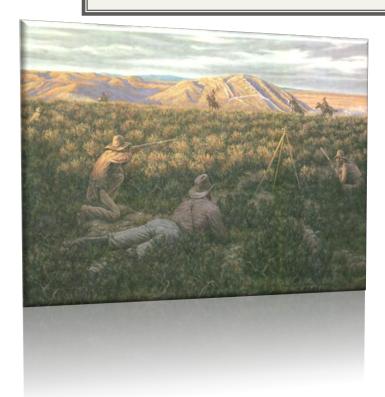


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