

Volume 36: Issue 4
October, 2025



LINES & POINTS

www.plsw.org



THE EQUALITY STATE SURVEYOR
PROFESSIONAL LAND SURVEYORS OF WYOMING



IXON

Mfg. & Supply Co.

www.hixonmfg.com

Two convenient retail locations

Surveying, Construction,
Engineering, Drones,
and Machine Control

Equipment and Supplies

Sales - Service - Rentals

Largest GNSS RTK Reference
Network in Colorado & Wyoming

Introducing the world's fastest and easiest-to-use GNSS RTK rover, the Leica GS18 T. Now you can measure any point faster and easier without the need to hold the pole vertical. This latest innovation combines GNSS and inertial measurement unit (IMU) being the first true tilt compensation solution that is immune to magnetic disturbances and is calibration-free. Save up to 20 percent over conventional surveying practices, measure where others can't, faster than ever before and forget the bubble.



Call 800.762.5252 today for additional information and to schedule a demo

JUST SOME OF OUR MANY VENDORS:



FORT COLLINS, CO

1001 Smithfield Dr.
Fort Collins, CO 80524
970.482.0111

DENVER, CO

7154 S Dillon Court
Englewood, CO 80112
303.694.0012



President • Cody Schatz, PELS

President Elect • John "Jack" Studley, PLS

Secretary/Treasurer • Bradley Neumiller, PLS



• Cotton Jones, PLS
Area Director



• John Lee, PLS
Wyoming Delegate

PUBLICATIONS COMMITTEE

Committee Chair-Chief Editor • Steven "Dennis" Dawson, PLS
dennieandbarb@gmail.com

Designer • Michael Flaim, PELS
mike.flaim@bresnan.net

Treasurer & Advertising • John "Jack" Studley, PLS
jklz0318@gmail.com

Circulation • Joel Ebner, PLS
jvebner@bresnan.net

Copy Editor • Herbert W. Stoughton, PhD, PELS, CP
hws.geod.engr@gmail.com

Website • Sonja "Suzie" Sparks, PLS
sasparks7@gmail.com

Emeritus Member • Pete Hutchison, PELS
petehpels@gmail.com



On The Cover

SUNRISE

PHOTO FROM Cody Schatz, P.L.S.

CONTENTS

Page 3 • PRESIDENT'S MESSAGE

Page 5 • ANNOUNCEMENTS

Page 7 • SURVEYING IN A POST-IRON BAR
LANDSCAPE
by: Geno G. Ferrero, P.L.S.

Page 13 • THIS NEW ATOMIC CLOCK IS SO
EXACT, IT COULD BE USED TO
DETECT DARK MATTER
by: Deborah Netburn, Las Angeles Times

Page 14 • REMEMBRANCE OF
DICK R. GRIFFIN

Page 15 • THOUGHTS ON PROFESSIONAL
PRACTICE AND EDUCATION
ARTICLE 11: COMMON PRACTICAL DEFICIENCIES IN
STUDENT EDUCATION
by: Knud E. Hermansen, P.L.S., P.E., Ph.D., Esq.

2025 PLSW SUSTAINING MEMBERS

- Jennifer Dibona - That CAD Girl
- Jason Dysthe - Frontier Precision Inc.
- John Baffert - Surv-KAP, LLC
- Kelly Goff - Underground Consulting Solutions
- Susan Hall - Trimble
- Tim Klaben - Berntsen International Inc.
- Troy Langston - Monsen Engineering

Advertising Information

Digital-ready, full-color advertising with payment should be mailed to Lines & Points, P.O. Box 8, Cheyenne, WY 82003.

Advertising rates are as follows:	Year	Issue
Full Page	\$810	\$210
Half Page	\$540	\$140
Quarter Page	\$310	\$80
Business Card	\$40	\$10
Employment	Free	Free

Special Rates apply for PLSW Chapters and cover placements.

For more information please contact Jack Studley.

PLSW (Professional Land Surveyors of Wyoming; PO Box 8, Cheyenne, WY 82003) is a statewide organization of Land Surveyors registered 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).

Lines and Points is published by the Professional Land Surveyors of Wyoming. Lines and Points is not copyrighted and permission is hereby granted to reprint articles with appropriate credit. The Professional Land Surveyors of Wyoming assume no responsibility for statements made or opinions expressed in this publication. The articles and opinions as put forth in this journal are not necessarily those of PLSW or the Editorial staff of this journal.

PRESIDENT'S MESSAGE

Once again, the summer has come and gone in the blink of an eye. I had just written the last President's Message a few weeks ago for July and now it is October. Hope your summer was great and I hope that the smoke from all the fires have finally cleared. I love/hate this time of the year in that contractors still want us to do lots of work, and half of our staff are gone hunting or will be going hunting. Come on snow!

This summer I have been truly blessed to survey in some great areas around Wyoming. We have also been working hard to bring this group great Fall Tech classes that are in Casper on October 29th and 30th. Please continue to spend time learning more about our profession and please get involved. We continue to see less and less folks stepping up to serve on boards like PLSW and less folks reaching out to the younger generation to show them what cool toys we get to work with (and also teach them a little about geometry and following the path of the original surveyor).



I leave you with another fun corner I found in Bangkok, Thailand last year. I found this corner just walking down the street. It has been a great honor serving this group as President this year. I don't take this position lightly. I plan to help all I can in the near future to help keep moving this organization forward. I hope to see all of you at Fall Tech.

Cody A. Schatz, PE&LS

President,
Professional Land Surveyors of Wyoming.



ANNOUNCEMENTS

P.L.S.W. TECHNICAL SESSION

OCTOBER 29 & 30, 2025 • CASPER, WYOMING

GENERAL INFORMATION

PRE-REGISTRATION:

FEE: \$150 PLSW Members
\$100 PLSW Affiliate Members
\$225 Non-Members

A \$20 late registration fee will be added to all registrations received after October 20, 2025.

AGENDA

October 29th

7^{am} - 8^{am} Registration
8^{am} - 12^{pm} Seminar
12^{pm} - 1^{pm} Luncheon &
Annual PLSW Meeting
1^{pm} - 5^{pm} Seminar
5^{pm} - 9^{pm} Social Hour

October 30th

7^{am} - 7:45^{am} Breakfast Buffet
8^{am} - 12^{pm} Seminar

Power, Water and Sewer – Understanding Utility Easements.

This course focuses on easements “in gross” associated with municipal and regional utilities. Topics include exclusive vs. non-exclusive rights; overburden and “piggybacking” of additional easements within an existing easement; apportionment of exclusive rights; discovery rule for underground utilities. (4 hours)

Know When to Hold ‘em and Other Procedural Pitfalls.

At the core of our profession is the boundary monument; most retracement disputes involve a choice to hold an existing monument, set a new monument, or choose between several existing monuments. This seminar is an in-depth discussion of basic theories and specific principles that form the basis of this critical decision, including the rules of construction, variations associated with riparian boundaries, and problems associated with ‘office surveys.’ Standards of research and a segment on modern survey retracement is included. (8 hrs.).

LOCATION AND LODING

A block of rooms has been reserved at the Ramkota Hotel & Conference Center, 800 N. Poplar Street, Casper, Wyoming.

Telephone: 307-266-6000

PROFESSIONAL DEVELOPMENT HOURS

12 Professional Development Hours will be awarded for the entire seminar.

FOR MORE INFORMATION, CONTACT:

Paul Svenson 307-266-2524
Brad Neumiller 307-266-4346

Kristopher M. Kline

Kristopher M. Kline, president of 2Point, Inc., has a Bachelor of Science degree (class of '84) in general science from Bridgewater College in Bridgewater, Va. He has been involved in the surveying profession since graduation.

Licensed in North Carolina in 1991, Kris is a 1999 graduate of the North Carolina Society of Surveyors (N.C.S.S.) Institute, a three-year continuing education program that for many years drew national attention for the quality of its curriculum and instructors. Kris chaired the N.C.S.S. Education Committee for three years.

In 2003, Kris began offering continuing education courses in North Carolina. Since 2010, his teaching career has expanded to include conferences and seminars nationwide, with customized presentations in over 40 states. Course offerings now include a broad range of topics, including adverse possession and other unwritten rights, riparian law, mineral rights, and courtroom preparation.

In August 2013, Kris published his first book, “Rooted in Stone: the Development of Adverse Possession in 20 Eastern States and the District of Columbia.”

Subsequent books written and published by Kline include “Riparian Boundaries and Rights of Navigation,” (2015); “How to Fix a Boundary Line” (2016); and Prescriptive Easements & Related Principles (2019).

In 2023, Kris was invited to write the Second Edition of the Washington State Common Law of Surveys and Property Boundaries. This book is available through Land Surveyors Association of Washington.

LINES AND POINTS ARTICLE ROTATION SUBMISSION SCHEDULE BY CHAPTER

Responsible Chapter	First Call Date	Last Call Date	Publication Date
Southwest Chapter	THANK YOU! (see “Surveying in a Post-Iron Bar Landscape” in this Issue)		
Northeast Chapter	December 1	December 15, 2025	January 1, 2026
Northwest Chapter	March 1	March 15	April 1, 2026
West Chapter	June 1	June 15	July 1, 2026
Central Chapter	September 1	September 15	October 1, 2026
South Chapter	December 1	December 15	January 1, 2027

Board of Directors discussed, any four page article (with pictures) may be from within the particular chapter membership (survey stories, or technical experiences) or after acquiring permission to use an article from another professional society publication or which provides information of interest to the PLSW members. The Board also approved assigning the responsibility for the article development and submission to each chapter’s vice president. If a Chapter does not provide an article that same Chapter shall be obligated to provide an article for the next publish date.



HINTS TO AUTHORS

Dear Readers:

The editors of Lines & Points wish to convey our gratitude to the numerous authors who have contributed photographs, technical and professional articles, and other information to be incorporated into the quarterly journal. In recent years, the assembly and redaction of the submitted materials has taken on considerable technical application of the various English language compilers, office suites, and "publishing suites". This means that the communication and transfer of information and materials arrive at the editors' desktops in a multitude of formats and styles, which sometimes are not compatible with the PLSW personal computers.

We, the editors, are setting forth some simple rules for submitting materials which, hopefully will simplify your efforts and make the transition to the published version simpler and less time consuming.

1. If you have any questions or comments, please contact S. Dennis Dawson, Publications Comm. Chm., (dennieandbarb@gmail.com) or Michael A. Flaim, Editor-in-Chief (mike.flaim@bresnan.net).

2. If an article contains any illustrations, photographs, graphs, or other graphics, please transmit them as separate individual files. You may also include the illustrations within your manuscript, but the image integrity/quality is degraded seriously when attempting to extract them from the manuscript to create a published digital image. The Editor-in-Chief states that a much better digital resolution is obtained from the separate, individual illustrations submitted.

3. All submissions (electronic and snail mail) should be sent to S. Dennis Dawson (4005 Snyder Avenue; Cheyenne 82001). It is recommended a second copy be sent to Michael A Flaim (1212 Southwest Drive; Cheyenne 82007). It is further recommended a third copy be sent to Dr. Herbert W. Stoughton (2821 Carey Avenue; Cheyenne 82001). Dr. Stoughton has spent over two decades as a technical review editor of two national surveying journals, and will provide editorial/redactory review for grammatical presentation and punctuation format. The criteria for acceptable conformity to grammatical usage and punctuation shall be governed by the U.S. Government Printing Office Style Manual (any edition is acceptable).

4. It is strongly recommended that all submissions be transmitted six weeks prior to the publication deadline. The publication deadlines are: 1 January; 1 April; 1 July; and 1 October, annually.

5. Lines & Points is the official publication for the Professional Land Surveyors of Wyoming. Therefore, hence forth there will be incorporated in the publication all formal announcements pertaining to official business of the organization and other announcements. This includes announcements for the Annual Meeting; state-wide membership meetings; seminars; and the Fall Technical Session. These announcements are to be submitted to the current PLSW Secretary/Treasurer (PLSW; P.O. Box No. 8; Cheyenne 82003), at least four weeks prior to the *Lines & Points* publication deadline in which the announcement will/shall appear. The PLSW Secretary/Treasurer will circulate the announcements to the PLWS Publication Comm. Chm./Chief Editor, and the PLSW Board of Directors.

6. Advertisers and prospective advertisers should communicate directly with the Publications Secretary (P.O. Box No. 8; Cheyenne 82003) about any advertisements and modifications.

FUNDAMENTALS OF SURVEYING: EXAM STUDY COURSE

**ORDER
TODAY**
WFPS.ORG

Over 16 hours of videos
and manual
Member Price - \$199

Topics included are based on the current NCEES Fundamentals of Surveying (FS) exam specifications and recommended knowledge.

Presenters: Dane Courville, PLS and Knud Hermansen, PLS, PE, Ph.D.

SURVEYING IN A POST-IRON BAR LANDSCAPE

by: Geno G. Ferrero, PLS

Introduction

The legal dispute over corner crossing in Wyoming has reignited national attention on the structural complexities of land access within the Public Land Survey System (PLSS). This framework underpins land ownership, cadastral mapping, and boundary resolution across most of the western United States.

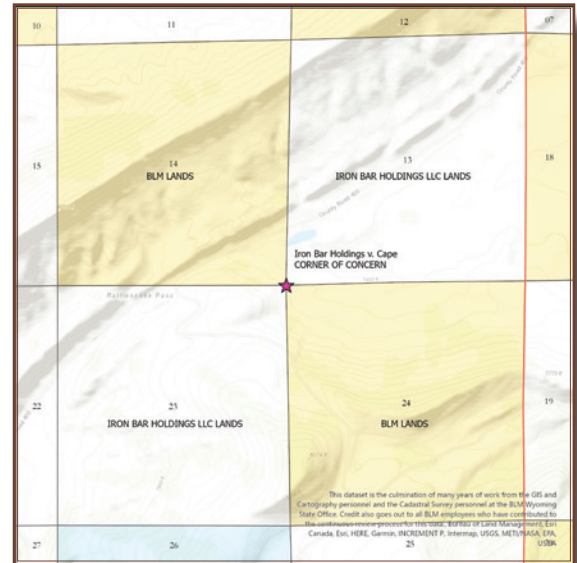
Where federal land grants to railroads created alternating patterns of public and private ownership, checkerboard configurations often leave public land parcels accessible only at shared corners with private land, creating legal ambiguity around physical access. The practice of “corner crossing”—stepping from one public parcel to another at a shared corner without touching private land—has long been contested by affected private owners.

The Wyoming Corner Crossing Controversy

In 2021, four hunters from Missouri used GPS mapping tools and an A-frame ladder to cross corners between public parcels in Carbon County, Wyoming where the landowner had posted “No Trespassing” signs and installed short chains across the corners to deter access. Although the entrants never physically touched private land, they were charged with criminal trespass.

This incident escalated into a federal legal battle that tested the concept of airspace ownership, access rights, and the role of federal law in regulating public lands.

Iron Bar Holdings, LLC—a private landowner in Carbon County—filed a civil lawsuit against the hunters, seeking \$9 million in damages. The central claim was that the hunters violated Iron Bar’s airspace rights, arguing that even though they didn’t touch the ground, their movement through the vertical column of airspace constituted trespass¹. The hunters countered with a federal defense under the Unlawful Inclosures Act of 1885 (UIA), asserting that Iron Bar’s chains and signage unlawfully obstructed access to public land².



Court Rulings

In May 2023, the U.S. District Court for the District of Wyoming granted summary judgment in favor of the hunters. The court found:

- No physical entry onto private land
- No damage caused
- Iron Bar's barriers constituted an unlawful enclosure under the UIA²

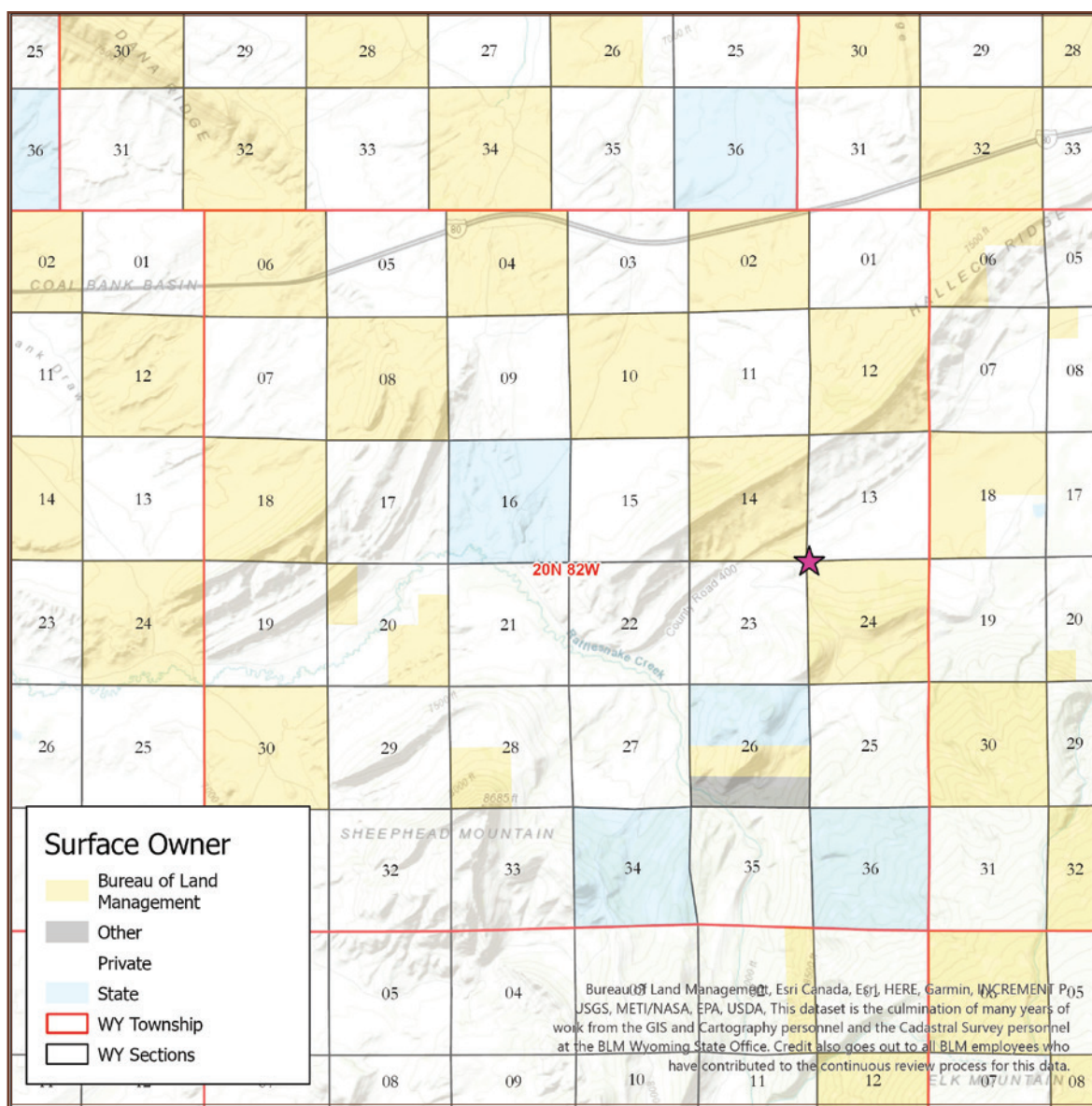
On appeal, in March 2025, the 10th Circuit Court of Appeals upheld the ruling, emphasizing that:

- Federal law preempts state-level airspace exclusion claims
- The UIA prohibits any action that obstructs free passage across public lands
- Corner crossing is lawful under federal law as long as there is no physical contact with private land¹

This decision sets precedent across six states: Wyoming, Colorado, Utah, New Mexico, Oklahoma, and Kansas. As of August 2025, a petition to the U.S. Supreme Court remains pending.

Why the Ruling Applies Only to Checkerboarded Ownership

While the Iron Bar ruling is a landmark for public access, its scope is narrow and specific. It applies only to checkerboarded land configurations—those created by alternating public and private parcels, typically stemming from 19th-century railroad land grants.



In these regions:

- Public land is often landlocked, accessible only at shared corners with private parcels
- The PLSS layout creates four-way intersections where two public and two private parcels meet
- Corner crossing becomes the only feasible method to reach public land without trespassing

The court's reasoning was anchored in this geometry. It did not create a general right to cross private land or airspace elsewhere. The ruling applies only where:

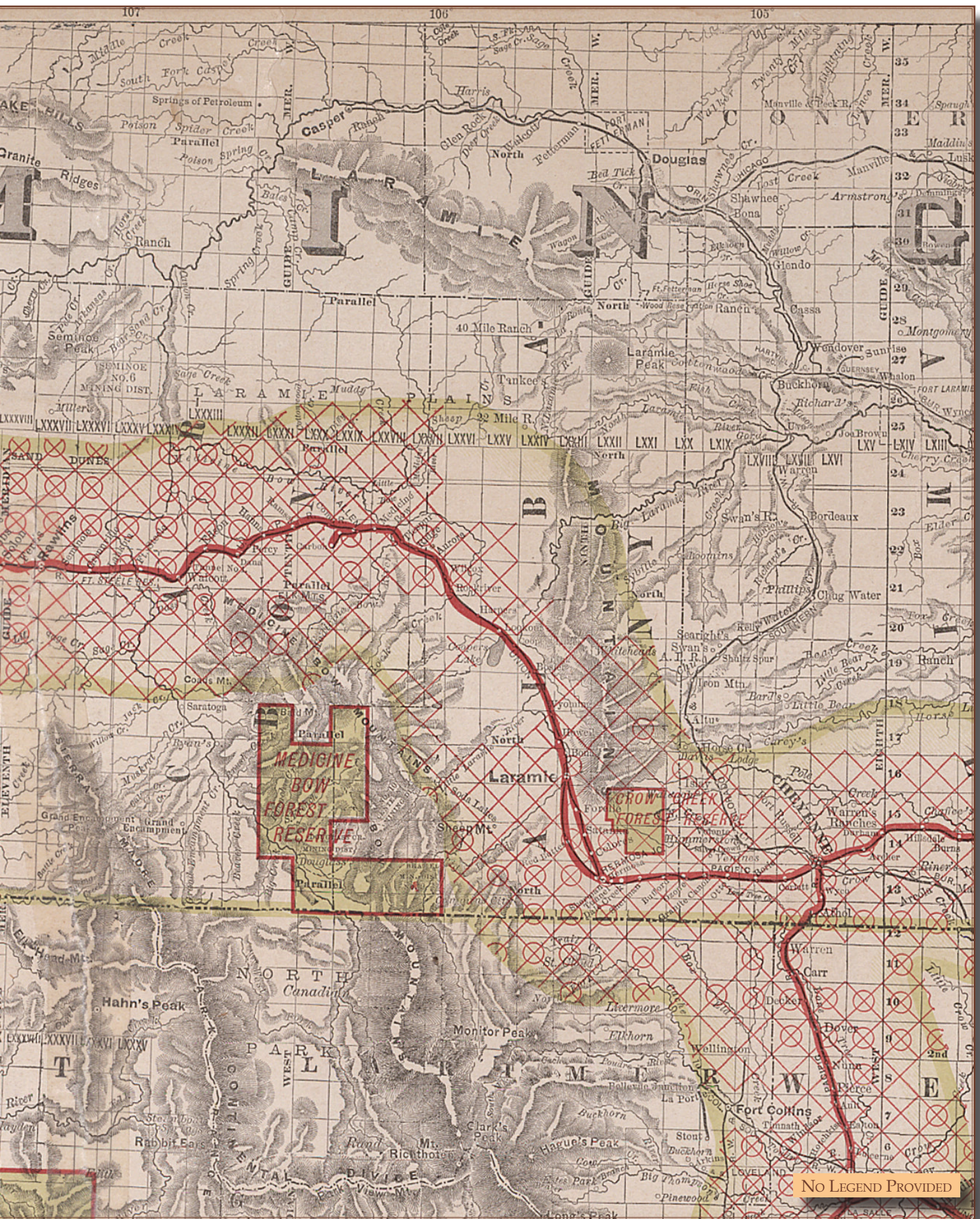
- Public parcels touch at corners
- No other legal access exists
- The crossing involves no physical contact with private land

Importantly, the ruling applies to any member of the public as long as they remain entirely on public land and do not physically contact or damage private property¹.

Surveyors must recognize that this decision does not authorize access across all private land boundaries, but only at the corners in checkerboarded ownership.

The court found that Iron Bar's chains and posted signs constituted an unlawful enclosure under §1063, and that the hunters' corner crossing did not violate any federal statute². This interpretation reinforces the Unlawful Inclosures Act's original intent: to ensure that public land remains accessible, even in complex ownership mosaics like Wyoming's checkerboarded ownership.





Wyoming Draft Bill 26LSO-0118 - Corner Crossing Clarification

On August 20, 2025 The State Travel, Recreation, Wildlife, and Cultural Resources Committee met in Casper to discuss 26LSO-0118 and narrowly voted to advance the bill.

The bill was presented by State Deputy Legal Administrator Brian Fuller and adds subsection (d) to State Statute 6-3-303 Criminal trespass; penalties and subsection (b) to 23-3-305 Hunting from highway; entering or traveling through private property without permission; penalty; hunting at night without permission prohibited.

Subsection (b) states *"For purposes of this section, a person does not commit criminal trespass if the person is traveling from one (1) parcel of land owned by a local government, the state of Wyoming or the federal government that the person is authorized to access to another parcel of land owned by a local government, the state of Wyoming or federal government that the person is authorized to access at the corner where the two (2) parcels meet and without causing damage to any privately owned land adjacent to the two (2) parcels."*

No additional draft bill updates were available at time of publication.

Conclusion

The Iron Bar ruling is not a blanket permission slip. It affirms that corner crossing to reach public land is lawful, so long as no private surface is touched or damaged. Surveyors should avoid assumptions, document monumentation rigorously, and seek permission when working near private boundaries—even if the work is adjacent to public land.

Corner Crossing—What It Is and What It Isn't Per Iron Bar Holdings v. Cape

What It Is (Legally Permitted Under Federal Law)

1. Corner crossing on public land without touching private land
2. Occupying the private land's airspace momentarily (without touching the surface)
3. Corner crossing is protected by the Unlawful Inclusions Act (UIA)
4. Public right to a reasonable way of passage through checkerboard ownership

SURV-KAP[®]

THE LANDMARK NAME IN SURVEY PRODUCTS
Exceptional Customer Service

- REBAR & PIPE CAPS
- CONCRETE MARKERS
- SURVEY MONUMENTS
- SECTIONAL ROD MONUMENTS
- ACCESS COVERS
- WASHERS & NAILS
- SUBSURFACE MAGNETICS
- STAMPING TOOLS
- SURVEY TOOLS & ACCESSORIES

CALL OR ORDER ONLINE!

520-622-6011 • 800-445-5320 • FAX 520-792-2030 • SURV-KAP.COM

What It Isn't (Still Prohibited or Outside the Ruling's Scope)

1. Blocking corner crossing with barriers or obstructions that prevent access
2. Asserting airspace-based trespass when surface rights aren't impacted
3. Using state trespass laws to override federal access rights, state trespass doctrines are preempted by the UIA

Disclaimer:

This article was written by surveyors for surveyors, with the goal of sharing practical insights and professional experiences. It is intended for informational and educational purposes only and does not constitute legal advice. Readers should consult a qualified attorney for guidance on specific legal matters or statutory interpretation.

Laws and regulations may change over time; readers are encouraged to verify current statutes and legal requirements before making decisions based on this content.

Works Cited

¹ Iron Bar Holdings, LLC v. Cape, No. 23-8043, 10th Cir. (2025).
Tenth Circuit Court of Appeals Published Opinion.
<https://www.ca10.uscourts.gov/opinion/23-8043>

² Unlawful Inclosures Act of 1885, 43 U.S.C. §§ 1061-1066.
U.S. Code via House.gov.
<https://uscode.house.gov/view.xhtml?path=/prelim@title43/chapter25&edition=prelim>

³ Wyoming Statute § 6-3-303 (2024) – Criminal Trespass.
<https://law.justia.com/codes/wyoming/title-6/chapter-3/article-3/section-6-3-303/>

⁴ Wyoming Statute § 40-27-101 (2024) – Civil Liability for Unlawful Collection of Resource Data.
<https://law.justia.com/codes/wyoming/title-40/chapter-27/section-40-27-101/>

⁵ Petition for Writ of Certiorari, Iron Bar Holdings, LLC v. Cape, No. 25-64, U.S. Supreme Court (2025).
https://www.supremecourt.gov/docketPDF/25/25-64/365369/20250716145424672_No.-__Petition%20for%20a%20Writ%20of%20Certiorari.pdf

Satchel Dauphine. CC_Map [Map]. Scale not given. Rock Springs, WY: JFC Engineers & Surveyors, 2025

Satchel Dauphine. CC_Map_Overview [Map]. Scale not given. Rock Springs, WY: JFC Engineers & Surveyors, 2025

Rand, McNally & Co. Union Pacific Land Grant Map of Wyoming [Map]. Scale not given. Rand, McNally & Co., 1901 – Portion of used under “fair use” guidelines as outlined in U.S. Copyright Law, Section 107

ATTENTION! **SAFETY MANUAL FOR SURVEYORS**



NOW AVAILABLE FROM THE SW CHAPTER
OF PROFESSIONAL LAND SURVEYORS OF
WYOMING

COMPREHENSIVE, AFFORDABLE, ADAPTABLE!
Special Offer - Only \$50 + \$2 SHIPPING!

CD CONTAINS ENTIRE 206 PAGE MANUAL IN BOTH
“WORD” AND ADOBE “.pdf” FORMATS THAT CAN BE
EDITED AND ADAPTED FOR YOUR PARTICULAR USE

Contact Secretary/Treasurer: Olian T. Shockley
Olian_Shockley@msn.com or phone 307-875-0146

SCHERBEL ON SURVEYING



**A compilation of parts of the
WYOMING STATUTES
and other items of interest to
PROFESSIONAL LAND SURVEYORS**
Order from SURVEYOR SCHERBEL, LTD.

307-276-3347

**Currently available in digital format only
for a cost of \$40.
Revised and updated biennially.**

(Previously printed in *Lines & Points* - July, 2019)

This New Atomic Clock Is So Exact, It Could Be Used to Detect Dark Matter

Deborah Netburn, Los Angeles Times

Scientists have invented a new clock that keeps time more precisely than any that have come before. The clock is so accurate that it will not gain or lose more than one second in 14 billion years - roughly the age of the cosmos. Its ticking rate is so stable that it varies by only 0.0000 0000 0000 0000 32 percent over the course of a single day (86,400 seconds).

That level of exactitude is not really necessary for those of us who rely on clocks to get us a doctor's appointment on time, or to know when to meet up with friends.

But keeping time is just the beginning. The new clock is so exact that it could be used to detect dark matter, measure the gravitational waves that ripple across the universe, and determine the exact shape of the Earth's gravitational field with unprecedented precision.

Indeed, these hyper-accurate clocks can help scientists better probe the mysteries of the cosmos, experts said.

"It turns out that if you have all these digits of precision for making a measurement, it can give you a microscope onto our very universe," said physicist Andrew Ludlow of the National Institute of Standards and Technology [NIST, formerly the National Bureau of Standards] in Boulder, Colorado. Ludlow led the work that produced the new clock, which was described this week in the journal *Nature*.


Since the 1960s, time has been measured by so-called atomic clocks that use the natural oscillations of a cesium atom as a pendulum. Think of it as a watch with a hand that ticks just over 9 billion times per second.

The optical lattice clock Ludlow and his colleagues developed measures the much faster oscillations of a ytterbium atom. Its atomic pendulum swings about 10,000 times faster, at a speed of 500 trillion times per second.

"Cesium is a beautiful atomic system, but we have reached the basic limits of how good it can be," Ludlow said. "Ytterbium can break down time into much finer intervals, enhancing the precision with which you can measure it."

Optical lattice clocks have been around for only 15 years, and they are still in the development stage, Ludlow said. Scientists continue to tinker with them, gradually increasing their accuracy with each new adjustment.

Most of the improvements in the latest iteration are due to a new heat shield that Ludlow's group developed a few years ago. It protects the ytterbium atoms from the effects of heat and electric fields, which can interfere with their natural oscillations.



don't let cad
drive you mad!

That CAD Girl

jennifer dibona
jennifer@thatcadgirl.com
www.thatcadgirl.com
(919) 417-8351

Carlson
AUTHORIZED DEALER
CERTIFIED TRAINING CENTER

Carlson Software
Sales, Support & Training

Office and field software for land surveying, civil design and construction professionals



SURVEY SUPPLY SERVICE COMPANY

MANUFACTURER CUSTOM
SURVEY STAKES, LATH, & BRASS CAPS
FLAGGING - PIN FLAGS - FLUORESCENT PAINT

ROB SHOOK
P.O. Box 51227
Casper, WY 82605-1227
307-234-9856

COMPLETE FIELD SUPPLIES SINCE 1969



Sundance

Unmanned Aerial Systems

UAV mapping services for oil and gas, construction planning, inspection and progress mapping

High resolution orthophotos and digital elevation maps

UAV flight and software training

 **Dave Spurlock**
307-330-7777
survey@wyoming.com



Dick R. Griffin

Dick R. Griffin, 84, passed away peacefully at his home in Hernando, Fla., surrounded by family on January 28, 2025.

Born on June 26, 1940, in Madill, Oklahoma Dick grew up in Marshall County before embarking on a career as a land surveyor. Dick was a lifelong land surveyor, spending much of his career in the oil and gas fields. One of his proudest achievements was his work for many years in Alaska during the 1970s, where he played a key role in surveying for the construction of the famous Trans-Alaska Pipeline.

His work then took him across the United States, but in 1978, he settled in Rock Springs, Wyoming, where he founded D.R. Griffin & Associates, a reputable land surveying and engineering firm that continues to operate under his name today. In 2000, after selling the company, Dick and his wife Claudia, retired to Madill. In 2020 and later relocated to Hernando, Florida, to be near their daughter, Tracy.

Dick and his wife, Claudia, shared a long life together, having four children while living in Oklahoma, New Mexico, Alaska, Wyoming and Florida though Madill was always home where they remain members of the Oakview Baptist Church in Oakland. Dick was preceded in death by his children, Stephanie, Robert and Stephen; and brother, Danny Griffin.

Dick is survived by his wife, Claudia, daughter Tracy (Griffin) Edgmon of Hernando, Florida, grandchildren, Cory Griffin of Dallas, Texas, Shannon Guffey of Rock Springs, Colby Griffin of Rock Springs, Robbie Edgmon of Orlando, Florida and Jennifer Nelson of Sleepy Hollow, New York; great-grandchildren Parker Nelson of Sleepy Hollow, NY, Ashlynn, Autumn, and Enslee Guffey of Rock Springs and brother Brian Griffin of Gillette, Wyoming. Dick's legacy of hard work, dedication, generosity and sharp sense of humor were his inherent nature. His passing is mourned by many nieces, nephews, cousins, friends and colleagues whose lives he touched. He will be deeply missed.

"Journeys: One Individual's Excursions into the Surveying and Mapping Professions: Volume I"

by Herbert W. Stoughton

Price: \$30.00 (includes S&H)

Proceeds from the sale will be invested in
the PLSW Scholarship fund.

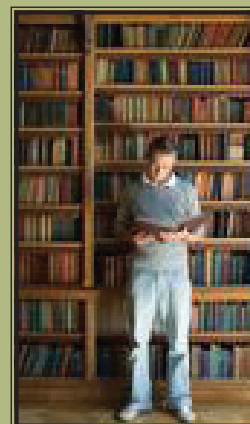
Send orders to:

2821 Carey Avenue, Cheyenne, WY 82001

APPLY NOW FOR A PLSW SCHOLARSHIP

If you are attending
college with the intent of
pursuing a career in Land
Surveying in Wyoming,
we want to give you
money!

A Scholarship Application
is available on our website
<http://www.plsw.org>



Thoughts on Professional Practice and Education

Article 11: Common Practical Deficiencies in Student Education

by: Knud E. Hermansen, P.L.S., P.E., Ph.D., Esq. [†]

This is the eleventh article I have prepared in the series of articles offering thoughts on professional practice and education. In this article I am going to explain what I believe to be common deficiencies in student education from the perspective of the professional practitioner.

I offer this perspective from teaching surveying for over thirty years in four different universities and practicing surveying for over fifty years.

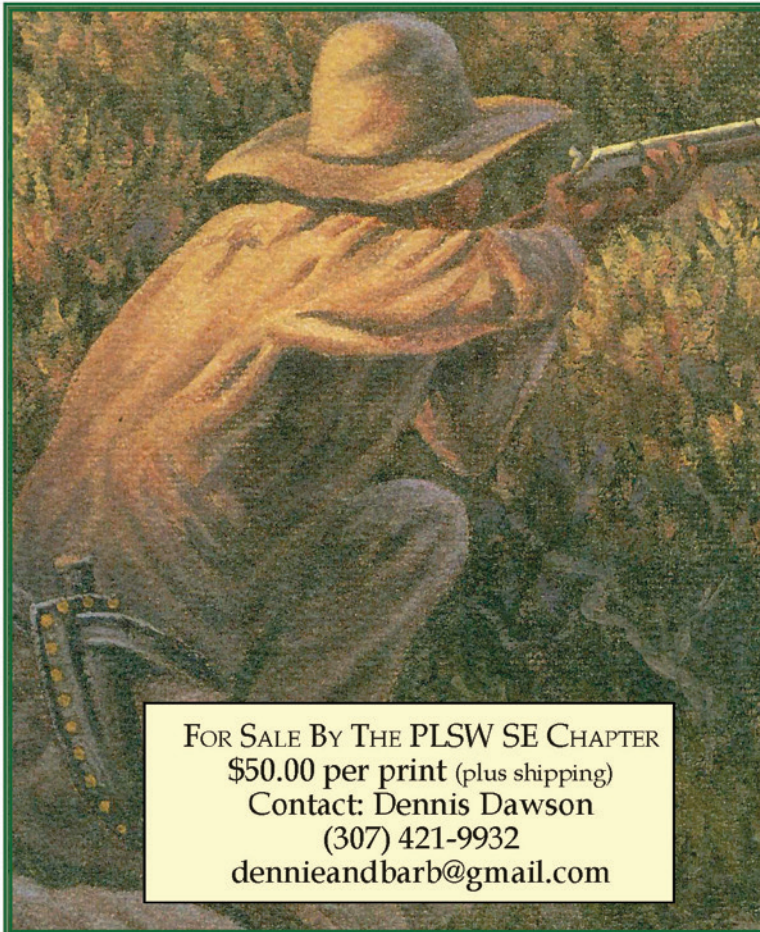
Of course, I will acknowledge from the outset that individual students often suffer from one or more deficiencies in their knowledge despite the best efforts of the faculty. Also, there are programs that have unique deficiencies brought about by faculty deficiencies or program deficiencies. This article will focus on deficiencies found across the many survey programs found in the United States. I should also state there are individual programs that don't suffer from the deficiencies

I will discuss because of the efforts of faculty in the program. I will exclude a discussion on one common deficiency that I have already written about – business and management knowledge.

The most common deficiency that will be the focus of this article is communication skills. Communication skills involve e-mails, reports, correspondence, public speaking, and CAD. Within each one of the methods of communication are numerous facets that could be explored.

I must acknowledge before continuing that this is the eleventh article I have written on practice and education. For those that have read my earlier articles, articles on my web site, or even read my fictional books, I am clearly not the source to expound on writing perfection. With my mea culpa on record, I continue.


The form of communication that a student has the most experience is often the area the student



**GRENVILLE DODGE AND PARTY
AT THE GANGPLANK**

A signed and numbered reprint of Dave Paulley's original oil painting of UPRR's survey party finding a route over the Laramie Mountains.

FOR SALE BY THE PLSW SE CHAPTER
\$50.00 per print (plus shipping)
Contact: Dennis Dawson
(307) 421-9932
dennieandbarb@gmail.com



is most deficient. I am referring to e-mail and digital messages. It is discouraging to receive an e-mail from a senior or graduate that begins a formal e-mail with the salutation of 'hey' or fails to include an adequate subject line that a business needs to triage emails.

The typical student's experience with digital communication seems to be composed of continuous repetition of bad habits. The student and recent graduate have failed to shift their focus from e-mails, tweets, and twitters composing electronic messages that seems to be the center of their life to a business e-mail read by the employer or client. As an employee they should realize that continuous quips during working hours from friends and family are a frustrating distraction that is inappropriate to continue as an employee during working hours, in a business environment.

Unfortunately, surveying programs have not been able to improve the communication skills of students using university resources. Many universities lack courses that teach business communications. All universities abound in courses on poetry, fictional writing, grant writing, persuasive writing, or technical

writing. The last course is more appropriate to an engineer reporting engineering test results. The technical writing course has little relevancy to a surveyor reporting on a boundary location. Writing courses taught by English faculty that have no experience in business and in many cases have never worked outside of a university environment, perhaps majored in literature, poetry, medieval writing, or such in graduate school, cannot be expected to teach the necessary writing and communication skills needed by surveying graduates practicing surveying.

The next deficiency of college graduates involving communicating is public speaking. Surveyors that have practiced for years know the value of public speaking. Public speaking courses offer a good start but fall short of educating the student on the public speaking a surveyor most often encounters. I need not elaborate what many of you reading this article experience when speaking at planning board meetings filled with a crowd opposed to a client's development, testifying as an expert witness, or coordinating a business meeting involving a multi-discipline project.



■ Digital Aerial Photography ■ LIDAR ■ Mobile Mapping
■ Topographic Mapping ■ Orthorectified Imagery



40 West Oakland Avenue, Salt Lake City, UT 84115 · **PHONE:** 801-487-3273 · **FAX:** 801-487-3313

CAD is another deficiency often found in surveying and engineering students that has surprised me. Diagraming, platting, and plans should be one form of communication that surveying students excel yet I often must resort to first threatening then later removing numerous points for a student's repeated failure to use a diagram that would immensely clarify their communications.

Having given my opinion, I now offer advice by suggesting surveying faculty take it upon themselves to instruct students on communication deficiencies that continue to exist after the student has taken numerous writing and speech courses. Request letters of transmittals with assignments. CAD should be taught sooner rather than later in the surveying program. I believe six credits of CAD to be a minimum for a surveying student. Require diagrams with every assignment that would benefit by inserting a diagram into an assignment response.

I would and probably should end this article at this point but for one more item I must mention. In reviewing the article, I see that I have failed to create much fodder for controversy. To write an

article without generating some controversy is unimaginable. Allow me to do so now.

I have noticed one concerted university effort at teaching communication to students that I must admit I roll my eyes in mystification. There are so many avenues of guidance that can be given to improve communication that are ignored. So, I must ask, why is it necessary to encourage, on a formal sign-off, what pronoun the writer wishes to associate with themselves when it is otherwise obvious. For example, if a person signs off as "Nancy" why would I ever begin to think I should address 'Nancy' using some other pronoun than as a she or her? If a 'Harry' wishes to be addressed as a she/her pronoun, I almost get the point. Perhaps I am not sensitive enough to evolving social norms. I do know that if I could change social norms I would focus on tv newscasters that show the picture of a person clearly dressed in a Marine uniform and then in a display of gross incompetence and insensitivity to thousands of Marines refer to that person as a soldier.

† Other books and articles by Knud can be found at <https://umaine.edu/svt/faculty/hermansen-articles/>

Custom Survey Markers & Monuments • Signs & Witness Posts • Flagging & Targets • Nails & Washers

SURVEY MARKING

Custom Survey Markers & Monuments • Signs & Witness Posts • Flagging & Targets • Nails & Washers

Berntsen®
Marking the Infrastructure of the World™

877-686-8561 | www.berntsen.com



Combining innovative technology with intuitive functionality, the Trimble® SX12 scanning total station saves time and maximizes efficiency. The SX12 collects high-quality, high-speed scan data, providing detailed site context in a seamless workflow that enables informed and faster project-based decisions.

Want more information? Contact:

Jason Dysthe, Geospatial Sales Representative
 jasond@frontierprecision.com
 720.214.3500 | 800.652.1522 [Toll Free]

Frontier Precision
 5480 West 60th Avenue, Unit A
 Arvada, CO 80003



Trimble
 Authorized Distribution Partner

TRIMBLE SX12

SCANNING TOTAL STATION

THE INDUSTRY'S MOST INNOVATIVE
 SOLUTION FOR SURVEYING, ENGINEERING,
 AND SCANNING PROFESSIONALS.

PRODUCTS | TRAINING | REPAIR
 RENTALS | TECHNICAL SERVICES

LEARN MORE www.frontierprecision.com/product/trimble-sx12-scanning-total-station

LINES AND POINTS

P.O. BOX 8

CHEYENNE, WY 82003

PRSRT STD
U.S. POSTAGE
PAID
PBR PRINTING

<<endorse>> <<ctn_no>> <<pkg_no_ctn>> <<pst_seq>>

<<name>>

<<address>>

<<address2>>

<<city>> <<state>> <<zip>>



Please Recycle

SURVEY | ENGINEERING | PLANNING | NATURAL RESOURCE SERVICES
y2consultants.com 307 733 2999 offices in Jackson, Cheyenne, and Pinedale

Y2

CONSULTANTS

LAND SURVEYING

Boundary/Property Lines

Existing Conditions Surveys

ALTA/NSPS Surveys

Route Surveying

Topographic Mapping

FEMA Elevation Certificates

Certificates of Placement

As-Built Surveys/Drawings

Subdivision/Condominium Plats

Improvement Location Surveys

Trail, Wetland, Resource Mapping

Water Rights Permitting

Construction Staking

Legal Descriptions

Survey Control for Aerial Photos

GIS & MAPPING

Web/App-based Mapping

Topographic Modeling

Spatial Analysis

Large-scale GeoDatabase Mgmt

Aerial Imagery - Current/Historic

Slope/Aspect Data Analysis

define design deliver

(Y2 Consultants merged with Western Research & Development in 2020)