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Deadline Dates
Deadline dates for submission of articles to ensure printing are as follows:
February 15th, June 1st, September 1st, and November 15th.
Advertising deadline dates to ensure printing are as follows: February 1st, May 15th, August 15th, and November 1st.

Disclaimer
Opinions expressed by the editor or individual writers are not necessarily endorsed by the Council of the Alberta Land Surveyors’ Association.

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ALS News is produced quarterly for circulation to the members of the Alberta Land Surveyors’ Association and is available online at www.alsa.ab.ca.
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History

Moment of Silence
The Best Just Got Better.
Least Squares Adjustment Software

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The Association of New Brunswick Land Surveyors, 65th Annual Meeting

MIKE FRETWELL, ALS

Held in Saint John, the 2018 ANBLS Annual General Meeting ran from January 18 through 20, with the Presidents’ Forum on the 17th. President David Parkhill and his partner, Beth Dixon, proved to be wonderful hosts yet again, leading to a very successful and interesting event.

The first day consisted of a number of mandatory continuing education seminars, once again emphasizing how the concerns, issues and interests of one jurisdiction are appropriate to all.

The first MCE seminar, presented by Director of Surveys, Joey Chessie was on field notes. In addition to speaking of the need for clarity and completeness when capturing field notes, Joey spoke to a number of relevant court cases that reflect their importance in litigation. He went on to address digital field notes, in the context of existing standards, noting that standards must be updated to reflect digital reality, thereby enabling practitioners to take full and appropriate advantage of technology.

He expressed concern over digital permanency, particularly in light of the need for the information to live in perpetuity. This should be a consideration for any records that are to be held for extended periods, particularly when long-term support cannot be guaranteed. We can all experience the dilution of quality due to expediency by simply comparing DLS field notes on SPIN to those held at the Provincial Archives of Alberta.

Scheduled presenter Mark Sampson was unable to attend due to weather, so Tania Bigstone, CLS stepped up to the plate, providing a presentation on First Nations Land Management issues.

University of New Brunswick student, Justin Collett, introduced the National Geomatics Competition (NGC)¹. The first ever NGC was scheduled to run from February 16 to 18, and brings undergraduate geomatics students from schools across Canada together to compete in a consultation style competition. Teams from both the University of Calgary and SAIT are participating.

Dr. Yun Zhang, from the University of New Brunswick, presented EarthView3D² technology which he and his team have been developing since 2005. EarthView3D enabled the generation of stereoscopic 3D satellite imagery and maps which cover the entire globe. The content can be viewed using 3D glasses or, impressively, using glasses-free smartphones and tablets.

¹ http://www.nationalgeomaticscomp.ca
² (Canada Research Chair in Advanced Geomatics Image Processing n.d.) www.EarthView.org

The federal governments evolving strategy for Canada’s positioning, timing and navigation (PTN) needs was introduced by lead Dr. Jason Bond. Approximately 75% of our critical infrastructure relies upon GNSS PTN information. This dependency without fallback poses significant risk, which this new strategy is intended to address. A component of this strategy is to promote installation of additional GNSS augmentation infrastructure with an ambition of providing correction services coast-to-coast-to-coast. The Canadian Positioning Needs Survey recently circulated in our Friday email will help to inform the government’s strategic investment policy; hopefully all active members participated in this survey.

Business meetings started the following day and covered much ground. President Dave presented brief biographies of recently passed members, Val Stewart and Don Elmore, and attendees observed a moment of silence.

Demographics continue to present a concern to current members. Sixteen members are between the ages of 56 to 60, with more than 50% of the membership older than 50. There are, however, currently nine surveyors-in-training with the ANBLS. Younger members, when asked, are confident they will be able to meet economic needs going forward. Concern with regards to declining membership numbers and aging demographics continues to be echoed in many jurisdictions and underlines the need for complete and robust cadastral education resulting in an attractive, meaningful and rewarding career.

The ANBLS expects their new act to be passed near the middle of 2018. Once this is done, bylaw updates are anticipated. President Dave is proposing that the president’s term be extended to two years. Further, there is a general desire to remove the fixed date for the AGM from the bylaws to allow more flexibility. Work is required to improve the complaints process and it is expected that the new act will result in increased costs due to the registrar of complaint position. The business meeting continued for the evening with various official and committee reports.

The afternoon began with Lara Chessie of GeoNB giving a presentation on the free LiDAR coverage available for New Brunswick through GeoNB³. Elevation models are one metre grid and include slope, aspect, shaded relief, colour relief and colour-shaded relief maps. These high value data produced by Natural Resources Canada, were made possible by New Brunswick’s open data policy and LiDAR data collection program. GeoNB demonstrates an excellent example of open data-sharing for economic enhancement.

³ http://www.nb.ca/geonb1/index-E.asp
Tania Bigstone was once again centre stage as she presented an update on the Foreign Credential Recognition initiative through CBEPS – ACLS. While this is a national initiative aimed at streamlining the process for foreign land surveyors to become qualified in Canada, it does require involvement from all jurisdictions. You will hear and read more about this later.

During the mid-afternoon election Jaret Guimond, NBLS was acclaimed president with Murdock MacAllister, NBLS becoming vice-president.

Following the election, Matt Hayes, LL.B. gave an informative presentation on the legislative review process, before the agenda switched to open forum.

President David's skill in consensus building and fostering collaboration was in evidence during open forum. The attendees were grouped around tables, with an out-of-town delegate for each table. A series of questions were put to the group as a whole, with each table to reach consensus and provide their solutions. Surprisingly, for each question each table reached virtually the same conclusion, despite some contentious issues being debated. This enabled Council to derive clear direction from all attendees on the issues brought forth.

The final day began with a presentation on "the Life of William Francis Ganong" and wrapped up with the final throws of the business meeting. At the end of the meeting, the mood in the room was decidedly positive.

Shortly after returning home, we received an email from Dave telling us that another member had volunteered to be vice president after Murdock MacAllister, stating, “we came away from the AGM with new wind in our sails.” With a two-year term being implemented, ANBLS has their leadership in line for the next six years.

Anyone who knows David Parkhill will tell you he puts his heart and soul into what he does. Kudos go to Dave for making a difference and “moving the needle.”

Barb and I look forward to working with Jaret and Nada Guimond during the remainder of our term.

**QUESTIONS?**

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**MEMBERSHIP DUES**

The annual membership fees and levies are due April 1 and are payable on or before April 30. Payment must be received or postmarked by April 30 in order to avoid a $200 late penalty fee.

It is the member’s responsibility to ensure these are paid even if their company is paying on their behalf.
I am the Council liaison for the Boundary Panel. Prior to being the liaison, I had a very basic understanding of the Boundary Panel. After working with the manager, chair and vice-chair of the Boundary Panel, my level of understanding increased dramatically. I gained some valuable insights that I would like to share with the members.

My first insight is that the Boundary Panel is just providing peer-to-peer advice to fellow land surveyors. Although the Panel may provide recommendations and an opinion, a land surveyor is still responsible for resolving the boundary problem but can do so with well thought out and well-documented advice from the Boundary Panel.

My second insight is that the Boundary Panel is very structured. They have assigned roles, a handbook, and final reports. They have a manager, Council liaison, chairman, vice-chairman, and a panel of land surveyors. There are other more specific roles within the panel of land surveyors. They work to resolve cases by sharing case files and research. The current version of the handbook is available on the ALSA website and a new version that more clearly outlines the various processes and roles and responsibilities of the different participants is in the development stages. The recommendations and opinion of the Boundary Panel is well documented in the final report and is supported by evidence and other materials resulting from the investigations and reviews by independent land surveyors.

My third insight is that the Boundary Panel provides several valuable services.

- They are providing recommendations to solve boundary problems amongst land surveyors. The Boundary Panel takes on a large case load each year and have a plan to complete new and lagging cases.
- They have information for future improvements to standards of practice. I think this is one of the areas that still requires more development. The potential learnings from this source of information are very inspiring.
- They organize active members to take over cases from former members who are not able to complete the resolution. No more cold cases.
- The services are cost effective. Members donate their time to keep costs down. The ministerial order is used to fund certain costs. The processes are effective and productive.

My fourth insight is that the volunteers put in many hours and demonstrate a high-level of skill to develop recommendations. I did not realize how many hours the volunteers contribute. I also did not realize the level of detail that is in the case files. The members may want to make their contributions quietly without praise, but I would give recognition for their effort, their contributions, and their successes. Well done.

My fifth insight is the amount of development. The Boundary Panel Manager showed me several processes that are in development and the many processes that have been developed. The list is long. I had no idea how much work was done.

BOUNDARY PANEL STATUS AND LOCATION REPORT
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Communication Goes A Long Way

BRIAN MUNDAY, Executive Director

In the last two issues, I have written in this space that we waste time and money trying to promote to the public who the land surveyor is and the benefits of hiring a land surveyor.

I have argued that none of the land survey associations in Canada could collectively ever spend enough money on public relations that would ever make the public more noticeably aware of who the land surveyor is.

I also contend that we convey mixed messages when we do try to talk to the public. Is our message about the real property report (the survey product that the public is most likely to see) or is our message about the importance of boundaries? Is our message about the land surveyor being professional and unbiased but is that message going to be heard when every other organization is essentially saying the same thing?

I do want to emphasize that I believe there is something that all of us involved in the land surveying profession can do to create a better image of the land surveyor and the profession. It won't even cost a great deal of money – but it will take your time.

Thanks to Scott Westlund for the idea for this article. He had received a phone call earlier this year from a lady concerned with the location of her fence and the development occurring on the lot next to hers. After a lengthy discussion, Scott convinced her that the best thing to do would be to contact a surveyor to have them stake the property line in the field so she could actually look at the line and see exactly where the fence is relative to the line.

She called Scott again a few days later to say that two of the three surveyors she phoned didn’t even return her call. The third surveyor quoted a price to her that seemed really high but she had no way of telling whether it was reasonable or not. Scott spoke to the third surveyor about why the price seemed to be so high and provided her with two more names of surveyors she could contact.

When Scott spoke to the third surveyor, he explained that the survey was a little more complicated because of a title issue and that is why the price seemed to be higher than one might have expected. This surveyor said that he would call the landowner back to try to better explain the situation.

The fourth surveyor apparently said that staking the boundary on this urban lot was too complicated for him and was not interested in doing the work.

The fifth surveyor quoted a price for an RPR and staking out the boundary but left her confused as to why the RPR cost less money but seemed to involve more work than staking out one property line.

Do we think that a series of television ads or a social media campaign would have changed this landowner’s opinion about what is like to deal with land surveyors? How do we promote that two land surveyors wouldn’t return a phone call; one said the job was too complicated and two more had a difficult time explaining their pricing?

Instead of a public relations campaign, we just need to communicate better.

A lot better.

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A lot better.

Sure, this situation is, I hope, out of the ordinary. Most projects go smoothly and are on time and on budget. However, as professionals, you are trained and examined on how to handle matters when things are out of the ordinary, may take longer than planned, and may go over budget. When a project starts to go sideways, it is critical to start communicating with everyone right away. You can’t stop a project from being a little different or a little unusual but you can stop it from becoming a train wreck if you make an effort to communicate.

Here are Munday’s mad ideas that can help make all of us a little better at communications.

1. Don’t Delegate – In the business world, it is important to delegate. We can’t get everything done that needs to get done if we try to do all of it ourselves. The one exception is communication. At the ALSA office, we receive calls from landowners who may be upset about something or don’t understand what is going on. They have talked to the survey office but were unable to get through to the Alberta Land Surveyor responsible. We tell the landowner to speak to the Alberta Land Surveyor directly and matters usually get straightened out pretty quickly.
2. Communicate with Staff Too – Tell your staff what your expectations are when it comes to communication and messaging. What should the field staff say and not say? How should they say what they can say in a polite way? What types of questions can the office staff answer? Do they know when to hand over a phone call or an inquiry to the person in charge? This way, your organization’s message will be consistent.

3. Do It Now – Dealing with upset landowners and clients is upsetting for you too. Explaining something that seems so obvious to you is exasperating. What is going to be worse, though, is putting it off. Contact them now. Don’t wait. The problem won’t get better with age.

4. Make the Call – Everyone, including myself, uses email as the first form of contact. However, sometimes a phone call and the back-and-forth of a live conversation will lead to a solution much quicker. Yes, all of us get eighty or more email messages every day but sometimes we need to turn our back on Outlook and pick up the phone and make a call.

5. Watch for the Outliers – Many of us get caught up in our production world. We have one more job to check. There is one more plan to sign. It can start to all look the same after a while. So much so that we don’t see the outliers. There are some jobs, however, that come with unusual requests or circumstances (outliers) that you need to be aware of. The ALSA once received a complaint a couple of years ago because the land surveyor did an RPR on the landowner’s property even though the landowner didn’t request the RPR. This turned out to be part of a potential adverse possession claim. Without getting into any details, perhaps more communication up front about this unusual circumstance could have put to bed any complaint before it actually happened.

If you have made it this far, some of you are probably thinking about the move Cool Hand Luke. In the movie, the Captain (played by the great character actor Strother Martin) says to Luke (played by the equally great actor Paul Newman), “What we’ve got here is failure to communicate.”

However, I am also reminded of an even older movie, Going My Way. Early on in the movie, Father O’Malley (Bing Crosby) is playing stickball on the New York streets with a bunch of kids. One of the kids belts the ball and breaks a nearby window. The kids scatter and tell Father O’Malley to do the same. Instead, he goes straight to the homeowner, Mr. Belknap (Porter Hall). Mr. Belknap is angry and outraged but Father O’Malley is calm and gracious to the point where Mr. Belknap is unable to reply any further. Situation defused.

In a few pages, you will read Al Jamieson’s letter to the editor. It’s much shorter and better written than my article but both of us are conveying the same type of message to help us stay out of trouble and provide the public relations that money can’t offer.
New Alberta Land Surveyors

#1009 - Dean Fischer
After working ten years in the transportation and tourism industry, Dean went back to school to start his new career in geomatics. Dean graduated from Lethbridge College in 2008 and immediately started at Focus Surveys in Medicine Hat. After working in the field for two years, he moved with his family to Vancouver to embark on the second half of his education. Dean graduated with a Bachelor of Technology in Geomatics from BCIT in 2012 and returned to Focus Surveys (WSP) in Calgary. His articles were served primarily under Kent Croucher and Jeff Adair. Dean is currently employed with Benchmark Geomatics Inc.

His survey experience is in municipal, oil & gas, laser scanning, and construction.
Dean is married to Robyn-Lee and they have two daughters - Lainey (10) and Reese (9).

#1010 - Kris Locking
Kris graduated from the University of Calgary with a BSc. in Geomatics Engineering.
He articled to Wayne Savoury until he received his commission on December 19, 2017.
He worked as a party chief at Focus and Compass Geomatics in Alberta and British Columbia from 2011-2017. Currently he fulfills an oil & gas office role at Compass.
His interests include hiking, snowboarding, playing softball and the Toronto Blue Jays!

#1011 - Paul Deering
Paul graduated from the University of Calgary with a BSc. in Geomatics Engineering.
He is an engineer-in-training with APEGA.
He articled to Alberta Land Surveyors Desmond Shaw, Jeffrey Gibson and Jeremy Zettel until he received his commission on January 11, 2018.
He has been employed with Caltech Surveys since 2005. Surveying experience is primarily in the oil & gas sector both legal and construction.
His interests include motorcycle riding, snowboarding, golf and football.
Paul resides in Calgary with Lauren.

#1012 - Chad Burwash
Chad graduated from BCIT with a Bachelors of Technology degree and from Lethbridge College with a Geomatics Engineering Technology diploma.
He articled to Alberta Land Surveyors Doug Sharp, Warren Lippitt and Jeremy Park until he received his commission on January 18, 2018.
Experienced in municipal, oil & gas, bathymetric and construction surveys.
His interests include motocross, snowmobiling, hockey, boating, camping, travelling and golf.
He is married to Ashley.

#1013 - John Benere
John graduated from COGS with a diploma in Geomatics Engineering Technology and from UNB with a degree in Geodesy & Geomatics Engineering.
He is an engineer-in-training with APEGA.
He articled to Jason Paziuk, ALS until he received his commission on January 22, 2018.
Experience is primarily in the oil & gas sector, construction and roads.
His interests include sports, camping, travelling and reading.
He resides in Grande Prairie with his spouse Marlena.

#1014 - R. Chase Van de Brand
Chase graduated from the University of Calgary with a BSc. in Geomatics Engineering and a minor in Entrepreneurship and Enterprise Development.
He is an engineer-in-training with APEGA.
He articled to Alberta Land Surveyors Scott Brooks and Eryn Gibbs until he received his commission on January 31, 2018.
In 2006, he began working as a survey assistant at Atlantic Geophysical Services and has worked as a summer student at Focus and Millennium Geomatics. He is currently employed at Global Raymac Surveys and his survey experience is mainly in the oil & gas sector with some exposure to urban subdivisions.
His interests include intramural sports, snowboarding, getting out to the mountains as often as possible, and the stock market.

mobile member page
www.alsa.ab.ca/mm/
In this three-day custom seminar we will gain a better understanding and appreciation of the ecological systems that affect the complex and dynamic transitional areas between the bed and shore and become more familiar with the new Alberta Government wetland policy, how this influences our job, and what it takes to become certified to evaluate wetlands.

Presenter: Fiera Biological Consulting

Calgary - April 30 & May 1 AND Edmonton - May 7 & 8

Field trip date and locations to be finalized.

More information and registration details will be available shortly.
Finally, the use of blockchain to record property transactions could also produce more effective property management as information could be reviewed in real time with less on-going management time required.

HM Land Registry and blockchain

The buzz around blockchain has not been lost on HM Land Registry. It plans to test a live ‘Digital Street,’ which will allow property transactions to take place almost instantaneously. This is all part of the UK government’s commitment to make HM Land Registry the ‘world’s leading land registry for speed, simplicity and an open approach to data.’ However, given the technology is relatively young, it is likely to be a matter of years, rather than months, before a blockchain-based registry is adopted in England and Wales.

International use

HM Land Registry is certainly not the first to consider blockchain as a means of recording property transactions. A number of other jurisdictions are already in various stages of exploring blockchain-based registries:

- Ukraine – the government has entered into a partnership with a blockchain provider, and passed a new law to allow foreign ownership of real estate, in the hope that foreign investment will drive up a market that has fallen by 70 per cent since 2008. The view is that before foreign investors are willing to invest in the Ukraine, it is vital that the state is seen to be modernizing and combatting corruption. Blockchain, with its greater transparency and the potential reduction in fraud, is therefore viewed as a vital component of the Ukraine’s intended real estate revival.

- The Republic of Georgia has already agreed to use blockchain to validate all government related property transactions. Since its launch in February 2017, Georgia’s blockchain provider has helped implement property registration and has registered more than 100,000 documents.

- Sweden believes blockchain could save the Swedish taxpayer over $100 million by speeding up transactions, reducing paperwork and minimizing fraud. This is an example of blockchain being utilized by an already well-established and competent land registry.

- Ghana and various Indian states are also considering blockchain. Despite the examples of Sweden and England and Wales, arguably the greatest benefits are likely to be enjoyed by counties where land holdings have less certain ownership and fraud is more common. However, blockchain will not remove the issue of incorrect data and the requirement for clean inputs. It will be necessary for countries with no central registries to devise a system for agreeing what data is to be entered onto the blockchain.

Hurdles to overcome

A huge amount of information will be stored on a land registry blockchain. Accordingly, it will be vital that blockchain systems comply with relevant data protection laws. It is likely that, as the technology develops, new laws will need to be passed to ensure the proper regulation of blockchains. In particular, the execution of smart contracts and electronic title transfers.

A blockchain registry is also only as good as the data that is inputted. Land registries will also need to give careful consideration to incorrect date entry and the resulting fidelity of the blockchain. Given the complexities of blockchain, it will not be a panacea for all land registration ills.

Finally, the time and cost of adopting blockchain to record land transactions is likely to mean measured progress by land registries in their pursuit of a fully operational blockchain registry.
What is blockchain?
Blockchain is, in essence, a digital database (or ledger) distributed across a network of computers.

The future
Blockchain is likely to be adopted by countries with no, or limited, centralized land recording looking to attract external investment by making property ownership more reliable and secure. However, even for those countries with well-established land registries, the potential cost savings and improved speed of transaction is likely to be enough to engage the relevant authorities.

According to a recent survey carried out by IBM, nine in ten governments say they plan to invest in blockchain technology to manage financial transactions, assets and contracts by next year. With the benefits on offer, it is hard to look past blockchain as the future of recording land transactions.

Nonetheless, it is still likely to be a number of years before blockchain is widely adopted by land registries given the various complexities which need to be overcome. The question, therefore, seems to be not if, but when.

About the Authors
Simon is a partner in Osborne Clarke’s corporate practice. He has over 12 years’ experience advising investors, management teams and companies on all aspects of the private equity market, including venture and growth capital transactions, private equity buyouts, buy-and-build projects, and exits.

Simon is a technology specialist and has particular experience working for technology focused VC funds, angel investors, and high-growth companies in the digital business sector. He is praised for the commercial and pragmatic support he provides to investors and the companies they invest in, from start-up through to exit.

Simon joined Osborne Clarke’s corporate team on qualification in September 2007, following the completion of his training contract with the firm, during which Simon was seconded to Osborne Clarke’s Silicon Valley office in Palo Alto.

Ed Socha is an associate in the real estate litigation team in London. He acts for a wide range of clients across a number of the firm’s key sectors, with a focus on clients operating in the real estate & infrastructure sector.

He has a broad experience, having acted for and advised commercial and residential developers, corporate occupiers and real estate investors.

Ed’s commercial and residential developer experience includes advising on development disputes involving rights of way, rights of light and other easements, restrictive covenants and the interpretation and exercise of option agreements.

He also advises on all aspects of commercial landlord and tenant disputes, including lease renewals, breach of tenant covenants, dilapidation’s claims, break notices and forfeiture.

Ed is a regular contributor to industry publications such as the Property Law Journal.

Ed is a member of the Property Litigation Association.
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You Don’t Want to Get There
At the 2015 AGM, our feature speaker, Curt Sumner, surmised the typical land surveyor would love to operate in a world where they never had to deal with a client or landowner, simply perform the technical aspects of the job, send out an invoice, receive a cheque in the mail, and forego any discussion beyond an e-mail with an outside party. Unfortunately, reality doesn’t allow that luxury!

A number of recent complaints against Alberta Land Surveyors and/or their corporations by members of the public triggers a reminder to us all to recap with veteran staff and acquaint new staff with their responsibilities regarding private land access.

Several complaints have ascended to the Registrar requiring they be dealt with through the discipline process and required a full initial investigation. You don’t want to get there! If a complaint does proceed to a full discipline hearing, recent typical hearings have ranged in the area of $40,000, take substantial time and effort away from your business and are extremely stressful!

Some key responsibilities/reminders to re-visit might include:

• Has your field staff read and signed the appropriate “Commitment to Property Damage Mitigation” document: rural or urban (available from the ALSA website).
• Make sure all members of your field crews, not just your party chiefs, realize their responsibilities in dealing with the public.
• Insure your field staff makes an effort to directly contact, or in cases where no one is home, leave a “while you were out” pamphlet to any landowner whose property is accessed.
• Have staff document contact attempts, alterations or potential problem discussions with landowners either in their field notes, diary, or time sheets.
• Educate staff in being courteous and stay away from an initial reference to Section 16 of the Surveys Act as a “right” to access property.
• Be aware that regarding Section 16: “but the surveyor is liable for any damage the surveyor or his assistants cause;” damage can be defined anywhere from trees cut to tire tracks.
• In instances where land agents have prepared a contact line list and identified concerns, be sure your staff is mindful of those conditions.
• Insure all survey vehicles have signage in accordance with the Manual of Standard Practice.
• If there is a complaint to your firm, deal with it in an expedient manner and treat it seriously and professionally when discussing it with the complainant.

Accessing private property is part of almost any field survey, being respectful of landowners rights is simply common courtesy and should be forefront in your crews actions. A little preventative measure can save a substantial amount of time and anguish in dealing with a public complaint, and goes a long way in depicting the competence of our profession.

Al Jamieson, ALS

Scholarship Recipients
Sergii Kolodii, Lethbridge College Scholarship Recipient
Alberta Land Surveyors’ Association

I am writing to thank you for your generous $1500 Alberta Land Surveyors’ Association annual scholarship.

I am a Geomatics Engineering Technology second-year student at Lethbridge College. My intention and goal is to work in the surveying field in Alberta and to become a worthy member of the Alberta Land Surveyors’ Association.

Being an international student (citizen of Ukraine), I pay significantly higher tuition fees for my education compared to Canadian citizens. Therefore, by awarding me the ALSA annual scholarship you have lightened my financial burden which allows me to focus more on the most important aspect of school, learning. Your generosity is very helpful in my situation.

I hope in the future I will be able to make my contribution to the surveying filed in Alberta and to become a worthy member of the Alberta Land Surveyors’ Association.

Steven Chang, SAIT Scholarship Recipient
Alberta Land Surveyors’ Association

It is a great honour to receive this reward. Geomatics was something that I stumbled upon at the very beginning of my professional career, I never expected it to have such a large impact on my life.

This award will help me move one step closer to my goals. Thank you so much for the time and consideration!

Nathan Nguyen Patton, University of Calgary
Alberta Land Surveyors’ Association

Without your financial assistance, my academic success would be nearly impossible. The support that you have provided me will undoubtedly aid me in my education, enabling me to focus strictly on my studies and not worry about being able to afford my tuition.

Thank you very much.

Zhibang (Luke) Wang SAIT Scholarship Recipient
Alberta Land Surveyors’ Association Scholarship

I am a Geomatics Engineering Technology second-year student in Geomatics Engineering Technology program. With the help from your organization, I believe I am one step closer to being an Alberta Land Surveyor.

Thank you again.

Steven Chang, SAIT Scholarship Recipient
Alberta Land Surveyors’ Association

I am very grateful that I was selected to receive the Alberta Land Surveyors’ Association’s award.

It is a great help to me with my tuition, and a great honor as a second year student in Geomatics Engineering Technology program. The help from your organization, I believe I am one step closer to be an Alberta Land Surveyor.

Thank you again.

Zhibang (Luke) Wang SAIT Scholarship Recipient
Alberta Land Surveyors’ Association Scholarship

I am very grateful that I was selected to receive the Alberta Land Surveyors’ Association’s award.

It is a great help to me with my tuition, and a great honor as a second year student in Geomatics Engineering Technology program. With the help from your organization, I believe I am one step closer to be an Alberta Land Surveyor.

Thank you again.

Dylan Krupity, University of Calgary, John Deyholos Memorial Award Recipient
J.H. Holloway Scholarship Foundation

I would like to thank this opportunity to express my thanks for the generous award. The award is, first and foremost, of great help in offsetting the costs of schooling. Your generosity allows me to devote my attention to my studies, to become the very best I can be. However, with equal importance, I would like to stress what a particular honour it is to be recognized and selected as a worthy recipient. In my time as a student at the university, my education has required much effort, time and dedication. It means a great deal to have all that work validated, and it
Pathways to Credential Recognition of Foreign Trained Land Surveyors
The Association of Canada Lands Surveyors (ACLS) is happy to announce that it has received all the support needed to proceed with the Pathways to Credential Recognition of Foreign Trained Land Surveyors project. In fact, work began on November 14th, 2017.

The overall objective of this project is to facilitate the recognition of credentials of foreign-trained lands surveyors (FTLS). More specifically, in partnership with the ten provincial land surveying associations, the Canadian Board of Examiners for Professional Surveyors and six learning institutions, the ACLS will:

a. Establish a national process to assess the academic qualifications and competence of FTLS;

b. Create a national single point of entry for FTLS to apply for credential recognition as a professional land surveyor in Canada; and

c. Develop a national bilingual website with information related to credential assessment and recognition processes for FTLS.

This project is funded by the Government of Canada under the Foreign Credential Recognition Program.

Jean-Claude Tétreault, CLS, a.-g. (ret.), MBA

CAPULC Endorses the 3-step UFL Certificate Program
The Canadian Association of Pipeline Utility Locating Contractors (“CAPULC”) provides leadership, promotes safety, and works to enhance the value and reputation of the underground facility locating industry in Canada. CAPULC is further responsible for establishing and sanctioning the minimum health, safety, and environmental protection standards that govern the locating industry and its members’ business operations.

As part of these responsibilities, CAPULC is working in partnership with the Government of Alberta to recognize locators as a “designated occupation” in an effort to standardize the industry in Alberta.

Through this mandate, CAPULC has reviewed available locator training programs, and endorses Locate Management’s “Underground Facility Locator (UFL) Certificate Program” (the “Program”) as being of superior quality.

The Program adheres to the Underground Facility Locator Competency Cycle (the “UFL Competency Cycle”) which consists of three stages:

1. Knowledge development (preferably industry specific) course(s),

2. Industry specific field training (practical hands-on and on-the-job training), and

3. Industry specific final assessment (verification of knowledge and skills).

The Underground Facility Locator’s Field Task Competency Manual (the “UFL Manual”) represents the third and final stage in the UFL Competency Cycle. The UFL Competency Cycle and the UFL Manual are endorsed and published by CAPULC. Locate Management is offering the Program as follows:

Step 1: Complete an online Line Locator knowledge course(s).
Step 2: Complete a 2-Day Locator Field training course.
Step 3: Initial Assessment(s), utilizing the UFL Manual.

DISCLAIMER
The within endorsement is for information only, and CAPULC makes no representations, warranties, or guarantees about the program, including but not limited to, [passing the certification requirements established by Alberta Advanced Education, Apprenticeship and Industry Training, Government of Alberta]. Before deciding to enroll in the program, individuals should conduct their own due diligence with respect to the program and should not solely rely upon CAPULC’s endorsement. CAPULC assumes no responsibility whatsoever, for any injury, loss or damage arising from this endorsement or from the Program itself.

Provided by Richard Nelson
January 17, 2018

Administration fee for CP Rail
We are in the process of completing a subdivision for one of our clients on a parcel that has an old CP Rail caveat on title. The interest was for an old spur line that has long since been removed. Here is the response that we have received:

Your email of February 15, 2018 has been passed on to me for further handling.

We would need to review this matter internally with various departments before a determination could be made as to the discharge or consent of this caveat.

Please note if we are able to discharge, there is a $1,000.00 administration fee (plus GST). If you wish us to progress this matter by way of Consent to Plan the administration fee would be $500.00 (plus GST). Please advise how you wish to proceed and we can begin to set up the file on this transaction and request review by internal stakeholders. Thank you.

What this amounts to is basically a fee to process the discharge of their caveat. When I discussed this with Vince Ziegler at our office he had mentioned he had not seen fees like this charged before. Just thought I would bring it to the associations attention as this is a fee that we do not typically account for.

Thanks.

Dallas Kuzek, ALS

20 · March 2018 ALS News
Lloyd Cridland, ALS #494 – Interviewed on November 4, 2013 by Dean Fischer, ALS in the boardroom at Midwest Surveys Inc., Medicine Hat.

We were not able to park close enough to the final end of the survey and we ended up traversing five or six miles to get into the location. It took a number of days to do. It was the last day. It was late in the fall, early, early winter and it was the last day in and we went in and cleaned up the log cutter and got everything finished. We were hauling all of our equipment out and it had snowed throughout the day, almost solid throughout the day. There was a creek that we had to cross about half a mile before we got back to the truck. All we had was a log across the creek. Of course the log was so slippery from all of the snow it when we were walking across, poof, off I went into the creek. Now I am soaked, like up to my waist with a half mile or so yet to walk back to the truck. Got back to the truck. During the day it had snowed so much that we probably had a foot, foot and a half of fresh snow. Of course, we had a two-wheel drive vehicle so we were not going to drive out of there without chaining up. So now we have to crawl under the truck, put on the chains and everything else, soaking wet and cold and finally we got out. That had to be the worst day in my career.

Fischer: It sounds terrible.

Fischer: Do you have any interesting evidence or boundary stories?

Cridland: I guess about the most interesting evidence story is once again when I was up north, I started in the fall. Of course we had a number of wells in the pipeline that we tried to tie all together. I had started on a baseline and worked my way through, I guess, four townships in total. At the end when I got up to the next baseline I wanted to tie off my survey. Of course we had taken star shots and check measured all of our distances. So I had an angle to work up north you have to know how to do star shots. I said well we took those in SAIT so I do not think that is going to be an issue. They said, well we will give you a test. They said we will send you out on this well, which in this case was in Nordegg in unsurveyed territory.

Lloyd Cridland, ALS

Fischer: What is your name? When did you first get into land surveying? What year did you get your commission? Who did you article to?

Cridland: My name is Lloyd Cridland. I went to SAIT first. I never did any field work prior to going to SAIT. I started in SAIT in the fall of 1972. The first job that I had was in the summer between 1973 and 1974 and I worked for Midwest Surveys that summer. I received my commission in 1979 and I articled to Don Sandham.

Fischer: What is your favourite part of being a land surveyor? What is the favourite part of your job?

Cridland: I guess now that I am in the office on a full-time basis, I think what I really enjoy the most about my job right now is actually getting the plan registered at Land Titles, when you know that the job is completely done and the plan is registered. I think that is what I get the most accomplishment out of, the most gratifying. I love calculating plans and doing the legal side of the calculations.

Fischer: Excellent. What was it that made you choose to be a land surveyor? What was the major draw for it?

Cridland: Well, it is kind of an interesting story. When I left high school, I went immediately to the University of Lethbridge and I really enjoyed mathematics. So I loaded up on math courses in my first year, thinking that I was going to do something in mathematics. In that first year, due to the fact that I took so many math courses, I found myself up till two or three in the morning trying to get my labs done. After the first year, I kind of said what am I doing here? So I took a year off and worked and did a little bit of travelling. After that year, I knew that I loved being outside. I was a farm kid, loved being outside and I loved mathematics. My uncle was a land surveyor so I talked with my uncle a little bit about it and I really decided from talking with him and knowing what he did. I thought that land surveying would be something up my alley, something that I would quite enjoy.

Fischer: Thanks. Perfect. So here is the question. What was, in your mind, the best day in the field?

Cridland: The best day in the field? I do not think that I could name one day as the best day. I had so many good days. I enjoyed so much of my career in the field.

Fischer: In contrast to that, do you have a day that you would rather not relive?

Cridland: There was a worst day in the field. This was shortly after I had started with Midwest on a full-time basis. The first winter that I did work for Midwest, I worked mainly on the prairie. With the cold and high winds, I felt they were almost unbearable. So I went to the office and said, is there any opportunity to work up north in the bush so I can get out of the wind and it would be much warmer. They said well if you are going to work up north you have to know how to do star shots. I said well we took those in SAIT so I do not think that is going to be an issue. They said, well we will give you a test. They said we will send you out on this well, which in this case was in Nordegg in unsurveyed territory.
Fischer: That is huge. When you first started surveying in the field, what were the primary instruments that you used?

Cridland: When I started in the field of course there was no electronic instrumentation what so ever. There was transit and chain. We did not have pin locators. We used a dip needle. So everything was transit and chain and level. For topo surveys, there were a couple of instances where I used an alidade and a plane table.

Fischer: Great. Thank you. I read about those but actually never seen one. What did your family think about what you did for a living generally speaking over the years?

Cridland: I think that my family had a pretty decent understanding of what it was that I did as a surveyor. Being raised on a farm, I know my parents certainly knew the township system. Of course my uncle being a land surveyor, I think that my family was pretty much in tune with what surveyors did. I think they understood quite well what it is that I do for a living.

Fischer: Perfect and your wife, of course being away from home a lot, she probably had an opinion for a while that evolved over the years?

Cridland: It was difficult being away from home but I think the biggest transition was when I came into the office on a full-time basis and we were not used to being together on a full-time basis. That was the difficult part. Usually it was that you were in town for two or three days and then gone for a couple weeks or three weeks and then back home for two or three more. I think the hardest part was that transition when I got back into the office on a full-time basis and having to learn how to live together on a full-time basis. That was difficult.

Fischer: That is happening to me right now. Well that is all I got here Lloyd. That is it. Perfect.

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**LOOKING FOR MEMBERS TO DO INTERVIEWS**

We are looking for members who would be willing to interview senior Alberta Land Surveyors and get their stories and experiences on record. The Alberta Land Surveyors’ Association will provide some direction and assistance with conducting interviews. If you are interested, please contact Executive Director Brian Munday at 780-429-8805 or munday@alsa.ab.ca.

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**MOMENT OF SILENCE**

**Lloyd Cridland (1952-2018)**

Lloyd Allan Cridland of Medicine Hat passed away unexpectedly after a brief illness on December 20th, 2017. He will be dearly missed by his wife Kelly; children Kyle Cridland (Bria), Colleen Cridland (Kaz Bremner), and Kurtis Cridland; grandchildren Mya & Emily Cridland and Ellis Bremner; siblings Ken Cridland (Susan) and Erna Kraska (Richard); mother and sister-in-law Kaye Sullivan and Leslie Glenn, as well as many nieces and nephews. Lloyd was born in Pincher Creek, Alberta to Ernie & Elsie Cridland on March 10th, 1952. After growing up on the family farm, he first moved to Pincher Creek to begin studying mathematics and then to Calgary where he enrolled in Surveying Technology at SAIT earning his diploma in 1974. He worked with Midwest Surveys for ten years before starting his own company, Cridland Surveys (later known as Cridland & Associates Ltd.), in 1984. Lloyd received his Alberta Land Surveyor (ALS) commission in 1979 and was a respected and active member of the Alberta Land Surveyors’ Association having volunteered on many committees and served on the Council throughout his career. In 2003, Lloyd and his family relocated to Medicine Hat where he spent time with both Munro Global and Midwest Surveys until his retirement in 2015. He was always happy crunching numbers in front of a drafting board or venturing out into the field. For Lloyd, family brought the most joy to his life; he was proud of his children and their accomplishments. He was an active participant in his children’s activities – as a Scout leader, soccer and baseball coach. Family ski and camping trips were always treasured times. Lloyd especially enjoyed his last few years in a new role as “Grandpa.” He was always up for a walk or hike, to kick around a soccer ball or snuggle on the couch with his favourite little people. Lloyd also loved using his creativity in woodworking. He made many fun and functional projects that can be seen in and around the house. Whether it was a pool cue rack, Santa sleigh and reindeer, terrifying toboggan or play house, he loved making things for his family to enjoy. Being a farm boy at heart, Lloyd always looked forward to spring when he could get to work on his garden. He loved tending to his fruits and vegetables and worked hard to keep the birds and deer away. Friends and family were fortunate to enjoy the fruits of his labour, literally, by eating the strawberries, carrots, potatoes, tomatoes and many other things he grew each year. Retirement allowed Lloyd to venture into a new phase of life as he and Kelly took up golfing together, riding their e-bikes around the city, and took many vacations travelling along the west coast of Canada and the United States, visiting Quebec and Ottawa, and most recently a tour through China. As retirees they had caught the travel bug and were excited to continue their adventures around the world. Last year Lloyd completed the 100km Kidney March where he walked from Kananaskis Country into Calgary over three days. His very long legs brought him over the finish line in record time as his team raised money for the Kidney Foundation of Canada.

The Alberta Land Surveyors’ Association has made a donation to the JH Holloway Scholarship Foundation in his memory.
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Several years ago I put together a report detailing the findings from Phase 1 of our Continuing Competency Review (CCR) program (available in MyMember on the website if you haven’t seen it). In Phase 1, I found that 45% of the plans submitted for examination had at least three drafting errors on them. I’m happy to report that this has drastically improved in Phase 2 and, as of early February, only 20% of products examined as part of a Phase 2 review have more than three drafting errors on them. This is a huge improvement.

However, there is still work that can be done and as part of the CCR program we are continually searching for root causes of drafting (and other) errors. In the past two months, I’ve seen something interesting happen on two different CCR files. Based on the discussion amongst Board members, I think many of us have also experienced this unusual problem. It is best explained with an example.

As you can see in Figures 1 through 3, three of the placed post symbols have inexplicably changed to found iron post symbols. What was originally correct and approved on the check print is now incorrect on the registered version of the plan. Unfortunately, there does not seem to be an obvious reason for why these three particular post symbols changed. On this plan, there are 16 other placed posts that were not altered and are correctly shown on the final plan. This drafting error seems to have been randomly introduced at some point in the plan preparation process and was not detected because portions of the plan previously checked and deemed correct were not rechecked.

...in addition to the plan checking already being done, a final check of the plan might be completed as late in the plan preparation process as possible.

Figure 1. Portions of field notes clearly showing placement of three iron posts  
Figure 2. Portions of a check print reflecting the field notes  
Figure 3. Corresponding portions of the final plan registered at Land Titles
The second instance of this type of drafting error involves the description for the E ¼ 17 shown in Figure 4. The description on the final plan suggests that the ALS found a trace of an original Part 2 monument at this corner. This description is not completely accurate because they actually found and accepted a post that was re-established at the E ¼ 17 by proportion in 1995. According to my correspondence with the author of the plan, the description at the E ¼ changed from Fd. I to Fd. I M at some point after the plan was checked. My guess is that the ‘M’ in the description was added by the drafting staff during the final LTO plan preparation in an attempt to reflect what is shown in the field notes. The field notes (which are excellent) say that the post “lines up with old fenceline mound in treeline.” Comments in the field notes on the existence of a line of occupation is very useful information for evidence assessment but a long ‘fenceline mound’ is not the type of mound that comes to mind when interpreting the description shown in Figure 4.

So how do we avoid drafting errors that are introduced after the plan is checked?

For the drafting errors that are seemingly random, I don’t exactly know what to recommend. However, it seems that in addition to the plan checking already being done, a final check of the plan might be completed as late in the plan preparation process as possible. My personal plan checking process included a final check of a hardcopy generated directly from the LTO plot file that was not uploaded until after I completed my final plan check.

I have also recently learned that there is software available (from Adobe, Brava Desktop and Bluebeam Revu) that can compare two pdf files and detect the differences between them. For example, when the comparison or overlay function is used in Bluebeam Revu you can select both the original and current version of a pdf and the software will automatically detect and highlight any differences between the two files. In the example I saw, the symbol depicting a residence in the wells site residence sketch was repositioned by about two mm in the Rev. 2 pdf file. When the comparison function was selected the software put a large red cloud around the house symbol in the pdf to indicate that something changed in this area. This function appears to be a very handy tool with lots of potential to detect unexpected changes on plans and in documents.
This Year I Hope to [Insert Answer Here]

Imagine closing your eyes, throwing a dart at the Wall Street Journal to pick a stock you had to invest your entire savings in. You can’t look at the price until the last day of the year; nervous? But yet, this is how most businesses plan. They choose one time a year, develop a plan, put it in the drawer only to review it at the same time the following year and hope they achieved their goal. This approach is not a good investment strategy, nor is it a good business planning process.

Everyone has heard the saying, “hope is not a plan.” That’s because it rings true. But equally true is that your life is only limited by the work you don’t do. You work to achieve. Achievement is the manifestation of executing more consistently and methodically. Are you ready to achieve your goals? Are you prepared to get your business back on track? Try this strategy.

A more fluid approach to business planning is more realistic in the “real world” vs. the one-and-done way you’ve always done planning. Business planning should be a living, breathing process that follows a cycle of brainstorming, winnowing, executing and measuring which naturally leads to the next planning opportunity. This process can be as short as weeks or as long as years. Each part of a business follows different timelines and the planning process for each, should match.

Just like New Year’s resolutions fall away quickly because of a lack of an execution strategy, business plans succumb to the same fate; destined to collect dust on a shelf or occupying the ignored bottom position in your inbox. Why? Because these methods lack a quantifiable execution and measurement strategy, which is a pivotal portion of the planning process—the part of the process where most fall short.

Whether you’re well on your way to achieving your business goals and you are ready to shoot for something bigger, or you’ve fallen short of expectations and you are looking to get back on track, a measurable execution strategy must be deployed and continuously redeployed through the process.

The first step in any execution strategy is to define the issue in sufficient detail such that anyone in your organization will intuitively understand the incremental activities necessary to achieve the goal. If you cannot break the goal down into actionable steps, you need to continue refining your goal. A goal is only actionable when it is evident to everyone in your business what those actionable steps are.

The most straightforward example is a sales goal. Most business plans will state a specific numeric goal, “$50,000,000 in product sales.” But if your organization doesn’t understand the connection of that goal to their unique job duties, it will likely never happen.

Instead, restate the goal to something more actionable, “Maintain 100% client retention of profitable $1mm clients while sourcing, vetting and closing one new client that will average $5mm in sales each week.” If the goal is restated in such a way that to that every department of your company understands their role in achieving that goal it is much more likely to happen. A sales goal is not going to get a person in accounts receivable to change their behaviour. Arguably, an overly zealous receivables person could be detrimental to your goal by collecting in such a way that drives clients out the door. By changing the focus of the goal to an action statement, it changes the way your organization views their role in executing their part in the process. It focuses a goal into a philosophical change with obvious incremental steps. Now list the steps, as few or as many as it takes, but it must be actionable and measurable.

1. Identify five leads weekly.
2. Qualify three prospects per-week from the leads.
3. Close one client per-week with a potential average $5mm in annual sales per month (keep in mind, if you onboard a new client late in the year, they likely will not do $5mm in sales this year.)
4. Reduce new client onboarding time to three business days.
5. Prioritize our customer service model, so we are spending 80% of our time with those clients making up 80% of our sales. (Once again, the old 80/20 rule)
6. 100% on-time shipping every day.
6. Reduce accounts receivable to 45 days.

Secondly, you have to do the work. While this seems obvious, the majority of goals find their way to the scrap heap for the most basic of reasons. The work was done intermittently, but honestly, the work was not done.

Someone first said, “What gets measured, gets done.” And they were right. So measure your action steps. Use technology to help keep track of your progress. Reminders on your phone work, but some prefer something more visual. Use a spreadsheet program to come up with a customized action tracking sheet.

A suggestion would be, at the end of the measuring period, color code the boxes to highlight successes and challenges. Distribute the finished sheet each period to all stakeholders. “What gets measured gets done.”

And finally, you need to have a consistent and honest accountability system. Accountability to do the small, necessary steps to accomplish your goal, both in quantity and quality. The fallacy of the spreadsheet of reminders is we can lie to ourselves. As human beings, we have a horrible ability to lie to ourselves and, worse yet, believe our lies.

So how do you manage this fault? Have an accountability partner. Find that person who cares enough about your success that they won’t tell you what you want to hear or make you feel better about only half-hearted work. Share with them your spreadsheet each week and go over every single event. Mutual accountability works well. Find a fellow salesperson, manager, significant other or business owner that is working on their own goals and be accountable to one another.

It has been said, “If success were easy, everyone would be successful.” While it is not easy, you have more control over your success than you think; and sometimes it is just about having a definable goal and doing the work consistently and being honest with the quantity and quality of your efforts.

Jeff Bush

About the Author: Jeff Bush, Wall Street’s Washington insider, is a dynamic and insightful speaker on tax and fiscal topics, and the author of American Cornerstones: History’s Insights on Today’s Issues. A 28-year veteran of the financial industry, Jeff works with executive teams, business owners, and high income individuals to proactively prepare their organizations to succeed in an ever evolving-market place. For more information on Jeff Bush, please visit www.JeffBush.net.
FOR PRESIDENT

W. Bruce Clark, ALS

Running for vice president of the ALSA last year, I detailed the non-traditional route I took to become a land surveyor: a want-to-be teacher, I combined my love of local history and geography into summer employment on a survey crew and three years later I headed to U of T for Survey Science...

Following graduation, I articled in Barrie, obtaining my OLS in 1991. I moved to Hamilton and managed a century-old surveying firm for seven years, modernizing and upgrading both our processes and workforce. Looking for a drastic change, I accepted the challenge to serve as mapping manager for the Land Titles conversion project in Ontario. In 2000, I changed venues again and joined Stantec in Ottawa, specializing in subdivisions, condominiums and other real estate related projects.

Working in Alberta these past 12 years, I’ve been fortunate to participate in a wide variety of survey projects: construction in the oil sands, municipal surveys in Edmonton and Fort McMurray, and mapping projects throughout Western Canada. The common denominator throughout has been the breadth and depth of knowledge of the various teams assembled to complete the projects. My current challenge is to help manage and grow Valard Geomatics Ltd., with added responsibility for our Ontario operations. This includes overall management of the survey-related activities associated with construction of a 450 km transmission line to be built north of Lake Superior—all while ensuring I get in as much canoe paddling as possible!

In my professional life, I have taken advantage of opportunities to serve on various committees of the AOLS, PSC and the ALSA, including Council and Executive Committee. Each of these experiences has exposed me to new challenges and introduced me to other groups of committed professionals. In each case, I have learned more about the issues affecting the surveying profession and more about myself. To each member with whom I have shared committee experience—thank you for your knowledge, contributions and sufferance!

With the long-term financial sustainability of the ALSA in good hands, I feel that it is time for Council to turn its attention to other priorities. A robust surveying profession, attracting the best and brightest—especially more women and indigenous members—is one of my top priorities if elected to Council. A strong believer in a national voice, I’ll also ensure that our Association continues to take a progressive national role, listening to our members while sharing ideas and our successes freely across Canada.

I look forward to continuing to represent the Alberta Land Surveyors’ Association as your president for 2018-19!
FOR VICE PRESIDENT

Steve Yanish, ALS

Those of us around when Elvis Presley passed away can remember exactly what they were doing that day – for me, it was my first day of surveying. I recall that day vividly: I learned to set up a tripod, use a plumb bob, cut line with a chainsaw, and, as a bonus, received my first wasp bite. It could have been any typical day of surveying and a historical event was not needed to remember it so clearly.

Those first glorious years of my survey career were spent as a chainman with W.D. Usher working mostly around Alberta. It was the best job in the world for a young city boy from Edmonton who, up to that point, hadn’t really considered what he wanted to do when he grew up. There is a saying: “choose a job you love, and you will never have to work a day in your life.” I consider myself very fortunate to have discovered surveying and is one of the reasons I wish to volunteer my time to the Alberta Land Surveyors’ Association.

In the early eighties, I attended the NAIT Survey Technology program. During the summers, I worked with the City of Edmonton, Energy Mines and Resources Canada (EMR) and eventually McElhanney Land Surveys. A highlight from my work with EMR was spending most of the summer establishing and surveying high accuracy control around Lake Louise.

In April 1992, I received my ALS commission and worked as a project land surveyor for McElhanney in Edmonton. I am proud to be part of a dynamic team that grew a relatively small survey company into one of the largest and most successful firms in Western Canada. It was during this time I became involved with the ALSA through various committee work as well as serving on Council for a term.

My responsibilities over the past decade have focused on managing people, projects, clients, and budgets. I believe my experience in the private sector will be a great asset in assisting with the direction of the ALSA, one that has a long-term sustainability strategies to keep the ALSA relevant. We can accomplish this goal by inspiring existing members to participate in ALSA affairs along with finding, recruiting, and supporting new members. There is also a need to embrace new technology by understanding how innovation affects the profession and how to be prepared for change. Furthermore, we must ensure the financial stability of the ALSA for our members and our benefactors.

Most importantly, it is essential that we continually engage our stakeholders through committees and members in order to strengthen the public’s confidence in the ALSA.

FOR COUNCILLOR

LeMont Edwards, ALS

LeMont started a life of surveying in 1986 while enlisted with the Canadian Armed Forces as an artillery surveyor. Literally pulled out of a trench and told he was going to be a surveyor by his sergeant major, his response at the time: “What exactly does a surveyor do?”

He then remustered to the Combat Engineers and was employed with the Mapping and Charting Establishment involved with rapid mapping for deployment. During this time, LeMont was part of the team performing GPS acceptance testing in the early 90s while conducting a gravimetric survey throughout the Yukon and a portion of the Northwest Territories in an effort to complete the gravimetric map of Canada. A point was set by GPS every 10 square kilometres throughout the region in conjunction with the grav-
Steve Meehan, ALS

Steve Meehan is a hard-working professional who moved to Calgary in 1994 to begin a career in surveying. He graduated from the Surveying & Mapping program with honours at SAIT and then strengthened his understanding of concepts by earning a Geomatics Engineering degree at the University of Calgary.

Most of his surveying career has been with the City of Calgary where he gained a wide variety of valuable experience dealing with everything from application development, databases, GIS, mapping and of course many years of surveying. Steve was also the project manager that successfully implemented networked-GNSS correction services for the corporation which still is one of only very few municipalities in Canada to administer its own network.

During his career, Steve has volunteered much of his spare time giving back to his professional associations. Most notably, he was elected as president of the City of Calgary’s Society of Professional Engineers providing leadership for more than 250 engineers. He is also currently on the Registration, Professional Development and Communication & Public Relations committees of the ALSA. Just last year, he completed ten-years on the Geomatics Advisory Committee at SAIT and received many compliments for his motivational career speech to first-year students.

Steve is very grateful for such a rewarding career as both Alberta Land Surveyor and Geomatics Engineer. Now, he would like to contribute to the ALSA as a Council member. It would be a great honour and he is willing to share his thoughts and ideas for helping the association excel in a fast-paced age of technological advancement. When he is not working or volunteering, Steve enjoys travelling and hiking with wife and teenage daughter.

Michelle Merrick, ALS

• Born and raised in Edmonton, Alberta.
• Graduated from NAIT with Geomatics Engineering Technology Diploma in 2001.
• Articles served under Stephen Howard, ALS, BCLS, CLS.
• Obtained ALS Commission in 2016 (through the CBEPS process).
• Employed at Altus Geomatics since 2011.
• Previous surveying employment with SARPoint Engineering, Westacott Consulting and CanAm Geomatics.
• Own, manage and in charge of finances for a company involved in the construction industry along with my husband, Bruce, since 2001.
• Host study sessions with the help of other land surveyors in spring and fall for ALSA articling students in preparation for their professional exams and qualifying exams.
• Volunteered for the St. Albert Minor Hockey Association Executive and at a team level while my oldest son played hockey.
• Currently reside in St. Albert with husband Bruce and have two adult sons, Kyle (28) and Trent (23).
• Interests include travel, skiing, learning to play piano, walking my dogs and working to improve my golf game.

When my kids were getting older I went looking for what I wanted to do for a career and decided on surveying from what I had heard about the profession. I enrolled into the NAIT Geomatics program starting in 1999. Originally, I did not intend to become a land surveyor, but wanted to work outside as a crew chief and later it was suggested to me that I should challenge my CBEPS and work towards my commission. I am glad I did and as with my fellow land surveyors, cannot imagine doing anything else.

For my biography, I was asked to describe an interesting project that I have worked on. After giving it some thought, I could not come up with just one and ended up with a long list from both my time in the field and in the office. There have been many interesting projects and I am sure there will be many more as time goes on.

During my articling process, I had several land surveyors at different companies help me with the areas of surveying that I lacked experience in. Based on the results from the October 2017 professional exam sitting, there appears to be a need for articling students seeking necessary knowledge external to their own companies’ realm of practice. I would like to look at options for a mentoring program to assist articling students and complement Eclipse College.

One area of surveying that is generating a lot of conversation and a variety of opinions recently is the hybrid cadastre. The hybrid cadastre is here to stay so there is still work needed to resolve concerns between land surveyors who use the hybrid cadastre and the Director of Surveys Office. The ALSA has been working with the government but continued conversation, input, and collaborative effort are still needed in order to streamline the hybrid cadastre process to make it useable for surveyors and acceptable for disposition applications.

In my speech for the new members lunch at the 2017 ALSA AGM, I said that “I encourage all new members to participate in the betterment of the ALSA” and although members frequently disagree that “through these discussions and differences of opinions the ALSA becomes the best of all ideas brought forward.” As a Council member, I would like to be part of bringing concerns and ideas of the membership together that support the future of the ALSA.
The Alberta Society of Surveying and Mapping Technologies (ASSMT) is a nationally-recognized association which provides accreditation for qualified individuals involved in surveying, mapping and related geomatics occupations.

As I prepared this article and considered the audience, I can safely deduce that the audience is mostly made up of land surveyors. (The clue is found on the cover.) We have all heard that in a room of "n" surveyors there will be "n"+1 opinions, right? Regardless of the differences, there are also many similarities, whether it be general skills and abilities or the requirements tested and fulfilled when obtaining ones commission.

Although the ASSMT was founded by land surveyors and technologists in the surveying field and continues to count a number of members as land surveyors and survey techs, we are currently reviewing ways in which we can provide more support to our members that are mapping and remote sensing professionals. Over the past number of years we have taken part in more activities related to GIS and mapping through events such as GIS Day and educational events at local post-secondary technical institutions and colleges.

In recent months, it has been impressed upon me the quality of mapping and GIS specialists within the membership. Members of our Society are typically graduates of recognized post-secondary technical institute or college programs and have been granted certification by the Society based on their field of study coupled with the time spent in the industry. The certification identifies what field one specializes in and Council is considering an update to the bylaws to more specifically recognize the areas of expertise that have been developed in mapping of late. Expect to hear in the upcoming months about how we will address the spatial skills and knowledge represented by these members.

The ASSMT promotes continuing education, member recognition and improvement of the standard and standing of survey and mapping technicians and technologists throughout the industry. On the surveying side, we have been provided with an amazing opportunity to bring some excellent information to our members, and those in the surveying industry with an upcoming seminar. Depending on the release of this issue, one of these deliveries will be the upcoming Getting It Right (GIR) Seminar that is to be held in Edmonton March 22nd, and if early indications are correct, there will also be one held in Calgary to follow. Please take the opportunity to add to the collaboration that makes these seminars unique by being in attendance with other members of your geomatics groups.

Finally, thank you to all the companies that have encouraged their employees to not only become certified in their particular field of expertise, but who have also encouraged them to participate in council and the various volunteer opportunities.

Brian Ball, President

According to the new market research report on the "Land Survey Equipment Market by Product (Gnss Systems, Total Stations & Theodolites, 3D Laser Scanners, UAVS), Industry (Construction, Oil & Gas, Mining, Agriculture), Application, Software, End User, Region - Global Forecast to 2022", published by MarketsandMarkets™, the market is projected to grow from USD 6.01 Billion in 2017 to USD 8.70 Billion by 2022, at a CAGR of 7.67% between 2017 to 2022. The global land survey equipment market is driven by numerous factors such as rapid urbanization, development of smart cities, and increasing construction activities in North America, Asia Pacific, and Africa.

The total stations & theodolites product segment is estimated to account for the largest share of the land survey equipment market in 2017. Based on product, the total stations & theodolites segment is estimated to account for the largest share of the land survey equipment market in 2017. This growth of the total stations & theodolites segment can be attributed to the rise in the adoption of electronic devices to carry out land surveys.

The construction software segment of the land survey equipment market is projected to witness the highest growth during the forecast period. Based on software, the construction software segment is projected to grow at the highest CAGR during the forecast period. Factors driving the software segment are the growing demand for the AUTOCAD Building Model with 2D and 3D applications. Key players in this market have been focusing on developing advanced software models to enhance the productivity and accuracy of the construction software. This is expected to fuel the growth of the construction software segment during the forecast period.

The commercial end user segment of the land survey equipment market is projected to witness the highest growth during the forecast period. Based on end user, the commercial segment of the land survey equipment market is projected to grow at the highest CAGR during the forecast period. With various technological advancements, such as the introduction of the GNSS technology for surveying and the adoption of land survey equipment for commercial purposes such as construction, mining, and agriculture, are likely to contribute to the growth of the global land survey equipment market.

The land survey equipment market in Asia Pacific is projected to witness the highest growth during the forecast period. The land survey equipment market in the Asia Pacific region is anticipated to grow at the highest CAGR from 2017 to 2022. Rapid urbanization in Mainland China and the growth in China’s real estate and construction market are driving the land survey equipment market in the region.

MarketsandMarkets™ INC. Northbrook, IL
Unregistered Iron Survey Posts

Over the past number of months, I have had the opportunity to review a large number of old field notes. During this process, I have noticed that a great many iron survey posts have been placed, for which there is no public record. This article deals only with monuments set after a plan was registered and therefore these posts were not necessarily set by the same Alberta Land Surveyor who authored the plan. The vast majority of these posts were placed in urban settings. The purpose of these surveys was generally to mark lot corners for construction purposes, both residential and commercial buildings. It is the posting of corners for commercial purposes that is more likely to lead to problems down the road, as these buildings are often built to the lot boundary.

For the purpose of this article, I will be referring to the corners where a lane intersects a street as a block corner. In most cases, beginning in the post-world war, lane corners were posted with iron posts as well as the actual block corners. This practice became very prevalent once subdivision design began to included curved boundaries.

Upon review of many of these older notes, a pattern began to emerge. It appears that iron posts were set only if both adjacent block corners were found in good condition. In the event that the block corners were not both found, the intervening lot corners were marked with iron bars or by some other means.

It therefore appears that new iron posts were only placed when they were situated between existing block corners.

The question therefore is what is the status of these iron posts? Strictly speaking they have no status. On the other hand, these iron posts were set to mark the lot corners by an Alberta Land Surveyor (ALS). Therefore, my question is how can we ignore them? The public should be entitled to rely on these posts as the location of their property corners, whether or not there is registered plan showing these posts. This then begs the question. Does filing a ‘T’ plan or what is now termed a ‘plan showing establishment or re-establishment of corners’ give more weight to these posts or not? The filing of a plan does make the survey community aware of the origin of otherwise un-recorded iron posts, however the general public other than the lot owner, would not know that these posts were anything but the original corners.

I am not suggesting that these unregistered iron posts be blindly accepted. That is not the practice followed when an ALS evaluates an iron post found during the course of their survey. What I am suggesting is that one had best have a very good reason for not accepting these posts. This becomes even more critical where not accepting the posted location as the lot corner would cause structures to encroach on the adjacent property.

Can we use these mid-block iron posts to re-establish the block corners from which they were set? Whether or not one accepts these posts for the purpose of re-establishing a missing block corner becomes, as in all cases of re-establishment, a matter of professional judgment. There is only one requirement and that is. Put it back where it was. The big question is of course. Where was it?

Any time that a re-established corner would cause some form of encroachment we must be asking ourselves. Is this where it was? However, just because the re-established position would cause an encroachment does not necessarily render the location wrong.

What it does mean is that more research is required to determine the following:

- Were both block corners in place when the mid-block posts were set?
- Was the subject iron post in position and used when the building was constructed?
- If the iron post was not there at the time of construction, how was the corner/lot line established?
- Would the building actually fit on the lot as shown on the subdivision plan?
- If the building is decidedly wider than the plan dimension of the lot there are several possibilities.
- The building is partially on at least two lots, or it could even be on three lots.

But I digress. The question is still do we accept these mid-block iron posts or do we not? It is not my intention to answer this question. My goal is to make the profession aware of the fact that there are great many ‘unregistered’ iron posts in the ground that were set by land surveyors who did their work carefully and to a high standard. The cost of laying out a building that is later found to encroach due to a poor survey is very high indeed.

Therefore, I will leave the reader with these thoughts to mull over the next time they find iron posts that are ‘not of record.’

Hugo Engler ALS

REGIONAL MEETING DATES

GRANDE PRAIRIE  
March 20

EDMONTON  
March 21

CALGARY  
March 22

The recommendations for the AGM will be discussed during these meetings.
Comprehensive Reviews in Phase 2 of the CCR

With Phase 2 of the Continuing Comprehensive Review (CCR) program drawing to a close, the PRB has begun to review some of the statistical data collected over the last three-and-a-half years. In this article, we will have a brief look at the CCR process, describe what a comprehensive review is and how it’s triggered. Next, we will present some statistics regarding who has had comprehensive reviews in Phase 2, discuss potential root causes, and suggest some action that can be taken that may help improve products.

SPR & CCR

But first, a brief history of the CCR program for those readers who have not been ALSs for more than a decade. Originally coined “systematic practice review,” the program focused on a land surveying firm’s processes and their implementation. The director would visit each firm, interview all the ALSs/department managers and dig into how the firm operated. The SPR program was effective and enjoyed strong leadership, however, after three iterations (approximately 16 years) Council approved a new more streamlined program.

In mid-2010, the first phase of the CCR began. The focus shifted from a review of a survey firm to a review of each individual ALS, with an emphasis on the products they produced. CCR Phase 3 is set to begin in May 2018. The Phase 3 Framework Document and Procedures Policy have both been approved by Council and are available in the reference material section of the ALSA website.

A poll conducted at the end of Phase 1 indicated that most practitioners had a positive experience and appreciated the suggestions they’ve received through the process. Several suggestions on how to improve the CCR experience were applied to Phase 2, and therefore, I am hopeful that the Phase 2 poll results will show a similar level of satisfaction.

The Review Process

For individual ALSs who author products (legal plans, wellsite plans, construction plans, RPRs, etc.) the CCR process proceeds as follows: a product is chosen and analyzed, questions are asked by the DPR, and the product and the DPR’s comments are sent to a member of the board for their review (the assessor). A procedural flowchart is also available on the website as part of the reference material noted above. The assessor reviews the information and makes a motion to the board. After discussion and a vote, action is taken by way of a letter to the ALS with a commendation for a well-prepared product and/or recommendation on how to improve their products/process. Very few reviews are without some sort of minor deficiency.

It is worth noting that the identity of the ALS under review is concealed from the board members, except for the DPR and the assigned assessor. When a review is presented to the board, the file is sanitized such that all locations, plan numbers and names are removed. This is done to ensure that, in-so-much as possible, personal bias does not creep into the process. The same evaluation criteria are applied to each review. There is no preferential treatment based on age, experience, geographic location, field of practice, nor firm.

Typically, at the end of the letter one of two significant statements will appear:

1. This review is deemed complete and your file is closed.
2. A comprehensive review will be conducted (possibly followed by a rough time frame).

For those readers who have received a letter from the PRB ending with statement 2, I can imagine the knot that formed in the pit of your stomach. The good news is that, although the PRB has all the same powers of the Discipline Committee, the PRB’s mandate is to focus on education and improvement. Positive results from this focus can be clearly seen in the overall improvement in the quality of products from Phase 1 to Phase 2.

For example, in Phase 1, 45% of products contained more than three drafting errors. In Phase 2 that number dropped to 20%. A concerted effort was made by the PRB in Phase 1 to identify the potential root causes of the drafting errors, and advice was provided on how to avoid them.

The PRB has some basic indicators that may trigger a comprehensive review. As a guide, if two of the following three issues are present, a comprehensive review is normally recommended by the Board.

1. Five or more drafting errors on a product.
2. A product that does not reflect the field survey (potentially due to very poor notes).
3. A product that seems to cause a boundary uncertainty (often related to governing evidence issues).

A comprehensive review is simply a deeper investigation into the processes and the office/field work behind the product that an ALS takes responsibility for. The DPR typically selects a second recent product, sits down with the practitioner to ask some questions, and reviews the setup, field notes, data files, and plan in detail. A field inspection is typically conducted to ensure the information shown on the product (and in the field notes) is consistent with what exists on the ground. The deficiencies exposed in the initial review are zeroed in on, to see if there is a pattern.
While difficult, the primary goal of the review process is to identify the root causes of issues. There is an assumption that the ALS is willing, and able to make changes to their practice to address root causes. In very rare cases there is no such willingness or the issues are so egregious that the PRB has made a complaint to the Discipline Committee.

The Numbers
Part of the PRB’s Phase 2 mandate is to report on trends of non-compliance within the profession. With nearly all the Phase 2 reviews now behind us, we can ask several important questions, including: do the statistics show any demographic group that struggle more than their peers to produce quality products?

First, we need to establish some groupings.
1. No. of years holding a commission: <5 years, 5-10 years, 10-20 years, 20+ years.
2. # of ALSs at the firm: 1, 2-5, 5+

<table>
<thead>
<tr>
<th># of years holding Commission</th>
<th>ALS Product Reviews in Phase 2</th>
<th>Comprehensive Review in Phase 2</th>
<th>% of Group that gets a Comprehensive Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 years</td>
<td>72</td>
<td>11</td>
<td>15%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>89</td>
<td>7</td>
<td>8%</td>
</tr>
<tr>
<td>10-20 years</td>
<td>84</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td>20+ years</td>
<td>79</td>
<td>15</td>
<td>19%</td>
</tr>
<tr>
<td>Total</td>
<td>324</td>
<td>42</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th># of ALSs in Firm</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>61</td>
<td>20</td>
<td>33%</td>
</tr>
<tr>
<td>2 to 5</td>
<td>120</td>
<td>9</td>
<td>8%</td>
</tr>
<tr>
<td>5+</td>
<td>143</td>
<td>13</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>324</td>
<td>42</td>
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P2… Phase 2, CR… Comprehensive Reviews. The numbers are current to February 1st, 2018.

The first comparison shows a somewhat higher rate of comprehensive reviews for ALSs with less than five years experience, and an even higher rate for those with a great deal of experience.

The second comparison shows that a much higher number of comprehensives are done on ALSs working as a sole practitioner. For a deeper look, we broke down the sole practitioner grouping further to see if there was a trend based on experience.

<table>
<thead>
<tr>
<th>Sole Practitioners by # of years holding Commission</th>
<th>20 Comprehensives in Phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 Years</td>
<td>7</td>
</tr>
<tr>
<td>5-10 years</td>
<td>1</td>
</tr>
<tr>
<td>10-20 years</td>
<td>2</td>
</tr>
<tr>
<td>20+ years</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
</tr>
</tbody>
</table>

Based on this analysis, it becomes apparent that two distinct groups receive comprehensive reviews more than their peers: sole practitioners having held their commissions for less than five years and sole practitioners having held their commissions for more than twenty years.

Before we explore this, I need to mention that in no uncertain terms is the purpose of this article to denigrate those in these groupings, nor detract from their contributions to our surveying community.

ALSs who have held their commission for less than five years who work as sole practitioners

I suspect the root cause as to why ALSs with less than five years of experience are receiving a high number of comprehensive reviews is simply a lack of robust experience.

The ALSA has a rigorous articling process that is effective in training pupils. Many, myself included, have been fortunate to have great principals through the articling term. I found my principal’s door was always open and I was never sent away without being given at least some direction to search for an answer to my question. As an association, we also have a group of experienced ALSs who are passionate about working with pupils all the way through to their final exams via online seminars, study groups, and mock orals. Nonetheless, when the articling process is complete, a newly commissioned ALS is likely to still have gaps in how to apply their knowledge to certain situations.

I would strongly encourage sole practitioners who belong to this group to build mentoring relationships with a few experienced ALSs. Association social activities present an occasion to step up to someone and ask if they would like to become a casual mentor on professional matters. The upcoming regional meetings and AGM are perfect opportunities.

On one occasion, a young surveyor wandered into my office and asked if he could come by sporadically and quiz me on various topics. In this case it may have been a matter of geographic convenience, as he worked 200 metres away, but I was honoured all the same and did what I could to help. He took a chance and stepped out of his comfort zone because he recognized the importance of a professional ‘sounding board.’

British Columbia has a more formalized peer mentorship program that may provide a model for the ALSA to consider.

A second root cause for survey issues identified within this grouping may be that the ALS are starting their systems/procedures from scratch. It understandably takes time to refine systems/procedures to accomplish desired results. I would strongly recommend that a good starting point is to adopt the same checklists the DPR uses to check everyone’s products (also available on-line in the Reference Material section of the ALSA website.)
ALSs that have held their commission for twenty or more years and work as sole practitioners

This group presents a bit of a paradox. Many are experienced practitioners who have had an influence within the Association and the group that we would ask to mentor newer ALSs. How is it possible that a higher percentage of them are struggling to keep up with their peers, at least with regards to the products they prepare?

Initially, I had thought that changing standards or new technology might be a stumbling block to some seasoned ALSs. That theory does not hold up when reviewing the issues in the ten comprehensive review cases. The fundamentals of surveying have not significantly changed, and deficiencies caused by technological advancements were not present in the reviews. Rather, the issues appear to be related to surveying practices and office procedures that are not being followed.

A more likely root cause is a reduction of ALS involvement in the firm’s processes. Most of the reviews appear to have been lacking in personal supervision. Perhaps more of the supervision has been delegated to non-professionals. I can see this happening for several reasons: a reduction in hours as someone moves to retirement, health issues, or a high level of confidence in long-term employees to ‘get it right.’

The Land Surveyors Act is clear that the practice of land surveying and the products prepared must be done under the personal supervision of an ALS. We are the experts. We develop the processes, evaluate the evidence, and decide on the best course of action.

The obvious solution would be to re-engage in the firm’s processes. This could include: making a trip to the field to observe the field crews and assist them with the fundamentals of surveying and evidence assessment, talking to the drafting staff about the automated routines and other processes they use, and ensuring plan checking staff understand what they need to check and why the information shown on the plan is important. Without continual improvement and review, any process (no matter how well it starts out) will eventually deteriorate to a substandard state.

A second possible solution would be to take on a junior ALS or pupil. I’ve had the pleasure of articling four pupils in the last six years and though it may sound cliché, they have taught me more, and had more positive influence within my firm, than I ever could have had on my own. To accomplish this, I had to give them some authority to make changes and influence the firm’s processes, as well as the confidence to tell me when something was sub-par.

I am not speculating nor giving these suggestions casually, for I too am a sole practitioner. I have been practicing for 13 years, having started my first company three years after receiving my commission. In the beginning, I had to navigate the issues of the first group, and having now hit the ‘reset’ button, I am quickly rolling my way into the second group. I will do my best to take my own advice.

Dwayne Edmundson, ALS

While travelling the backroads of British Columbia last summer, we happened upon this sign. How apt, I thought. In some ways, that trip was analogous to the journey we have been on recently in Alberta, with the ALSA, and even on Council. The trip had started well enough, with a well-tuned machine well-suited to the journey, a full tank of gas, many resources, a generally positive attitude, and a desire to work together as a team. It was not, however, without some trepidation, as the hills were on fire.

Throughout the journey we met many travellers along the way, some travelling towards the same objectives, and others seemingly heading in the other direction, some friendly and helpful, others not so much.

The road itself was a bit bumpy with some washboard on the uphill portions and the odd surprise around a bend, some pleasant, some less so. There was the odd single-lane bridge, and often clouds of dust obscured the road ahead.

As this term ends and we contemplate the successes of the year, I feel it important to gauge things in a broader context. Have we succeeded in moving the needle a bit as Dave Parkhill and his team in New Brunswick have? Perhaps we were not as successful as one would have hoped. Are we better positioned to move the needle in future years? I believe so, and that was the key objective.

As to the road ahead, yes, there will be bends, yes, there will be hills - some very steep, yes, there will be potholes, and the road will at times be rough, but there are no situations we cannot handle. After all, we have a good vehicle, well equipped, capable, and well suited to the road. We have strong enthusiastic companions, and we are prepared for the next stage of our journey.

Let us not become stuck in the mud, mired in institutional and intellectual inertia, nor roll backwards through blind adherence to the status quo, but rather continue to strive for governance excellence with a strong focus on the future.

Beyond the sign as we crest the hill, the vista opens up, and the vision becomes virtually unlimited.

Dwayne Edmundson, ALS

Mike Fretwell, ALS
The Sirius Pro from Topcon is a groundbreaking aerial survey tool that delivers fast, highly accurate mapping results using GNSS-RTK, for 2-5 cm accuracy without the need to set ground control points (GCP). In traditional mapping, placing and measuring sufficient GCPs to ensure accuracy can take up much of your schedule. The Sirius Pro totally eliminates the need for GCPs by quickly capturing images with automated GNSS-RTK locations and time stamps – equivalent to 1000 control points in the air – making the Sirius Pro the perfect airborne solution for your aerial mapping projects.

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Tips and Suggestions on How to Prepare for the Written Exams

This article has been written to discuss the most recent Principles and Practice of Land Surveying 2 Exam (PPLS2 - rural surveys) and help to provide tips and suggestions for articled pupils and their respective principals.

The track record for this exam since its inception in the Fall of 2016 is very concerning. It appears pupils understand the basics of each topic but when they are used in real-world scenarios, the “wheels” come off. There are many theories as to why the PPLS2 results are poor, but it appears the common theme in all of them is a lack of experience. Pupils are not allowing themselves enough time in the articling process to gain the right experience and knowledge before attempting these exams.

Out of the 24 pupils who wrote, the majority of pupils were in the municipal sector and approximately half were under articles for less than two years.

The exams are structured to test pupils on survey topics presented from both field and office point of views. Pupils need to acknowledge the areas they are weak in and focus their time on changing that; gone are the days of memorizing acts and regulations a few weeks before a sitting and possibly passing.

From reviewing the exam answers provided by pupils, and the corresponding marks, the pupils appear to struggle with understanding the intent of each question and properly identifying the problem or challenge presented. The same can be said about relating the acts, regulations and manuals they use to prepare for the exam to each question. A few examples of this are listed below:

- The Code of Ethics and how it applies to day-to-day problems and scenarios that surveyors face;
- The Manual of Standard Practice and when to refer to it in a question to support your answer;
- The Surveys Act regarding establishing boundaries and re-establishments

Pupils must take advantage of their articles and strive to understand all aspects of the survey profession. Don’t be afraid to ask your supervisor, manager and principal questions about the various plans they deliver to clients and what the client does with them. Follow field data once it is submitted to the office to see the steps that are taken to create the final product. Sit in on a phone call with a landowner to see how the land surveyor or project manager interacts with them and shares information. All of this will add depth to your articling experience and further your careers as future land surveyors. It may seem like a lot to fit into five years of articling however this type of experience can also be gained prior to signing articles.

Studying for the PPLS exams can be very overwhelming, especially for newer pupils who are trying to understand how all the legislation and manuals apply to Land surveyors. After a few years of articling, gaining experience in both the field and office, and attending study group sessions, it will all start to come together and make sense. It can be very helpful to find a study group or study partner who is at a similar stage in the articling process to discuss survey topics with. Even if no one in the group knows the answer, you will still gain something from just discussing the topic and listening to other people’s opinions.

It also seems like pupils are not taking the right amount of time to prepare for upcoming exams. Everyone has a unique way of studying for exams, which usually develops during the formative years of high school and continues into college or university. Professional exams are challenging and should not be treated like any old exam written in the past. Pupils should start preparing for an upcoming exam at least three months prior to the exam date. This includes going through older exams posted online (even though they are the old format), organizing study sessions with colleagues and quizzes your principal on topics that are unclear to you. There are also full/half-day seminars available throughout the year (and of course at the AGM) on specific topics that are a great learning resource.

Also try to seek out land surveyors from other companies and ask them some of the controversial questions that surveyors come across. Over time, some land surveyors working for larger firms end up having similar opinions on the “grey area” questions. This opinion can vary from person to person and company to company, so it is good to get another perspective. That way the pupil can formulate their own opinion and will be well-equipped to support it.

Although it is easy to blame the new exam format for the recent poor results, the topics are very similar to the old, three exam model. The major difference now is each question is a blend of statute law, the survey profession and the practical. The PPLS exams are extensively reviewed by a exam subgroup of the committee and then are also reviewed and discussed by the full Registration Committee prior to every sitting to ensure each question is fair and there is no ambiguity.

There is no doubt that most articling pupils understand the importance of land surveying and are passionate about their careers. So much so that they may want to rush through the articling process, so they can finally start practicing land surveying in Alberta. However, this will only lead to frustration once the pupil writes an exam or eventually attempts the qualifying exam. The key to articling is to learn new skills, ask questions, take yourself out of your comfort zone and experience all of the avenues that surveying has to offer.
Mapmaker
Philip Turnor in Rupert's Land in the Age of Enlightenment
BY BARBARA MITCHELL
327 pages
Available from ALSA Library – H0813

"Barbara Mitchell fills a yawning gap in the history of the fur trade and northern exploration. This is a labour of love, and it shows." Ken McGoogan author of Dead Reckoning: The Story of the Northwest Passage

Barbara Mitchell has indeed filled a missing gap in the history of northern exploration. We are all fairly familiar with the exploits of David Thompson and Peter Fidler but Barbara Mitchell has dug into the history of her great-great-great-great grandfather, the very first surveyor for the Hudson’s Bay Company. It was Philip Turnor who taught both David Thompson and Peter Fidler the art of surveying in the late 1700s. We will recall that it was David Thompson who was destined to accompany Turnor on the historic mapping of Lake Athabasca in 1790 but due to a bad fall and a poorly-healed broken leg, Peter Fidler got the nod to assist Turnor in this epic adventure.

But it is really Mitchell’s ancestral connection that gives this book its life. While she has done an excellent job of researching through old Hudson’s Bay archives, providing authenticity to Turnor’s accomplishments; she has woven that raw history into a story that injects her personal explorations following his trail through the northern wilderness, and much of it remains virtually untouched. As well as providing a biographic narrative, she has injected her personal voice dramatizing some of the events that surveyor’s diaries omit to tell. She has included photographic plates of some of Turnor’s maps accompanied by modern maps showing the extent of his travels. Also included are photographs and sketches of some of the physical and topographical features that would have been known to Turnor and his descendants. A photo of a 17th Century sextant and compass are included as well of photos of some of the original forts.

It has never been clear from the diaries of Thompson and Fidler how poorly the HBC managers on the ground regarded the importance of surveys and accurate mapping. The HBC hierarchy in London however had specifically engaged Turnor to provide accurate charts, not just of Rupert’s Land but into the northwest territory that the North West Company was finding so lucrative in trading with the natives. Turnor’s mapping expeditions into Northern Ontario and later into the Athabasca country were never properly provisioned and his remuneration was considerably less than that of the NWC traders. David Thompson defected to the NWC towards the end of his second seven-year contract because of his frustration with the HBC and their lack of commitment to the mapping mandate of the managers at York Factory. There is little doubt that the poor provisioning and low pay were also factors that led to his departure.

Throughout the book, Barbara Mitchell interjects some of the stories of Turnor’s descendants including the few stories from her living ancestors who knew tidbits of the ancestral history. She has been able to research birth and marriage records as most of the Turnor progeny seem to have settled around Moose Factory in Northern Ontario and the Red River Settlement in Manitoba. One of the first illustrations in the book is a genealogical chart setting out her lineage down from Philip Turnor to her generation.

The first nine years of Turnor’s adventures in North America from 1778 to 1787 were spent mapping the lands between James Bay and Lake Superior while the later three year contract from 1789 to 1792 with the HBC took him to Lake Athabasca and Great Slave Lake. He spent the two intervening years back in England preparing his maps of northern Ontario. He was engaged by the HBC finalizing his charting of his western explorations to Lake Athabasca and beyond upon returning to England in 1792. Upon completion of his mapping of the northwest he was engaged by the HBC as well as assisting Sir Nevil Maskelyne, the Astronomer Royal, in compiling nautical almanacs off and on until his death in 1800.

The only disappointment that I had with the book is the lack of detail on some of the modern-day maps particularly in the area south of James Bay, an area that I personally am not acquainted with. The geography of his western travels is more familiar to myself. I’m sure Ontario readers would find it just the opposite.

One interesting note of local interest is Turnor’s comment from Peter Fidler’s journals about Fort Spitzee, just west of High River, Alberta, where the author spent her childhood. The word Ispitsi in the Siksika language means “high” as in high water which has been a well-known trademark of this river for centuries.

G. K. Allred, ALS (Hon. Life)
An atlas is a collection of various maps of the earth or a specific region of the earth, such as Canada or Europe. The maps in atlases show geographic features, the topography of an area’s landscape and political boundaries. They also show climatic, social, religious and economic statistics of an area.

Atlases were really popular when I went to school a long time ago. Every September when the school year started, I would get a new atlas for my Geography class for whatever grade I was going into.

Well, these days there is no Geography class; it. Geography and History, as separate school subjects, have gone by the wayside. I had assumed that atlases were also consigned to the rubbish heap having been replaced by things like Google Earth and a myriad of GIS tools and apps.

So, imagine my surprise when I received the Oxford Atlas of the World – an honest-to-goodness traditional bound 448-page atlas. It is so much nicer than any atlas I used in school but also something that I can appreciate more now in adulthood than I ever could as a child.

According to the Oxford University Press release, “Twenty-four years in the making, the Atlas of the World: Twenty-Fourth Edition, is the most authoritative atlas on the market. The only atlas updated annually, it features crisp, clear cartography of both urban areas and virtually uninhabited landscapes around the globe that combine to create a striking overview of the Earth’s surface.”

As part of the release of the 24th edition, Oxford University Press has announced a “Place of the Year.” The 2017 Place of the Year Is Puerto Rico.

Puerto Rico has been in recession since 2006 due to a spiraling cycle of public debt – much of it stemming from public corporations such as the government development bank, the transportation authority, the electrical power authority, and the water and sewage authority. However, earlier this year, the island came into the global spotlight when they declared a form of bankruptcy in May. Because Puerto Rico is a Commonwealth of the United States, it was not allowed to formally declare bankruptcy, thus shedding light on the Commonwealth’s political relationship with the United States.

Between the financial and humanitarian crises facing Puerto Ricans, it has not been an easy year for this Commonwealth. It’s also unclear how the rest of the year will play out in regards to additional hurricane relief. What is sure is that debates will continue between Puerto Rico and the White House regarding debt relief, further hurricane assistance, and whether Puerto Rico should remain in the United States as a territory or a state – or become an independent country altogether. Source: https://blog.oup.com/2017/12/oxford-place-of-the-year-2017-puerto-rico/

And there is a map of Puerto Rico on page 321 of the Oxford World Atlas in fantastic detail and colour. On page 57, I can learn that Puerto Rico is 8,875 square kilometres, has a population of 3,578,000 and is the most industrialized country in the Caribbean.

The Oxford Atlas of the World features 22 pages of stunning satellite images, comprehensively updated world maps and over 110 plans of the approaches to the world’s major cities and city centre maps, checked and updated to show new roads, railways and places of interest.

The Oxford Atlas of the World is available in the ALSA library and available for purchase from Oxford University Press for $89.95.

Brian Munday
William Andrew Robinson

William was born to Hector O’Neil Robinson and Mary Elizabeth (Cohoe) Robinson (both originally from Ontario) on February 21, 1881 in Ludington, Michigan. His father was a prominent contractor in Winnipeg.

“One day last century, he first blinked at the sun in Ludington, Michigan. At the age of six months, however, that perception and foresight which are particularly his began to manifest themselves, when he migrated to Winnipeg. Matriculating in 1898, he entered Manitoba University, from which he graduated in Higher Mathematics in 1901. Stocked with so much learning, he tried for some years to impart it to the rising generation. In 1906 William’s perception fully manifested itself, when he came east and joined the glorious class of ’08 in the second year. Although unknown as an office seeker, his influence is not inconsiderable. A genial manner and manly kindness bespeak future success.”

“He was educated at Victoria School, Central Collegiate, Wesley College where he was graduated in arts, and the School of Practical Science of the University of Toronto.”

William attended the School of Practical Science at the University of Toronto (1906-1908) and graduated with honours. In his college days it is said that he was active in football. He obtained his DLS commission in 1911; his SLS commission in 1912; and his ALS & MLS commissions in 1913.

Research shows that Robinson was always based out of Winnipeg. From 1910 to 1918, he worked as a clerk, an engineer, and a surveyor for the CPR and the Dominion government. He performed township surveys in Saskatchewan in 1912.

In 1914 – 1915, Robinson registered quite a few plans in Saskatchewan and looking at a small sampling, they are, as expected, work done for CPR. Mr. Robinson discontinued his ALS commission in 1915. We would venture to guess that any of the work he performed in Alberta was also done exclusively for CPR.

William married Mary Ann Bedford in 1914 but in 1918 she died in childbirth, as well as the infant. William remarried in 1923 and they had a son in 1926, William George Robinson (he went on to become an engineer in British Columbia).

In 1918, he became the district engineer for the ‘good roads department’ (its inception) with the Manitoba Provincial Government; the position he held until his death.

“…district engineer in the good roads section of the provincial department of public works, died Sunday morning at his residence, 301 Niagara St. He had been in poor health for some time but was at work as usual Saturday at his office in the Parliament buildings.”

William was an active curler; a member of the Strathcona Curling Club; and a member of Prince Rupert Lodge, A.P. and A.M. He passed away on December 21, 1930.

Sources: Library and Archives Canada; NRCan; Al Jensen-Controller of Surveys; ISC; Brian Munday, ALSA; Ancestry.com; NewspaperArchives.com; Jim Watling, MLS; University of Toronto Publications; Wesley College Archives; Tech. Support from Carl Shiel; Winnipeg Tribune; Press; SLSA; Peel’s Prairie Provinces-University of Alberta; Vital Stats-Manitoba

Notes

Many thanks to Mike Waschuk, SLS for writing and providing this biography of one of our earliest and least-known members.

The Alberta Land Surveyors’ Association has an extensive – but not exhaustive – number of biographies of each Alberta Land Surveyor since Day One.

If you would like to do some research and prepare a biography or two of some of our other little-known members, please contact Executive Director Brian Munday at 780-429-8805 or munday@alsa.ab.ca

We are also looking for members who would be willing to interview senior Alberta Land Surveyors and get their stories and experiences on record. The John Horn/Army MacCrimmon interview and the Lloyd Cridland interview in this and past issues of the magazine are an example of the interviews that were done in the past. We want to continue with these types of interviews. The Alberta Land Surveyors’ Association will provide some direction and assistance with conducting interviews. Again, if you are interested, please contact Executive Director Brian Munday at 780-429-8805 or munday@alsa.ab.ca.
1986 Maintain the Survey Fabric
In his address to the 1986 Annual General Meeting, President Denis Hosford emphasized an overriding concern that, “as a group we are not doing all that we could to live up to our professional duty to society to not only maintain the survey fabric…but also to provide the reliable survey information required by our clients.” Mr. Hosford’s address was a lead-in to a debate on the introduction of mandatory professional liability insurance. After some debate, the bylaw was approved.

The membership then considered a mandatory continuing education regulation. The regulation would have required that Alberta Land Surveyors maintain their level of competency by attending conferences and seminars, by subscribing to professional journals or by participating in professional affairs. An Alberta Land Surveyor would have been required to accrue and maintain over a three-year period a total of ten continuing education units, with one continuing education unit being equal to ten hours of participation. The recommendation was referred back to Council.

At the 1986 Annual General Meeting, the membership approved advertising regulations which set out standards for business cards, telephone directory listings, newspaper and magazine advertisements and vehicle identifications - issues long discussed by the Association.

The membership also debated proposed standards for the Real Property Report which was to replace the Building Locations Certificate. After a considerable discussion, the recommendation was deferred pending the result of a secret ballot.

From the ALS News Vault
Land Surveying in the Year 2000
As long as citizens own property or need to define a right or interest in property, then there will be a need for land surveyors. Land surveying has been around for 5000 years. It has its roots in ancient Egyptian society where it evolved from a need to accurately re-establish the boundaries of the properties in the Nile Delta after each annual flood.

In Western Canada, a system of land ownership has been established which is based on the fact that official survey posts are placed at each corner of a property. The strongest claim to the location of a boundary is the undisputed original survey post placed by the surveyor who first surveyed the boundary. Clearly if these original survey posts did not rust away, or were never disturbed, then there would be few disputes or problems in re-establishing boundaries.

However, we all know that posts do disappear and are moved, so the first task of a land surveyor in defining boundaries is to find evidence and then to determine if that evidence is in its correct or original position.

Today, under our present system, the position of survey evidence can only be confirmed by measuring distances and directions between found survey evidence to either confirm or re-establish the boundary corners in question.

By the year 2000, I can visualize a scenario in which measuring techniques have improved to the point that coordinates of points on the earth’s surface can be reliably determined to an accuracy of two millimetres. When this technology becomes readily available at a reasonable cost, then surveyors will have the ability to establish reliable coordinates on each survey post they use to define a boundary. Once these coordinates have been properly established and officially recorded, then they will be the best evidence thereafter, of the true position of the property corner.

At the turn of the century, the first task of a land surveyor in defining boundaries will still be to find evidence and then determine if the evidence is in its correct and original position. Essentially, he will do this by using a black box to determine the correct location, dig for evidence and, if necessary, re-establish the corner. The professional activities of land surveying will remain the same, but the technical activities will change in that, instead of measuring distances and directions, reliable coordinates will be determined directly.

By the year 2000, the professional responsibilities of the land surveyor to maintain the survey fabric and advise clients in land related matters, etc, will not change but the tools and procedures he uses to carry out these responsibilities will.

A.D. Hosford, ALS

Reprinted from the Spring 1986 issue of ALS News

Advertisement from the Spring 1986 Issue
George Baerg (1929-2017)
George Baerg, ALS passed away on December 6, 2017.
Mr. Baerg was commissioned as a BC Land Surveyor in 1952 and was commissioned as an Alberta Land Surveyor (#439) on September 19, 1977. Mr. Baerg remained an Alberta Land Surveyor until his retirement in 1999. He was a BC Land Surveyor operating Baerg Land Surveying Ltd. in Chilliwack right up until his passing.
Mr. Baerg was 88.

Brenwyn Cooley (1946-2017)
Former ALSA Executive Director Brenwyn Cooley passed away on November 16, 2017 at the age of 71. She was predeceased by her husband, Bill Taylor. They both lost their battle with cancer, only four days apart, at the Foothills Hospital.
Ms. Cooley was executive director of the ALSA from 1992 to 1997.
The Alberta Land Surveyors’ Association has made donations to the JH Holloway Scholarship Foundation in their memory.

J.H. Holloway Scholarship Foundation
The foundation was formed in 1975 to commemorate Jack Holloway, our Secretary Treasurer for the years 1941 to 1967.
During Jack’s long, productive and all-encompassing stewardship of the Alberta Land Surveyors’ Association, he was the initiator and driving force behind modernizing the Surveys Act, the Land Surveyors Act, the Planning Act, and had considerable input into revisions to the Land Titles Act and the Expropriation Act. He was well known and highly respected in surveying circles across Canada and wrote at least nine articles for The Canadian Surveyor on various topics including "The Discovery of the Longitude," "Northern Alberta Oil Sands and Their Development," and particularly "The Principles of Evidence," which has become a classic in its field and required reading for a proper understanding of the "surveyor and the Law." Jack had a lucid polished literary style and a well developed sense of humour. In his younger days he was a regular contributor to Punch in London, England. He wrote a history of the Alberta Land Surveyors’ Association and wrote articles and gave lectures on town planning.
Jack Holloway’s achievements were many, profound, and lasting.

JOIN AN ASSOCIATION COMMITTEE
FURTHER INFORMATION IN RECOMMENDATIONS PACKAGE
WE NEED VOLUNTEERS
JOIN AN ASSOCIATION COMMITTEE
YOUR 2017/2018 ALSA COUNCIL

The ALSA affirms that Council members are the governors of the Association, providing leadership and direction for the Association's affairs. ALSA also affirms that Council members are responsible for encouraging volunteerism and helping ALSA to achieve its mission and aims.

Accordingly, the Council of ALSA, having the legal, statutory and judicial responsibilities for the continuity of the Association's affairs, will ensure that the Council obtains skilled and knowledgeable members to carry out its mandate and duties by:

- annually recruiting members from the ALSA to serve on the Council;
- providing an annual orientation workshop for council members that outlines the Council's policy process, the organization's history and programs, ALSA's organizational and operational plans, and the Council member's job description;
- providing members with an opportunity to obtain training in Council's functions;
- acknowledging the contribution of retiring council members who have served the Association.
2018 AGM KEYNOTE SPEAKER
Bruce Kirkby
Acclaimed Explorer | Writer | Photographer

Bruce Kirkby’s incredible adventures have taken him to every corner of the earth – from Everest to Arabia, from Ethiopia to the Arctic. An acclaimed explorer, travel writer, and adventure television host (who also has a degree in engineering physics), Bruce’s expeditions – and the formidable adversities they’ve entailed — have made him an authority on change leadership and risk management. In his engaging talks, Bruce draws on the tests and trials he’s faced in his travels to offer simple strategies from the field that encourage people and organizations – wherever they find themselves – to move toward possibility and opportunity to create lasting success.

With three decades of international expedition experience behind him, Bruce has crossed Mongolia on horseback; traversed Borneo by sea-kayak; reached mountaineering summits on five continents; and trekked coast-to-coast trek over Iceland. Recently, he spent six months travelling to and living in a Himalayan Buddhist monastery with his young family – an experience chronicled on Travel Channel's Big Crazy Family Adventure.

The former host of CBC’s No Opportunity Wasted, Bruce is also the bestselling author of two travel books, and his work appears regularly in The Globe and Mail, The New York Times, Outside, and EnRoute. His photography was selected by National Geographic as among “the most compelling adventure images of the decade.”

MARK YOUR CALENDAR
April 19, 2018
Fairmont Jasper Park Lodge

VALIDATION
2018 SESSION TOPICS

Water Boundaries Seminars
• Riparian Boundary Case Law/Legal Aspect of Riparian Boundaries
• AEP Wetland Policy
• AEP Water Boundaries New Operational Policy

Business Seminars
• Professional Management of Technical Staff
• Mentoring an Articled Pupil
• Elevator Pitch for Introducing Ourselves

Survey Specific Seminars
• Insurance
• Blue Book
• UAV, 3D Scanners and Photogrammetry

REGISTRATION IS OPEN