

Ontario Professional Surveyor



CANADA 150
1867-2017

on the cover ...
Happy 150th Canada!
Parliament Hill, Ottawa, ON

also in this issue ...

Early Land Settlement –
Making Canada Home
Canadian Pioneer –
William Chewett (1757-1849)
What Social Scientists Can Learn from
the History of Land Surveying

plus our regular features

Educational Foundation
News from 1043
Book Reviews

ONTARIO PROFESSIONAL SURVEYOR



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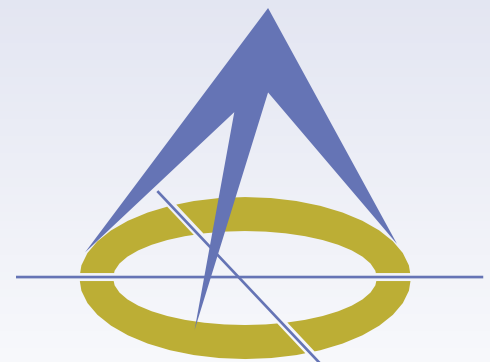
ON THE COVER ...

On July 1, 1867, the Dominion of Canada was born. The new country united the former province of Canada (which was split into two new provinces Ontario and Quebec), New Brunswick and Nova Scotia. The cover image is a photo (credit Ottawa Tourism) of the Peace Tower on Parliament Hill, which was conceived by an act of parliament as a commemoration of the 1918 armistice that ended the First World War. The photo was chosen for two reasons; to celebrate Canada's 150th birthday and to remember those Canadians who gave their lives 100 years ago during the Battle of Vimy Ridge.

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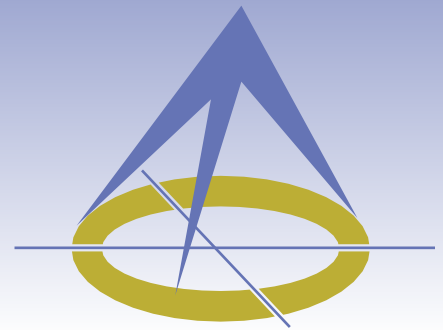
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President's Page

By Russ Hogan, O.L.S.



This is an exciting year to be President as we celebrate our association's 125 years of incorporation and our nation's 150th birthday. During my short time as president I have traveled from coast to coast (Victoria, BC to St. John's, NL), attended four Provincial Surveying Association meetings and met the presidents of all of the provincial surveying associations as well as the President of the Association of Canada Lands Surveyors and the Chair of Professional Surveyors Canada. A lot of the issues and challenges that we face here in Ontario are the same across the country and the presidents are all enthusiastic about collaborating with each other to tackle these issues together. We are all passionate about developing a national perspective and promoting the importance of our profession to Canadian society.

Just today one of the presidents forwarded a CBC article about a Nova Scotia man who was stunned to learn that he doesn't own the backyard he thought he'd purchased with his home. He was unaware that there were two parcels, one where his house sits and the other the backyard. He didn't get a survey, which I am sure would have revealed this serious problem. This homeowner's plight is a good illustration of the need to have a survey completed as part of the property transactions. This was reinforced by lawyer Ray Leclair (LawPRO) in our last Webinar. All of the presidents agreed that this is an important issue for all of us and it will be added to the Presidents' Forum agenda when we meet in Prince Edward Island next week.

I have also been busy dealing with matters closer to home. Our Strategic Planning session was held at the end of March with most members of Council participating along with representatives from some committees and regional groups. This year the session was once again led by Peter Richardson and Erik Lockhart from Queen's University. It was an intense couple of days and thanks to the efforts of the group and the open dialogue, I believe we have set some very important yet realistic goals for the coming year. The four key priorities that rose to the top are: Legislative and Regulatory Changes, Marketing Strategy, Succession Planning, and Developing New Members.

Strategic planning helps to ensure that Council and its committees are focused on the issues and initiatives that are important to our Association. More details about the Strategic Plan, including action plans and deliverables, will be provided

in an upcoming AOLS In Sight newsletter.

At the first Presidents' Forum that I attended, I provided a summary of our Strategic Plan and asked if any other organizations would be interested in participating in a salary study or the development of a marketing strategy. I am happy to report that all Associations have agreed to participate in a National Salary Study that will include both professional and technical staff. In addition, many have agreed to participate in a one-day workshop to collaboratively develop a marketing strategy. Following the workshop it is my hope that most, if not all of the organizations, will agree to participate in a multi-year national marketing campaign.

In May, Executive Director Blain Martin and I visited York University and met with Richard Hornsey, Interim Dean, Lassonde School of Engineering; Costas Armenakis, Program Director, Geomatics Engineering; and Suzie Lee Hortness, Senior Development Officer. The focus of the meeting was on how we could help each other attract students to York and encourage them to become members of our Association. I believe that the results of this meeting will help to build a stronger relationship with both the university and the students.

We started with a brief presentation about the AOLS, our demographics, the career opportunities and some of our efforts to raise awareness of the profession, but the majority of the meeting focused on how we could help each other attract high school students to Geomatics Engineering and the surveying profession. Some of the ideas discussed included holding AOLS events at York and having AOLS members volunteer as guest lecturers. We also discussed potential opportunities for the association and members to financially support both the students and the university. Suggestions included scholarships and mentorship awards, supporting Geomatics faculty in research endeavors and having an AOLS member as a "Geomatics Engineer in Residence" to mentor students. One opportunity to which we quickly agreed was to sponsor a Lassonde Summer Student Researcher position, which will provide a summer job for a female high school student to work with a Geomatics professor. The goal is to encourage more female students to pursue surveying as a career. Finally we discussed how members could get involved. In addition to hiring students and graduates, some suggestions included the purchase of equipment for the Geomatics program or possibly the loan of specialized surveying equipment. If any member is interested in volunteering their talents and/or resources please contact Blain Martin.

cont'd on page 5

Executive Director's Notes

By Blain Martin



Once again there are many things I could write about in my Ontario Professional Surveyor's article. Actually, President Russ and I met to make sure that we covered current topics and were not writing about the same things. My topics included the move to GeoEd for our CPD tracking, our continued success with our Webinar series, an outline of our book distribution procedures, a description of the meeting that Bill Buck and I had with Professional Engineers Ontario and notice of the upcoming National Salary Survey. All of these topics would be of interest but on reflection, I thought I would go in a different direction.

Over the last few years I have noticed what may be a degradation or compromise in the quality of work that some survey firms are delivering to their clients. There are two indications of this. The first is the number of instances where plans are sent to the Registrar when one surveyor thinks that the quality of another's work, for whatever reason, is below par. Although these are not official complaints, the Registrar examines each one carefully and when warranted, takes action.

The second indication is the number of referrals that are coming to the Registrar from the Survey Review Department. Before I speak about that, I want to talk about the Survey Review Department Staff. All of the professional staff are seasoned and incredibly knowledgeable Ontario Land Surveyors who have worked in private practice for many years prior to working in the AOLS Survey Review Department (SRD).

Doug, Drew, Al and Tim all take an educational approach to try to help the Survey Firms enhance the quality of their surveys by providing those firms with knowledge that is based on their own extensive experience. The comprehensive review includes an examination of the survey file, a field review and an office visit. This 3-step review process provides each survey firm with a rare opportunity to learn from very knowledgeable surveyors.

Unfortunately, it appears that many survey firms are not producing the high quality products that are expected of the survey profession. In most cases a formal referral to the Registrar indicates significant issues with the surveys that were examined. In 2015 there were 19 referrals, in 2016 there were 16 and so far this year there have been 6. The number for 2017 will likely increase as most referrals happen later in the year. When you consider that the SRD only completes about 40 comprehensive reviews each year, the referral number is very high.

There is no doubt that being referred is a very serious matter and if you do not treat it seriously, the consequences will most likely have a negative impact on your business.

I heard a story recently that I felt would be a good topic for my Quarterly article. It concerned one of the referrals from 2015. The Surveyor being referred (let's call him Surveyor One) was shocked and wondered how he should deal with his referral so he went to one of his surveyor friends (Surveyor Two) to discuss what approach he should take.

Well, Surveyor Two had a look at Surveyor One's SRD report and said that the SRD is right on every count. He then said that it is not as easy as sending a reply to the SRD saying that you will "try harder". Surveyor Two told Surveyor One that he would need to look at each deficiency flagged in the review and develop an action plan to address each issue to ensure that it would never happen again. He went on to say that the SRD staff would likely check to make sure that the action plan was implemented but once they found it was, then they would not worry about your firm any longer.

In some ways action planning to solve these SRD problems is analogous to the Strategic Planning Process that the AOLS goes through each year. The strategic planning process is simply the development of an action plan to move more productively through the next several years.

I like this story because it shows how we can go to our colleagues for advice and get additional input that will enhance the quality of our survey products. I know when I was in private practice years ago, there were many times that I sought out my articling surveyor's (Tom Merriman) input on issues that I did not have experience with. It always gave me the additional perspective that I needed.

That is all well and good, but Surveyor Two went on to make another point with his colleague. He said that the idea of an action plan is great but there is a more fundamental problem; you are simply not charging enough for your services and consequently you do not have enough time to complete your projects properly. He said, "You cut corners and your action plan cannot be implemented successfully without changing that fundamental problem".

Surveyor One thought that he would lose all his clients if he charged more but Surveyor Two assured him that the clients that remained would be good clients, the type that he would actually want to work for. Well, Surveyor One trusted his colleague and after implementing his action plan raised his prices to fit what was required to prepare high quality surveys. The results a year later were that Surveyor One's business is thriving, he is working more regular hours and is making a good living.

This approach could be carried over to the complaints or even our discipline process. Each of these processes is in place to protect the public. However, if you can figure out what the problem is, come up with an action plan where you are protecting the public yourself, then complaints, discipline and SRD referrals will disappear. Don't hesitate to approach your colleagues for their opinions if you run into issues that you can't solve yourself. Let's all work together to reduce the number of complaints, the number of referrals and the number of plans that are being sent to the Registrar.



Letter to the Editor

Dear Maureen,

I have known AOLS Executive Director Blain Martin a long time. We first met in the early 1990s when I was hired on by the Association of Ontario Land Surveyors shortly after the centennial AGM to run the fledgling survey technologist program. Blain, at the time, was contracted to the AOLS to do a variety of jobs from time to time to get the computer systems up and running or fill in with the Survey Review Department.

Our paths crossed over the years but we have been in pretty regular communication since he became executive director in Ontario and I fulfill that same role here in Alberta.

I have borrowed/stolen/plagiarized a number of ideas from Blain and he has borrowed/stolen/plagiarized a number of ideas from me as we truly work together for the betterment of the land surveying profession. One of the ideas that Blain lifted from me was the idea of “executive director’s notes” in each issue of the Ontario Professional Surveyor.

I was really pleased to read the last issue of the magazine which shows a picture of Blain and three past-executive directors together and another picture of Carl and Jan Rooth. Blain said, “I consider Carl to be my mentor.”

I would like to echo those comments and publicly thank Carl Rooth for everything that he has meant to me in my career. Carl was not the executive director who hired the 20-something kid fresh out of MBA school but he was the one who gave me the confidence to do what I was doing. He was the one who kept giving me more and more responsibility

and reined me in when I took too much. It would have been easy to give up on me. The economy in the early 1990s was lousy; I was the newest person on staff; and I didn’t have a defined role or title. But Carl kept me on board and encouraged me to apply for the executive

director position in Alberta when it became open even though I wasn’t sure I wanted to sell the house we had just bought and move out West. As usual, Carl was right.

In many ways, I look at the time I spent at the Association of Ontario Land Surveyors from 1992 to 1997 as my articling period helping prepare me for the last twenty years as executive director of the Alberta Land Surveyors’ Association. This year, at our annual general meeting in April, I was fortunate enough to be recognized for my long-standing service to the profession in Alberta. As our photographer was taking my picture after the awards lunch and getting me to hold my plaque one way and turn my head the other, I could not help but think that I almost did not last a year with the profession

and that I would not be here today without a lot of support and help from a great many people and especially the advice and support and mentorship of Carl Rooth. Thank you, Carl.

Brian Munday
Executive Director
Alberta Land Surveyors’ Association



President’s Page continued from page 2

When I think about why I wanted to take on the role of President, I realize it was because I want to help the profession. It does take some time and effort but the rewards are immeasurable. I am fortunate to have the opportunity to work with colleagues whom I have known all my adult life, newer members, and others from across the country; each group

helping to improve our profession. These are a dedicated group of people who all have the same perspective; we all want to make the profession strong and viable. As I read Great Lengths I realize that I am following in the footsteps of those who came before me and I hope that I can help to continue to strengthen our profession as we move forward.



Reflections on an Amazing Strategic Planning Event: Translating the Insights into a Strong and Meaningful Profession

By Izaak de Rijcke

It was a privilege to be part of an intense and hard-working effort by all in a strategic planning session in late March. After leaving the experience, there was an opportunity to reflect on some of the directions and new initiatives that were identified for both the near future and as part of a longer timeline. It is expected that the details of those new goals and directions have been reported to the membership in the months that followed. One element that appeared in the list of action items was of particular interest to me because it identified a forward thinking direction that could hold great beneficial impact for both the membership and the public in years to come. It was the mention of an ethics-based Product and Service delivery focus. Members may wonder: do we not have a Code of Ethics already? Do we not have a discipline structure?

The appearance of this item late in the strategic planning session meant that it could not be fully explored in terms of what it might mean for members, for AOLS as a regulator, and for the public as consumers of members' services. Yet, there emerged a broader consensus that we might be on to something. Despite being late-arriving, it persisted as an idea. The purpose of this article is to describe what that potential is, and to hopefully spur the discussion forward – thereby inviting all of us to reflect further – and also to explain why this deserves some serious consideration.

To be clear, the original reference to an ethics-based Product and Service delivery focus was framed differently. It was suggested as “Quality Service and Product Principles that Serve and Protect the Public”. This appeared to be the common thread that could tie together many other goals and action items that had been identified as important to list and do. However, we seemed to remain stuck in details. For example, “Does the sketch issue get resolved or not?” – “How can we gauge

whether marketing dollars create measurable value?” And, “Why do C of R members not consider OLS membership as a value-based proposition?” Answers to such questions seemed frustratingly elusive. In the diagram below, the statement of Service and Product Principles appears central.

The point however, is to consider the potential link and impact of the central statement on other, associated issues. What may emerge is an entirely different and forward-looking approach that treats our individual and collective relationships with the public through a lens of trust.

For example, if we consider sketches: Coming to understand the rightful place of sketches would not be definitively prescribed by Regulation as in “a surveyor shall not”, but rather, as an example of how the delivery of the product needs to include sufficient detail for the recipient to completely understand the purpose, limitations, and application of the sketch product. Some segments of the public then benefit from the availability of sketches, but other consumers of sketches will not want them because the cost of explaining the limitations of the product and the warnings of misuse make the sketch product more expensive than a standard survey product (a standard survey plan). In other words, the surveyor becomes responsible for educating the client on the proper use of the sketch product... it is provided with its own “User Manual”.

Likewise, marketing our services is defined by how we view our own service and product quality as something that will serve the public. If marketing is only a crass, financial, business or profit-driven activity, then marketing fails to accomplish the central theme of building trust – and risks back-firing when the public sees through it.

Furthermore, CPD that enables quality services and products for our members, will enhance and enable the delivery of quality products that are trust-driven,



trust-based, and ultimately protect the public in how such products are configured. Likewise, for C of R members, there is a value proposition because the OLS designation becomes recognized as a credential of trust. Legislation and regulations are relaxed so as to accommodate the development of 3D products for condominium units – because unit buyers and their lawyers need this. How this is done in practice (even using colour or a “dynamic” survey product such as a video) is left up to surveyors to develop and produce. Room is created by which to depict different boundaries (think of water boundaries) by methods that are more effective and valuable than what can only be conveyed by a mere single line on a plan.

Ultimately, the core principles are broadly stated, but are adopted by Council with detailed Guidelines or a Commentary that fleshes out how the principles translate in practice. This approach will support innovation and place the OLS practitioner of cadastral surveying in a role of “surveyor of boundaries” because he or she is recognized as a trusted and capable practitioner of the profession – with an OLS licence. Some may fear that this will lead to chaos or a lack of responsible service and product delivery. To this fear, we may remember that the fear (and cost) of litigation would, in itself go a long way to ensuring responsible practice. A competent surgeon does not practice medicine because a regulation dictates the number of sutures or the length of an incision. The surgeon’s knowledge and expertise, confirmed by a licence, and a fear of the economic consequences of medical malpractice, all ensure that the operation proceeds in a manner that is in the best interests of the patient.

Could this have been a Day 3 activity for strategic planning? Not necessarily. This is an initiative for the whole

profession; each member should be invited to think about innovation and how the delivery of products and services meets a public need. This requires an entire flip in attitude – from “because I have a licence as an OLS and must comply with rules, this is what you need,” – to “let me understand what you need and allow me to respond by showing how I can create value for you in meeting that need.”

Developing a list of core principles need not be complicated. A suggested start might be:

- The delivery of a product or service shall always include:
 - sufficient explanation and clarity to allow for the appropriate use and application of the product by the end user;
 - a written agreement that addresses IP in the product, third party use and distribution, and other things;
 - appropriate measures to avoid confusion or misleading interpretations as to title, and other legal rights;
 - etc.

A Commentary, or further Guidelines, would assist in describing how much is sufficient and what is appropriate. The practice of a profession from this vantage point would build trust and reward practitioners as having a reputation that their products and services are truly designed to place the public interest first. Such products and services have monetary value.



Izaak de Rijcke is a licensed surveyor based in Guelph, Ontario. He is also a practising lawyer, focusing on boundary and title related issues. He has written numerous articles, co-authored books and taught seminars and courses for lawyers and land surveyors. Izaak teaches courses in boundary law at York University’s Lassonde School of Engineering where he is an adjunct professor. He can be reached by email at: izaak@izaak.ca

Calendar of Events

September 4 to 7, 2017

UAV-g 2017

Bonn, Germany

<http://uavg17.ipb.uni-bonn.de>

September 6 to 8, 2017

InterDrone

Las Vegas, Nevada

www.interdrone.com

September 26 to 28, 2017

INTERGEO

Berlin, Germany

www.intergeo.de

October 23 to 26, 2017

GIS-Pro 2017 – URISA’s 55th Annual Conference

Jacksonville, Florida

www.urisa.org

November 15, 2017

GIS Day

Discovering the World Through GIS

www.gisday.com

November 23 to 24, 2017

Geomatics Atlantic

St. John’s, Newfoundland & Labrador

www.geomaticsatlantic2017.com

Canadian Pioneer – William Chewett (1757-1849)

By Katharine Whitaker

It is 127 years since the Association of Provincial Land Surveyors of Ontario honoured William Chewett, pioneer land surveyor, draftsman, soldier and public servant at their Fifth Annual meeting held at Toronto in February 1890.

Fast forward to July 2017, when Reveley Lodge in Bushey Heath, Hertfordshire, England, will be honouring William Chewett with a small exhibition entitled “Canadian pioneers, William Chewett and Son.” Why an exhibition about one of Toronto’s esteemed families so far removed from the place where they made their mark?

The last owner of Reveley Lodge was Albert Ranney Chewett (1877-1965), great grandson of William Chewett. In 2003 the estate and house was bequeathed to the Bushey Museum on the death of Albert’s wife, Eila Chewett. A charitable trust was established to preserve and look after the estate including the artistic and cultural heritage of the Chewetts.

Much is known and documented at Reveley Lodge about Albert Ranney Chewett’s activities and artistic life in Bushey/Bushey Heath from 1898 till his death in 1965 but very little is known to the Bushey community about his Canadian ancestors. It seemed a fitting tribute in this 150th anniversary year of Canadian history to highlight in particular the role of William Chewett in the pioneering days of Upper Canada and how he, his son James and later his grandson William Cameron Chewett became esteemed members of the Toronto community during the 1800s.

Whilst researching for the exhibition I made some very interesting discoveries. Canadian sources tell us that William Chewett had left England in 1771, after being trained as a hydrographic engineer at the East India Company College in London. I went to the British Library in London, which holds the records of the East India Company, to discover that there was no record of William Chewett having attended this college.

Next I looked for William Chewett’s birth record through the many church parish records for the City of London, held at the London Metropolitan Archives. Here I was more successful, but this search revealed that William Chewett had been born on 21st December 1757, not 1753 as recorded in Canadian secondary sources. He was the first child of James and Sarah Chewett and baptised on the 8th January 1758 at St. Katharine Cree Church, Leadenhall Street, City of London. This church is of particular importance as it is one of eight churches to survive the fire of London in 1666



Figure 1. William Chewett, miniature painting by Hoppner Meyer. Courtesy of the Reveley Lodge Trust.

and today still stands intact with its Tudor tower and significant Jacobean interior and exterior dating from 1623-30, including the font that William was baptised at.

So where was William Chewett in 1771 as he would have been only thirteen years old? My next clue came with a discovery at Reveley Lodge. On the back of a miniature oil painting of William Chewett (I believe this painting is by Hoppner Meyer and referred to in the report of the fifth annual meeting in 1890 – see figure 1) was a note that he had attended Christ’s Hospital School, in the handwriting of William Cameron Chewett. Christ’s Hospital, a school founded by King Edward VI in 1552 for the care and education of poor children living in London, moved from the City of London to Horsham in Surrey in 1902. The school still exists but is now an elite public school compared with its origins.

Further research at the London Metropolitan Archives where the records of Christ’s Hospital School are held,

cont’d on page 10



Figure 2. Boy in blue uniform: William Chewett would have worn this distinctive uniform and silver badge denoting him as a Mathematics student. Published in 1827 by Ackerman in "The World in Miniature, England, Scotland and Ireland".

revealed that William Chewett's mother died in April 1761, leaving her husband James with two small children. James Chewett petitioned Christ's Hospital School (also known as a Bluecoat school because of its distinctive uniform – see figure 2), petition dated 10th March 1762, to admit William. James could do this as he was a bricklayer by trade and a member of the Worshipful Company of Bricklayers and Tylers, which gave him the right to be a Freeman of the City of London, one of the criteria for admitting poor children into Christ's Hospital School. As a Freeman, James could live and work legitimately in the City of London, a practice inherited from the Guild system in the medieval period. Another criteria was that James Chewett had to provide proof of his wife's death and of William's baptism, which was certified by the curate, P. James of St Katharine Cree Church, in December 1764 and January 1765, respectively.

William Chewett entered Christ's Hospital School on 17th January 1765, just aged seven, where he was cared for and looked after for the next ten years. Aged fourteen and half, William Chewett was enrolled into the Royal Mathematical School of Christ's Hospital, founded and granted a Royal

Charter by King Charles II in 1673, for the purpose of educating young boys in the art of navigation for His Majesty's Navy. The book, 'The Elements of Navigation,' formed the basis of the course which included Geometry, Plane Trigonometry, Spherics (spherical trigonometry), Geography, Plane Sailing, Globular Sailing, Astronomy, Day works and Fortification.

William would have produced a navigational workbook which he took to sea when he joined his ship the British Queen, in the Quebec trade, in March 1775. He was apprenticed to Joseph Judge for seven years unless required by His Majesty for military service (see figure 3). Upon discharge, Christ's Hospital School provided William Chewett with a complete wardrobe of sea clothes and some navigational instruments such as a quadrant, fore staff and Gunter's rule. William would also have taken his silver badge with him, a safeguard against the press gangs of the day who would then have proof that William was serving an apprenticeship at sea.

William Chewett arrived in Quebec, Canada in 1775, at a time when the American Revolutionary War had broken out the previous April. William was soon drafted into the Quebec militia, where his mathematical skills became an asset during the siege of Quebec in 1775-76. There being no engineer in the Province, he was employed, by order of His Excellency, Captain-General Carleton, Governor of Quebec to draw plans of the fortifications and determine the distances of the enemy batteries. William Chewett remained on active service till 1783 when he entered the service of the deputy surveyor general, John Collins in the Quebec Surveyor General's Office. William Chewett received his commission as a Deputy Surveyor in 1784 and immediately was involved in the Loyalist resettlement programme in the Townships established along the St. Lawrence and around the Bay of Quinte.

Children	Parents	Apprentices	On what Trade	Time
James Thompson	John Thompson	William Thompson	Navigation	1765
John Thompson	John Thompson	John Thompson	Navigation	1765
William Chewett	James Chewett	Joseph Judge	Navigation	1765
...

Figure 3. Record book: Boys leaving the Royal Mathematical School, showing entry for William Chewett, reproduced from the record book held by Christ's Hospital Museum.



Reveley Conservatory. Photo courtesy of John McCormack.

However, it is recorded in Canadian secondary sources that William Chewett was commissioned as a Deputy Surveyor in 1774, but I have shown in this article that this cannot be correct. How that came about I can only guess at. Perhaps the date was originally written down incorrectly and then taken at face value. Like William's birth year, there was no way of checking the date then, as no birth certificates were issued in the 1700s and only came to be issued in the United Kingdom from 1853.

In the book *'They Left Their Mark'* Surveyors and their Role in the Settlement of Ontario, by John Ladell, published in 1993, he states that the earliest known surveyors to be commissioned by the Crown to survey Crown Lands in Canada were Philip Frey and Alexander Aitken in 1783¹. John Ladell goes on to say that there were plans submitted to Lieutenant-Governor Simcoe for the townships of Marysburgh and Sophiasburgh, surveyed by John Collins and William Chewett in 1784 and 1785 but he questions whether Chewett was in fact active in the Loyalist settlements as early as 1784, despite stating that William Chewett received his commission in 1774², which cannot possibly be true, as Chewett was still at school in London. I can only deduce that William Chewett was commissioned in 1784 and that the date of 1774 was incorrectly recorded at the time.

However, there is proof that William Chewett was active in the resettlement of the United Empire Loyalist programme established by the British Government

after the end of the American Revolutionary War in 1783. The Reveley Lodge Trust holds a number of William Chewett's journals, field note books, account books and letters, etc. in the collection of the Chewett family papers. In William Chewett's journal entry for 16 May 1784 he writes: *'List of plans delivered into the Deputy Surveyor Generals Office – viz General Plans of the five Townships from Cataraqui to the head of the Bay of Quinte'*.

I hope this article goes some way to correct William Chewett's record of his early life because his story demonstrates the power of education, and how he was able to adapt to the rugged conditions of Colonial life and make good. The Reveley Lodge exhibition is a brief history of this remarkable family whose contribution to the development of the

Town of York (renamed Toronto in 1834) is still revered there today.

The exhibition opens on Sunday 2nd July, to coincide with Reveley Lodge's Canada Day Garden Party and will continue to the end of July. It is open only on Thursdays, Fridays and Saturdays, from 2-5pm. We hope that many Canadian nationals will visit us and if you are in the area please drop in.



Katharine Whitaker, Trustee, Reveley Lodge, 88 Elstree Road, Bushey Heath, Herts. WD23 4GL United Kingdom.
www.reveleylodge.org

¹ *'They Left Their Mark'* by John L Ladell, 1993, p. 73

² *ibid.* p. 76



Reveley Lodge. Photo courtesy of John McCormack.

Early Land Settlement - Making Canada Home

By Shirley Mask Connolly

This summer, a special 150th anniversary of Canada exhibit at the Polish Kashub Heritage Museum in Wilno, Ontario focuses on the efforts at land ownership of the first Polish Kashub immigrants in Canada. The display titled “Mapping Our Roots & Early Land Settlement — Making Canada Home” includes maps, deeds, inspection reports, survey reports, official letters, and diaries etc. made by the government agents involved — including **Provincial Land Surveyor, William Bell** and Crown Land Agent, Thomas Patrick (T.P.) French.

The overwhelming attraction of Canada to the Kashubs was the promise of free land. These immigrants from the Pomeranian region of West Prussia (today’s northern Poland) were Kashubs, a Slavic group closely connected to the Poles who identified themselves as Polish (referred to by the government agents as *Prussian Poles* and by the author as Polish Kashubs). Most were landless farm labourers who were directed to lands ill-suited for agriculture as part of this country’s pre-confederation colonization road scheme for attracting more settlers into the wild lands of Upper Canada. They were assigned lots on the Ottawa and Opeongo Colonization Road (aka Opeongo Road) with their first locations dated September 9, 1859. The key map in the museum’s display depicts “*A Part of the Township of Sherwood, Radcliffe, Hagarty, Brudenell— Ottawa and Opeongo Road*”¹ where most of these lots were located. Dated February 2, 1864, it’s the oldest map in the exhibit and was made by Provincial Land Surveyor, William Bell (1819-1890) (Photo above).

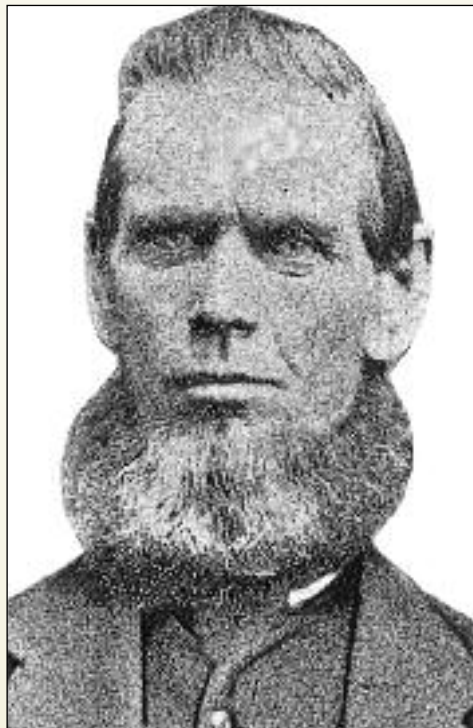
In the summer of 1862, William Bell received instructions from Andrew Russell, Assistant Commissioner of Crown Lands, Quebec, to re-survey and repost the free grant lots on the Ottawa Opeongo Colonization Road. This was Bell’s first major contract after passing his qualifying examination as a land surveyor in Pembroke, on January 14, 1861. Interesting to note that it was his younger brother, Robert Bell (1823-1873), who led the survey crew which originally blazed out the Opeongo Road in 1851. William Bell was forty-two years of age when he qualified as a Provincial

Land Surveyor, seventeen years after Robert who was twenty years of age when he qualified.

As a government agent, William Bell played an important role in relation to the first Polish Kashub settlers. While the job of the land surveyor may be perceived as being impersonal, mathematical and “scientific”, there was/is also very much a human element. Bell’s diary entries show that Mr. French, the Crown Land Agent, and Bell were often occupied with settling land disputes. In the letter accompanying his field notes dated Pembroke July 18, 1864, Bell states: “*disputes had arisen between parties along the line of the Road who had settled according to the old survey. In accordance with my instructions, in all such cases, I endeavoured*

to bring the parties to an agreement and where necessary made such a subdivision of the lots in dispute as gave to each of them his improvement.”²

Bell was described as “*a man of deep thought and wide information and of such equable temperament that he probably never made a personal enemy in all the course of his long life.*”³ This trait undoubtedly would be helpful when it came to handling land claim disputes. Bell also empathized with the settlers: “*The Free Grants in Sherwood are for the most part inferior in quality, the soil being generally a light sandy loam, and if possible more stony than on any other part of the line. The surface is broken and hilly and the hills generally rocky. The timber is chiefly composed of white and red pine occasionally mixed with poplar and white birch. A large quantity of pine timber has been taken off the*



Free Grants here since the commencement of the settlement, which has contributed in a good degree to the support of the settlers. It is to be feared that when this source fails (and it is fast becoming exhausted) many of the settlers will find it difficult to support themselves by the produce of their farms. A great majority of them are Prussian Poles, a quiet and industrious people, but they have been unfortunate in their choice of lands.”⁴

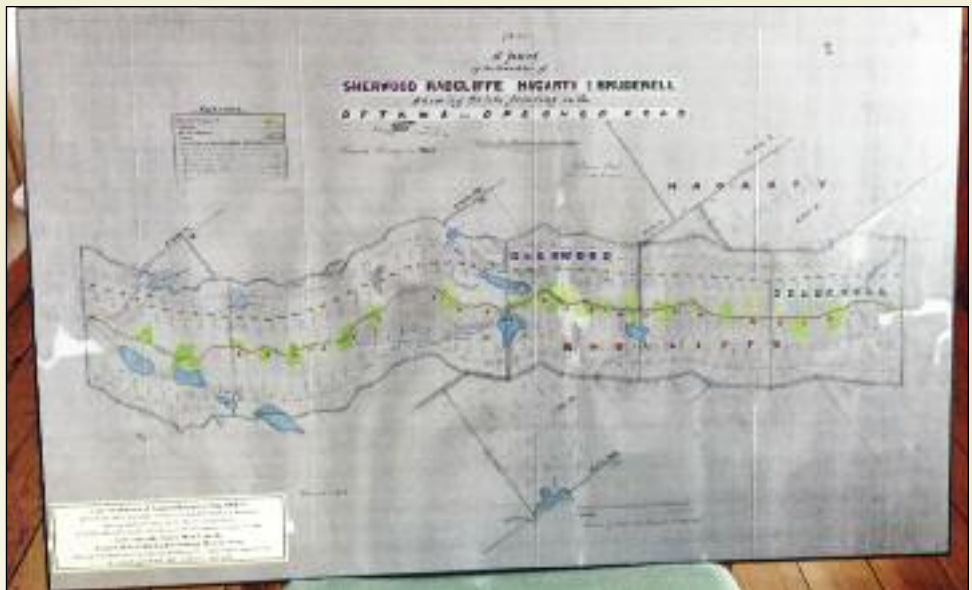
Based on his diary notations, Bell’s dealings with the Polish Kashub immigrants began in early March, 1863. Bell had direct contact, albeit using an interpreter, and often was accompanied by T. P. French. He included their names on

the close-up drawings of their lots along with notations describing the terrain, land/soil/rocks, trees and the presence and location of all buildings. These neatly executed and carefully drawn *Field Notes* are informative and valuable archival documents.

Bell had lived on a farm in a good agricultural area in Oxford Township, County of Grenville, Upper Canada, about three miles south of Kemptville, from early in 1832 after his family arrived here from Ireland (after a short sojourn in New York). And although Bell does not entirely negate the agricultural possibilities of lots along the Opeongo Road – after all he was employed by the Government which was intent on implementing the Colonization Road plan to open up this part of the Ottawa-Huron tract as part of its nation building strategy – he was realistic in his description of the agricultural limitations of land. As a Provincial Land Surveyor, it was not only his job to identify and define the property lines, but also to make an overall assessment of the “*general character of the country*” and the “*condition of the settlements on the line of the Road.*”⁵

Ultimately, Bell had considerable impact on the lives of these Polish Kashub settlers, but not in a way he necessarily would have intended or would have wanted. As per instructions, he was to measure the size and total acreage of the individual lots, as well as the size of the clearings. Both of these measurements would impact the settlers, sometimes adversely. Settlers who wished to get free grant title to the 100-acre lots on which they were located were required to meet settlement duties as set down by the government – this included clearing and cultivating at least twelve acres of land in the course of four years, and residing on the lot(s) during that period. Thus William Bell’s Survey, Report and Field Notes, with calculations of the acreage of the lots and the clearing sizes, directly affected whether or not the Polish Kashub settlers would get title to their allotments when they applied for their free grant patents in 1864. If their allotments exceeded the 100 acres of Crown land that they were entitled to when they fulfilled the required settlement duties, they were required to pay for excess acreage – the going rate being 70 cents an acre – a lot of money for these barely subsisting settlers to pay for essentially worthless land! No recompense was offered for any acreage shortages, however.

In April and May, 1864, twenty-five of the original Polish Kashubs applied for title⁶. On August 8, 1864, Andrew Russell, Department of Crown Lands, Upper Canada, responded with Fiat 528,⁷ and eight of the applicants were granted title; however, another list contains also the names of the unsuccessful applicants with the reasons for them



being denied title indicated in the right hand column. Six of the denied applicants had to buy acreage, eleven had insufficient clearances, and two were not the mandatory four years in occupation. A couple of names were repeated. *Bell’s Survey* was referenced for nine of the applicants with “*not sufficient clearance*” notations. And so despite his compassion for these settlers, Bell’s Survey did impact them negatively – delaying and complicating the acquisition of their free grant patents until they cleared further acreage and in some cases, costing them money in purchasing surplus acreage.

T.P. French complained about the Prussian Poles being less than honest with him when he did his 1863 winter inspection report⁸ and it is quite probable that Bell as well as French, as persons of government authority, were regarded with some apprehension and mistrust.

There was difficulty also for Bell and his crew “*roughing it in the bush*”, enduring the seasonal highs and lows of temperature along with exposure to rain, snow and high winds. On this job, Bell initially pitched camp on the Colonization Road on September 5, 1862, and more than seven months later, on April 20, 1863, he discharged his crew and returned to Pembroke. His timing was good in that he avoided the onslaught of black flies and mosquitos that no doubt swooped in a few weeks later.


Bell’s field notes give only a little indication of the difficulties faced in performing his duties. There were very few days off – Christmas Day and Sundays. And while on this job, tragedy struck his family and took one of his four daughters. On November 12, 1862, Bell wrote in his diary “*Received intelligence that my daughter at Kemptville lay dangerously ill* and on November 13, 1862, he wrote that he “*left the party in charge of Mr. Turnbull chief chainbearer & started for Kemptville.*” On November 25, he “*Left Ottawa in Company with Mr. Porter en Route to Opeongo Survey*” and then on November 28, he wrote that: “*My daughter being very low I left Mr. Porter in charge of party & started for Kemptville.*” On January 5, 1863, he noted in his diary:

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“Arrived at camp this morning - having performed the last offices for my daughter who died 27th ultimo.” Bell went right back to work and worked long hours until the completion of the survey that spring. Most days he tried to catch up on time missed by “preparing Returns in evening.”

Other big surveying jobs taken on by William Bell included: in 1870, he surveyed Heenan timber limits and in 1873, Perley and Pattie’s timber limits. When the C.P.R. was being built, he laid out the town plot of Mattawa. In 1885, he surveyed residues of the Townships of Fraser and Head. In 1882, he was employed by the Dominion Government on Township outline work. He worked until his death in January 1890 at the age of 70 years – he died of exposure.⁹

Thanks to the Association of Ontario Land Surveyors for the loan of a replica 66-foot Gunter’s Chain for the museum exhibit at the Polish Kashub Heritage Museum in Wilno and

special thanks to Maureen V. Mountjoy, Deputy Registrar/Editor, AOLS, for her assistance with biographical information and a photo of William Bell. 

Author **Shirley Mask Connolly** is the Curator of the Polish Kashub Heritage Museum in Wilno. She was born a fourth generation Polish-Canadian on land settled by her great-great-great grandfather, Michael Mask between Killaloe and Round Lake Centre on what is now called the Mask Road. Shirley devotes much of her spare time researching and writing about the early history of the Kashubian Poles who homesteaded near Barry’s Bay, Renfrew and Wilno. The Museum is open daily in July and August from 11 AM to 5 PM or by special appointment. Contact Shirley Mask Connolly at maskconn@magma.ca or the museum at 613-756-6937.

¹ Copy of original from the Ministry of Natural Resources, Peterborough.

² Letter dated Pembroke, July 18th 1864 and addressed to The Hon. Commis. Crown Lands, Quebec – accompanying Bell’s Field Notes, p.1.

³ *Pembroke Observer*, January 24, 1890.

⁴ As he stated in his Letter dated Pembroke, July 18th 1864 and addressed to The Hon. Commis. Crown Lands, Quebec – accompanying Bell’s Field Notes, p.4 & 5.

⁵ Letter dated Pembroke, July 18th 1864 and addressed to The Hon. Commis. Crown Lands, Quebec – accompanying Bell’s Field Notes, p.1.

⁶ List 08620, Ontario Archives, RG-1 series.

⁷ OA - RG 1-155 fiats for land grants (A.A.) are official orders which cover

multiple land grants, although the name of each individual grantee and the location of their grant are noted.

⁸ He writes “...reluctance of the Prussian settlers to speak the truth as to their crops...the daughter of one of them who acted as my interpreter told me that they were not replying truthfully to my questions. They all seemed impressed with the idea that it would be much to their advantage to make me believe that their crops were poor and their prospects bad though why they should do so I am at a loss to imagine.” Letter/Report dated January 4, 1864. Archives of Ontario, RG 1 Series, MS 892.

⁹ He was engaged on a survey on the Schyan River when he became seriously ill. He was brought home and died probably from Influenza. Biography from Association of Ontario Land Surveyors publication, 1923.

“Unusual” Township Names (Part 2)

By Allan Day

The following article is related to one that was published in the Winter 2014 issue of the Ontario Professional Surveyor titled “Townships named for Surveyors (Part 1)”.

If you were to look at a map of the North Channel of Lake Huron and the North Shore of Lake Superior prior to 1974, you would see a series of townships in the Algoma, Sudbury and Thunder Bay Districts that were designated by a number, township number and range, letter or a number followed by a letter.

Jeff Ball, Geographic Names Specialist, at the Ministry of Natural Resources and Forestry Geographic Names office here in Peterborough told me which procedure was used to submit names for consideration for these townships and how the final decision was made to establish the name. This is his explanation... “Names were put forward by an All-Party committee of the provincial legislature. Suitable names from the All-Party committee were submitted to the Minister of Natural Resources for approval by the Premier and the government.” The final approval for the names of these townships was given on June 27, 1974.

Avis (Twp L) named for *Allan Avis* the Mayor of Fort Frances between 1972 and 1980.

Bazett (Twp 8) named for *Edward Bazett*¹ a pioneer surveyor who worked in the Nipissing/Cobalt Districts in the 1800’s.

Beihartz (Twp 23, Range 19) named for *W. Beihartz*, the reeve of Plummer Additional Township in the Algoma District.

Bernier (Twp 9E) named for *Honourable Leo Bernier*² who was MPP in Kenora.

Blackburn (Twp 22, Range 19) named for *P. H. Blackburn*, the reeve of Chamberlain Township in Timiskaming District.

Cavana (Twp 7) named for *Allan George Cavana, Sr*¹.

Cuthbertson (Twp 196) named for *F. S. Hugh Cuthbertson*, RCAF of Bruce Mines³ who was killed in 1945.

Del Villano (Twp D) named for *Leo Del Villano*⁴ who was the mayor of the City of Timmins.

Dukszta (Twp 8B) named for *Jan Dukszta*⁵ who was MPP for Parkdale.

Edighoffer (Twp 8Z) named for *Hugh Edighoffer*⁶ MPP for Perth District.

Hembruff (Twp 151) named for *Leonard Hembruff*,

Sergeant of Little Current who was killed during WW II.

Macaskill (Twp 31, Range 23) named for *John Macaskill*, a Canadian Army Sapper from Thunder Bay.

Miskokomon (Twp 25, Range 23) named for *Harry Miskokomon*, Chief of the Chippewas of the Thames⁷.

Monestime (Twp J) named for *Dr. S. F. Monestime*⁸ who was the mayor of Mattawa.

Neelands (Twp 11B) named for *Dr. Ralph Neelands* who was a former reeve of Teck Township.

Olinyk (Twp F) named for *C. Olinyk*, the mayor of the town of Rainy River District in 1973.

Patenaude (Twp 9G) named for *Dr. N. Patenaude* who was the reeve of Field Township in the Nipissing District.

Poulin (Twp 1B) named for *Wm. Poulin* who was a Recollet⁹ priest to the Huron missions of the Upper Great Lakes in the 1600’s.

St. Germain (Twp 33, Range 24) named for *Verant St. Germain* who was a fur trader in the Pic area in 1700’s.

Schembri (Twp 23, Range 15) named for *Mrs. F. Schembri*, the reeve of Mattawa in the Nipissing District.

Shawkence (Twp 24, Range 21) named for *Charles Shawkence*, Chief of Kettle and Stony Point¹⁰.

Shipley (Twp 19) named for *Marie Ann Shipley*¹¹ who was the reeve of Teck Township for 14 years and also MP for Timiskaming in the 1950’s.

Symington (Twp 10A) named for *Ernest Symington* who was a resident of Kirkland Lake and a veteran of the Battle at Vimy Ridge¹² during WWI.

Tofflemire (Twp 108) named for *C. Tofflemire*, the mayor of Trout Creek.

Winkler (Twp 3C) named for *E. A. Winkler*¹³ MPP for Grey South.



The information in this article was obtained from a 3-volume set of books which I have in my library called “Places in Ontario” published by the Mikki Publishing Company, Belleville, ON.

Allan Day worked in the Office of the Surveyor General, Ministry of Natural Resources and Forestry for 28 years as a Survey Records Information Officer. He now owns a survey and research business in Peterborough. E-Mail surveyresearch@cogeco.ca

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¹ See the article “Townships Named for Surveyors” in the Ontario Professional Surveyor, Volume 57, No.1, Winter 2014.

² He was also the Minister of the Ministry of Natural Resources when I started working for them in 1972. He was the *only* Minister of Natural Resources that ever sent me a Christmas card. In 2012 Highway 664 was renamed in his honour.

³ Bruce Mines is a town in located on the north shore of Lake Huron in the Algoma District along Highway 17.

⁴ Leo Del Villano was mayor from 1956 to 1959.

⁵ Janusz Romwald Duksza was a New Democratic member of the Legislative Assembly of Ontario from 1971 to 1981.

⁶ Hugh Alden Edighoffer served in the Legislative Assembly of Ontario as a Liberal member from 1967 to 1990 and was Speaker of the legislature during the administration of David Peterson.

⁷ Chippewas of the Thames First Nation is an Anishinaabe (Ojibway) First Nations band government located 15 miles west of St. Thomas. Their land base is 9,025.8 acres. The Chippewas of the Thames First Nation 42 reserve almost entirely surrounds the separate reserve of Munsee-Delaware.

⁸ Dr. S.F. Monestime was the first black mayor in Canada The town of Mattawa holds the distinction of electing Canada’s first black mayor fifty years ago.

⁹ The Recollects were a French reform branch of the Order of Friars Minor commonly known today as the Franciscans. They used the post-nominal initials O.F.M. Rec. or O.M.R. Denoted by their gray habits and pointed hoods, the Recollects took vows of poverty and devoted their lives to prayer, penance, and spiritual reflection. Today, they are best known for their presence as missionaries in various parts of the world, most notably in early Canada. Created as

an Order at the end of the fifteenth century the origin of the name “Recollects” is still debated. Some historians attribute it to the Recollection houses while others credit it to the orders’ practice of accepting only those who possessed the ability of recollection. In 1897 Pope Leo XIII officially dissolved the Recollects order and integrated it as a part of the Franciscan order officially changing their name to Friars Minor.

¹⁰ Kettle Point 44 is a First Nations reserve 22 miles northeast of Sarnia on the southern shore of Lake Huron. There are two nations on this reserve Chippewas of Kettle Point and Chippewas of Stony Point.

¹¹ Born in Lawrence Station in Southwold, Ontario, Marie Ann was educated at Ottawa’s Lisgar Collegiate and married Manley Adair Shipley. They settled in Kirkland Lake where she was an administrative secretary for the Kirkland District Mines Medical Plans. From 1943 to 1952, she was reeve of Teck Township and was President of the Association of Municipalities of Ontario in 1951. From 1953 to 1957, she was the Liberal Party Member of Parliament in the House of Commons from the northeastern Ontario riding of Timiskaming. In 1955, she became the first woman to move acceptance of a Speech from the Throne in the House of Commons.

¹² The Canadian Corps was ordered to seize Vimy Ridge in April 1917. Situated in northern France, the heavily-fortified seven-kilometre ridge held a commanding view over the Allied lines. The Canadians would be assaulting over an open graveyard since previous French attacks had failed with over 100,000 casualties.

¹³ Eric Alfred Winkler was a Progressive Conservative member of the House of Commons from 1957 to 1967. He represented the riding of Grey-Bruce. He was also a member of provincial parliament from 1967 to 1975 and represented the riding of Grey South. He served as a cabinet minister in the government of Bill Davis.

Surviving and Thriving in the New Boundary Reality

The evolving role of boundary due diligence in a title insurance-backed real estate transaction.

By Chris Kamarianakis

Last month I was invited to speak at Realtor Quest, the Toronto Real Estate Board's annual two-day trade show and education event for their 45,000 member agents. The seminar was titled "Surviving the New Boundary Reality: 5 simple steps to protect your client, your deal and your reputation".

In isolation this may not be of much interest to the surveying community. However, we see it as yet another piece of evidence that boundaries are making a comeback in the Ontario real estate transaction.

The Ontario real estate juggernaut ... that we're not part of

Boundaries (or rather the true extent of title) have been all but neglected in the real estate transaction for the better part of 20 years since title insurance made its debut in Ontario and kicked the Surveyor's Real Property Report (SRPR) to the curb.

In 2016 there were 243,400 residential property re-sales in Ontario (Globe and Mail, Jan 16th, 2017). It's doubtful that more than a handful of these transactions were completed conditional upon a new survey. In Toronto the norm became fierce bidding wars, 24-hour offer periods, no conditions, and sale prices of 20%, sometimes 30% over asking. Scarcity of inventory, fuelled by the perception of foreign investors using Toronto as a safe place to park their wealth created a frenzied bidding environment more akin to a Black Friday stampede at Walmart than well thought out financial investments.

The ripple effects are now being felt outside of the GTA. Cambridge, Kitchener, Guelph, Hamilton, Barrie, Georgina, Peterborough and Bowmanville are all seeing unprecedented spikes in property prices as the aptly named "Toronto refugees" – Greater Torontonians in their 30's and 40's desperate to buy - move out of the GTA and accept a longer commute or even a job change in exchange for detached homes they can afford.

More risk? Not for the lenders

Facilitating this phenomenon is a system that enables a real estate transaction to be completed in record time, and with few checks and balances to protect the buyer and seller from transacting a "boundary lemon". That's not to say that all the players in the deal are exposed. Far from it. Lenders have their interests protected and insured better than ever. Lawyers do too but to a slightly lesser extent. It's the homebuyer, home seller and real estate agent to whom risks appear to have inadvertently accrued. At the centre of this system is title insurance.

Title insurance ... don't look now, you might see something you don't like

I am a big proponent of title insurance. In fact I would argue that it's the best value insurance product one can buy. For a one-time premium that averages \$400, a homeowner is protected for the life of their ownership against defects in title, fraud, unpermitted or un-certified construction, and "some of what may appear on a new survey", provided that the buyer and their representatives had no prior knowledge of the defect prior to closing.

It's a fantastic product, but it's in that last statement that the challenge lies. The impact of the prior knowledge exclusion has resulted in a dangerous leap from "we'll insure you against defects that you had no knowledge of when you bought" to "turn a blind eye to anything materially wrong in order to protect your insurance policy".

The first statement is a promise of intent. The second is a promotion of wilful blindness, and it's this that has defined the informal rules of the game for 20 years.

To understand how this came about and its true implications requires a deeper examination of title insurance.

Goodbye lawyer's opinion; hello insurance policy

Title insurance exists principally as a vehicle to reduce lenders' risks and costs in evaluating, issuing and holding mortgages.

Traditionally the lender relied on the lawyer to provide an opinion on a property's title, a process that took several days if not weeks. This was a check and balance demanded by the lender to satisfy, among other things, that the property was free of title defects and encumbrances that may diminish its appraised value.

Crucially this process had an added benefit: each time a property changed hands we had a built-in mechanism for updated boundary due diligence. A new survey was required (or an existing one with a statutory declaration that there had been no changes) along with an extensive title and off-title search to scour for title defects, unpaid property taxes, uncertified construction, permit violations, etc. Buyers knew where the boundaries were and what, if any, issues they were inheriting.

Then as now the system ensured that the lender was protected. However, the system's reliance on the lawyer's opinion (which included a survey) had an exploitable weakness; it took time and was expensive.

Enter title insurance with a very simple value proposition: replace the bulk of the lawyer's opinion with an insurance policy that compensates for damages resulting from a property's title and off-title defects carried into the transaction and subsequently exposed. These defects are no longer identified before the sale closes because the lawyer is no longer required to look for them.

Overnight, buyers went from knowing the possible issues with a property before buying, to being told not to care about them because title insurance would cover them.

This works well for the lender because it all but eliminates their reliance on the lawyer's opinion. Their risks are now covered by an insurance policy, which the lender requires the buyer to purchase.

Winners, losers and the 4-minute process

Hardest hit were not the surveyors as we often lament, but the lawyers. Admittedly surveyors lost a large chunk of their market overnight, but at least the sanctity of the OLS opinion stayed intact. Real estate lawyers weren't so lucky. They went from being a central part of the transaction, their legal opinion on title pivotal, to (some might argue) insurance sales people and legal document managers.

Today four of the five title insurance companies operating in Ontario compete for a lawyer's business based on how quickly their title insurance policy can be completed and approved. First Canadian Title and Chicago Title (both US companies) promote a sub-4 minute process as their key selling feature.

Furthermore, the forms that are completed online are crunched through complex risk assessment and title check algorithms that spit back automated approvals almost instantaneously.

TitlePLUS™, the Law Society's title insurance product (and the only Canadian one at that) has steadfastly resisted the slide towards the fully automated transaction. They require lawyers to do some title search work as part of the title insurance application process in order to offset some of the risks inherent on relying solely on an insurance product. However, after 20 years in the business their modest market share is likely an indicator that for the majority of real estate lawyers the ship has sailed on any appetite for up-front due diligence.

That's not to say all real estate lawyers have moved in this direction. There are some who believe replacing the lawyer's (up front) due diligence and opinion with (after the fact) title insurance coverage is a deterioration of standards that is not in their clients' best interest, and will not work on a file unless the client is willing to accept the additional cost of a "full service" opinion along with a title insurance policy.

It's not a product, it's an industry re-engineered

When we grasp that title insurance isn't just a product, but a part of a re-engineered mortgage approval process, we begin to understand how the early stages of the buying lifecycle – agents helping buyers decide on properties that meet their needs - have been affected.

Lenders care about growing their business and protecting their profits by managing the risk of bad debt. Title insurance

provided a cheaper, faster way of achieving this outcome.

Real estate lawyers reacted by changing their business model. Many now work on volume, processing as many fixed-fee, "clean" deals as possible. Exceptions are the enemy in this business model. Driven by the market, lawyers engaged in a race to the bottom on price, and anything that requires them to touch the file more than absolutely necessary eats into their slim profit margins. Many have reengineered their process to discourage any and all "distractions".

Yes, we represent a distraction

One of the most prevalent "distractions" is pre-bid boundary due diligence. The message that buyers and their agents receive from most lawyers is to avoid pre-bid due diligence because anything they discover may be constituted as prior knowledge and could be excluded from coverage if they do go ahead with the purchase.

What they are really saying is "Don't bring me distractions or exceptions ... I'm on a fixed fee and tight margins." Efficiency and volume is the name of the game. Lawyers and lenders are not discouraging boundary due diligence because it's in the buyer's and seller's best interest, but rather to protect a business model that hinges largely on clean title insurance applications.

Buyers and their agents aren't blameless. They enable this by opting for the cheapest version of something they don't fully understand.

It is this behavioural cycle that caused the boundary baby to get thrown out with the legal opinion bathwater. Not just new surveys, but any kind of boundary due diligence has been erased from the real estate transaction in the name of protecting the title insurance policy.

Until recently...

The 49%

In 2014 Protect Your Boundaries and Krcmar Surveyors conducted a study to answer one simple question: What percentage of residential properties have one or more hidden boundary issues?

The result was astonishing: 49%. (<http://www.protectyourboundaries.ca/press/PYB-2014-09-16.pdf>).

While we cannot definitively point to title insurance as the smoking gun, we have to wonder whether the abandonment of surveys and boundary due diligence in the real estate transaction was partially to blame. If it is then we're seeing a cause and effect of epic proportions, and a serious dose of vindication for what we as an industry stand for.

Trending now ... boundaries??

Most of us agree that, without a legislative change, the days of a new survey being commissioned as part of the real estate transaction are behind us. The lending industry that uses title insurance, technology, algorithms, big data and cloud-based computing to increase their profitability isn't going anywhere.

Critically, there is no place in that 4-minute process for a service that takes three weeks.

However, there is a growing cohort of real estate lawyers who recognize that their clients are not always best served by no pre-

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close boundary due diligence. For those who cannot afford to buy into a boundary dispute or risk a failed title insurance claim, pre-close boundary due diligence is often more prudent than turning a blind eye and hoping the title insurance safety net will catch them.

Increasingly it's the *reputational risk* of promoting wilful blindness that is fuelling a trend for real estate lawyers to distinguish (and protect) themselves with value-added, due diligence services which the client can choose from to augment the base offering. Boundary due diligence is one such service.

Between a rock and a hard place ... is the real estate agent?

Entrusted by their emotionally charged clients with the responsibility of finding the "dream house", the real estate agent is caught on the horns of a dilemma. Do they encourage the pre-bid boundary due diligence they know will serve their client best? Or do they bend to the pressure to turn a blind eye - pressure exerted on them by the lawyer whose business model favours a clean, no-questions-asked deal to process?

Too often it's the latter, and when a client's intended use of land falls prey to a defect not resolved by title insurance, the blowback on the unsuspecting agent can be devastating.

We often ask agents, "Would you buy a used car from Kijiji based on the pictures in the ad alone?" The answer is always a resounding "No". But in so many ways that's exactly the behaviour they are complicit in when they encourage wilful blindness to their clients.

Once again we see an increase of awareness in *reputational risk*.

The New Boundary Reality, and a new hope

It is here that we see the opportunity for the land survey industry to reassert itself; title insurance, a hot and inflated market, a legal process that encourages wilful blindness to protect lender profits not customers, and widespread boundary issues have created a "New Boundary Reality" where boundary awareness and due diligence is becoming important again.

We believe the opportunity exists now for our industry to become relevant in the residential real estate transaction again, but in a non-traditional way. If we want "in" we have to reinvent ourselves and answer the question: "How can we add value to the current process?"

To do this effectively we have to evolve from being single minded survey-centric to positioning ourselves as experts in boundary intelligence and identifying and treating boundary risks.

We have to move from our position of "it's a \$2000 survey in 3 weeks or nothing at all", to "how do we take our domain expertise and create products and services that reduce risk and costs for the stakeholders in the current process?"

We have to also look at how the lawyer's opinion was traded away in return for a continued role in the process, and ask, "How do we maintain the role of the OLS as the protector of the public interest AND insert value into the real estate process?"

One of the most potent tools is education. Real estate agents are working off the script provided by lenders and title insurance companies. We can only change a market by introducing new

perspectives and arguments, challenge the status quo and rewrite the script that helps put them and their client in the driver's seat.

We believe that agents are ripe for empowerment. The real estate lawyer has long abdicated responsibility for being the buyer's safety net (although that trend is showing signs of reversing), and no one has filled the vacuum.

We believe that land surveyors can fill that vacuum by working with agents as our partners and proxy. Agents, with our help, have an opportunity to take ownership of that space, and in doing so give further justification to the fees they charge.

Arguably the single greatest risk to buying a property today is a boundary-related issue. Of the 49% of properties in the GTA that have boundary issues, we found that 85% are expressly excluded from title insurance coverage (e.g. fence and boundary wall encroachments), heightening the reputational risk to lawyers and agents.

This is a powerful counter to the wilful blindness doctrine that has persisted for 20 years.

Where to next?


Building products, services, processes and education that support the real estate agent, who is taking ownership of pre-bid due diligence, may be a great place to start. We at Protect Your Boundaries are having great success with that strategy.

Making existing survey plans available for purchase online is another, and allows surveyors to capitalize on their digital assets in a market that they are not currently active in.

Finding ways to help lenders and title insurance companies further increase their speed and efficiency is another, with data, insights and expertise.

Who knows? If the prevalence of boundary issues continues to rise there may come a time when the title insurance company's interests are best served by some pre-bid boundary due diligence. For that we need to be ready with a new mindset, new tools and a new script.

For now we have to realize that the game on the real estate playground has changed and we're not getting anywhere sitting on the sideline sulking because we're not getting picked.

If we evolve, reinvent ourselves, we stand a chance of getting back in the game WITH title insurance, not against or instead of it, and once again assert our profession as the voice of reason and sanity in an industry in desperate need of it. 

Chris Kamarianakis is the Executive Director of Protect Your Boundaries Inc., an Ontario land survey firm and host to the largest online database of land survey plans. Chris is a proponent of balance between title insurance and up-front due diligence, and is a relentless advocate for the role of surveying in the real estate transaction. Chris can be reached at chris@protectyourboundaries.ca

The views expressed in this article are solely those of the author and do not necessarily reflect or represent the position of the AOLS.

The Appeal of Hydrographic Surveying in Egypt

By Ian Gordon

This article was written as a result of a Letter to the Editor (see the Sidebar at right) that was received from Ian Gordon, a British Chartered Hydrographic Surveyor (MRICS) working in Egypt.

After a varied career in surveying since 1973, I arrived in Egypt in 1996, and by then having been self-employed for 8 years, it promised to be a good potential for on-going work. (Slightly understated as I am still working in Egypt in 2017!).

Something about the Egyptians really appealed the moment I arrived at Cairo. Yes, they assumed I was a tourist desperate for my first camel ride to see the pyramids, but there was humour and smiles which I had not experienced in many of the other countries where I had previously worked in this region.

The work requirement was for a Party Chief to manage all aspects of survey acquisition for a contract survey company engaged by the major oil and gas producer in the Gulf of Suez. Furthermore, it would be shore-based which I considered to be a bonus, after years of living onboard ships, barges, oil platforms and such-like. At that stage, I hadn't seen the onshore accommodation! However, as I was initially working a back-to-back routine with a Party Chief I knew well from work on the North Sea and Mediterranean, and the contract had already been running for several years, convinced me it would be worth putting up with any such initial inconveniences.

In the early days, survey operations comprised mapping updates of seabed and pipelines via side scan sonar positioned by DGPS (locally broadcast differential corrections) and measured towfish layback, together with single beam echo sounder. Relatively straight forward until some of the older pipeline configurations were surveyed, which made interpretation and processing of the side scan records an intensive job for the geophysicist/data processor. It is a testament to the previous survey teams who compiled the original charts that the complex nature of some of the pipeline layouts had been so well resolved during processing. Ultimately, the entire network of pipelines, platforms, wells and onshore facilities would be digitized onto a comprehensive GIS Database and therefore the quality of information was under constant review and update.

Site surveys were also conducted for new well or platform locations using additional sensors; magnetometer, pinger sub-

bottom profiler and boomer or sparker for shallow seismic. Furthermore, Remotely Operated Underwater Vehicle (ROV) operations would be undertaken for surveys close-in to platforms in order to check the seabed prior to a Rig moving onto location. In particular, the ROV would be looking for any debris which could impact the Rig legs when setting-up, or debris within the platform which could impede running a new conductor. If required, divers would assist with debris recovery – most locations being in relatively shallow water up to 50m, although the capability for deeper diving was there when needed. The term 'Bottom Walk' was (and still is) applied to these ROV surveys which was confusing initially, but was simply a term from the pre-ROV days when divers would carry out a 'bottom walk' visual assessment of the seabed. The image of two divers out for a Sunday afternoon stroll on the seabed is hard to shake-off!

At that time, there was no DP vessel (Dynamic Positioning) on site and USBL (ultra short baseline) positioning for the ROV was not part of the contract. The vessel would therefore drop anchors (another headache in pipeline-congested areas) or tie-up to the relevant platform and the ROV would use sector-scan sonar for position fixing relative to the platform legs of known coordinates. Although Rigs set-up safely based on our surveys, it is not a system I would recommend for peace of mind – particularly after one ROV pilot, having dis-entangled the ROV umbilical on the way down to the seabed in poor visibility, ended up off the wrong face of the platform. The online surveyor merely logged the sonar ranges, bearings and ROV heading given to him by the ROV pilot and all the logs and video tapes came ashore for me to review, plot and prepare a Report. I started to review the data and wondered if I'd spent too long in the sun. The tendency is to believe what you are hearing on the video commentary but I could see that if the sonar ranges were valid, the ROV gyrocompass must be in error and wondered if something happened when the ROV umbilical had become entangled earlier. (As it turned out I was correct, although it was the Pilot's bearings and not the ROV bearings



which had gone haywire!)

There were other more obvious clues that I pointed out at a rather serious de-briefing, namely ‘where had all the pipelines gone?’ and ‘why was the seabed devoid of any significant features such as previous Rig spudcan depressions and such-like?’ Fortunately, the Client accepted that a repeat survey was needed due to poor visibility (in fairness that was true) and we strengthened our operating procedures accordingly. (The repeat survey showed how good the team could be when the effort is made.) Later, while writing the Bottom Walk report, I wanted to let the Client know that they had a nice clean seabed with no unknown pipelines or anomalies on the west side of the platform, as it must have been depressing to see how much the divers had to do on the south side before the Rig could move in!

Running concurrently with offshore projects were numerous land survey operations as updates were needed for onshore pipelines and facilities which were continually being made. The majority of this work was located within the confines of the main onshore terminal, but there were secondary terminals linked to the main terminal at approximately 30 miles each way along the coast, thereby making it a significant size overall. Land surveys were carried out by Total Station and Levelling at that time, with an occasional requirement for ground-penetrating radar.

Primary onshore survey control had been established some years previously and this was the historical basis for all coordinates onshore and offshore. On taking the job as Party Chief, I was impressed with the level of care that had been implemented by the original survey teams and after further assessments over time, it was clear that the overall situation regarding coordinate reference systems was anything but clear in this region.

The Geodetic Datum established by the Egyptian General Survey Authority and used by the oil industry in the Gulf of Suez, is the Old Egyptian 1907 datum, based on the Helmert 1906 ellipsoid with Transverse Mercator grid projection – Red Belt. In 1930, the network was extended and recomputed to correct an error in the longitude of the 1907 origin amounting to 3.45 arc-seconds, resulting in the New Egyptian 1930 datum, but this was based on the International 1924 ellipsoid. It was decided to use the 1930 re-computation for scientific purposes only and adopt the 1907 for all references. Furthermore, in 1930 three grids were created by military mapping authorities which were denoted Purple, Red and Green Belts with the Green Belt subsequently renamed as the Blue Belt (though both names are encountered) and the Purple Belt increased to provide a fourth grid, the Extended Purple Belt. The four grids are applied to both the Old Egyptian 1907 and New Egyptian 1930 geographic coordinate reference systems. Subsequently, British and American military authorities made adjustments of several survey networks in the region based on the European Datum of 1950 (ED50) which uses the International 1924 ellipsoid as does the New Egyptian 1930 datum. The potential for confusion regarding coordinate reference systems was well and truly established!

In the mid-1970s when the Transit satellite navigation system

Letter to the Editor

Hello,

I am a British chartered hydrographic surveyor (MRICS) working in Egypt and would just like to pass-on my thanks to one of your Members, a Mr. James Ferguson (Member CR64), for the superb article he wrote in your OPS Magazine way back in [Winter] 1991 regarding Grid, Astronomic and Geodetic Azimuths. I suspect he would be amazed and pleased to hear that someone is still finding this article so useful after 26 years!! Despite all the modern developments, the basics remain the same which is a point I am regularly pointing out to colleagues. My thanks again.

Kind Regards,
Ian Gordon



became available, further complications were introduced regarding ‘precise’ or ‘broadcast’ satellite ephemerides (WGS72 and WGS72BE) and the appropriate ellipsoid – NWL9D or NWL10D from 1987. Later, with the advent of GPS satellite navigation technology and introduction of the GPS coordinate reference system, WGS84, another potential for confusion was added to the mix.

Without labouring the point further, one of the most important aspects of the work was dealing with the potential errors where coordinates were stated with no identification of the geodetic datum. These often originated from sources where the user had no appreciation that unqualified latitude/longitude coordinates were ambiguous without quoting the reference datum. Even if quoted, there were dangers that incorrect assumptions had been made and the stated geodetic parameters were a mixture from the range of possible options. Depending on which set of coordinates were valid, perhaps I was a little bit nearer to home than I realised!

As time passed, systems were upgraded with vessel dynamic positioning (DP) capability and full ultra-short base line (USBL) positioning for the ROV, which was replaced with a ‘work class’ vehicle enabling more detailed pipeline surveys, platform inspections, cathodic protection surveys and flooded member detection. In addition, the capability for debris recovery by ROV was improved, with multi-function manipulators added in order to reduce the risks to divers. The poor divers had not only been stopped from their Sunday afternoon stroll ‘bottom walks’, but were now unable to sell scrap metal at the local bazaar!

cont'd on page 26


In the cut-throat world of commercial business, we lost that particular contract in 2008. Departure from the site after so many years since my arrival in 1996 was not so easy. Many of the Client's personnel had become very good friends and were just as upset to see us go. Basically, we'd all been working together to achieve the same goals and it felt wrong that it was being forfeited based on someone somewhere saving a few dollars. Even the cats I'd been feeding all this time at the camp knew something was amiss! However, there is no room for sentiment in business (they say) and so the huge job of demobilisation went ahead.

We regained the contract in the Gulf of Suez during 2012. In the intervening years, I was fortunate to have retained a working schedule with the same contract survey company, being based in Cairo for work on numerous projects mainly in the eastern Mediterranean, which presents its own challenges - in particular being deep water operations, with some sites located in as much as 1300 m water depth.

Operationally, the surveyors, engineers, processors, geophysicists, office staff and management are a mix of Egyptian and ex-pat personnel, which is an excellent combination. In particular, it amazes me just how well the Egyptian staff manage with some highly technical issues in what is effectively a foreign language (which fortunately for me is English!).

A significant event known as the Arab Spring occurred in 2011 with turmoil across the Middle East. I was in Cairo at the time and the tensions and instability were growing daily to the extent that the expat staff were eventually evacuated. Tanks, military vehicles and soldiers were on the streets as we left, which seemed surreal compared to the normal daily scenes. On a lighter note, amongst the ensuing chaos at Cairo airport was what must have been the last tourist in Egypt at the time - a Japanese man patiently waiting to check-in. Firstly, he had failed to grasp the 'subtleties' of the Egyptian queue which basically starts out as a sort-of line, quickly transforming into a triangular wedge and ending up as a semi-circle of ever increasing radius! He explained that he had wanted to see the

pyramids and how quiet it was out there (well there's a surprise!), but best of all is that the camel herder had still tried to overcharge him for the experience!

Our operations resumed later that year and despite regaining our contract in the Gulf of Suez in 2012, I didn't return there, but have remained based in Cairo on a regular working schedule from the UK, involved with management on the multitude of bids, procedures, reports and data qc - and also providing regular contact and occasional site visits with the team now in the Gulf of Suez. Further upgrades have been made there, with absolute positioning via DGPS and the Russian GLONASS systems, together with upgrades to acoustic data via multibeam echo sounder and long baseline (LBL) positioning where necessary. Land surveys incorporate Real-Time Kinematic and Post-Processed Kinematic techniques, and of particular importance, the cats are still being fed, regardless of who holds the survey contract or indeed which geodetic datum, ellipsoid or projection are in use! 

Some notes from the author:

I was born in 1953 in Manchester, England and am now living in Kent in the south-east of England, my survey career began in 1973, and has spanned many different facets covering land, hydrographic and engineering/setting-out in the UK and overseas. My employer at the outset, a Roy Griffiths, (now sadly deceased) was an ex-army survey instructor at the Royal School of Military Survey in the UK. Predominantly, it was hydrographic surveying and associated dredging and offshore oil and gas exploration/construction which became my principal activity, but I have often found that a varied experience in all aspects has been a big advantage over the years.

I operate as Director through my own Limited Company (Gordon Hydro-Land Surveys Ltd, which is regulated by RICS) and have the designations MRICS - Chartered Hydrographic Surveyor in addition to AFRIN - Associate Fellow of the Royal Institute of Navigation, and Cert Con Sci (Open), with qualifications in Contemporary Science, Practical Surveying, Coastal Navigation and Celestial Navigation.

NEWS FROM 1043

Changes to the Register

MEMBERS DECEASED

Edwin 'Ted' Stuart Smith	1248	Oct. 10, 2016
Bruce M. Wright	CR6	Oct. 18, 2016
Max Berman	907	Jan. 28, 2017
Donald Frank Walton	748	Mar. 19, 2017
David Matthew Bews	977	Mar. 28, 2017

RETIREMENTS/RESIGNATIONS

Wojciech Zurek	CR177	Apr. 20, 2017
Patrick Sun	CR127	Apr. 24, 2017
Francis E. Wall	1369	Apr. 25, 2017
Steve Ruttan	1671	Apr. 26, 2017

CANCELLED MEMBERSHIP

Oladele S. Bello	1853	May 24, 2017
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COFA'S APPROVED

TBT Surveyors Inc.
Thunder Bay, Ontario, April 1, 2017

COFA'S REVISED

Was: MMM Geomatics Ontario Limited
Now: WSP Geomatics (Ontario) Inc.
Markham, Ontario, May 10, 2017

COFA'S RELINQUISHED

Beninger Surveying Ltd.
Peterborough, Ontario, May 26, 2017

Surveyors in Transit

Andrea E. Tieman is now an Assistant Examiner of Surveys with the **Ministry of Government and Consumer Services** in Toronto, ON. Phone: 416-314-5287.

David S. Urso is now the Managing OLS at **D.S. Urso Surveying Ltd.** in Sault Ste. Marie, Ontario.

Surveyors On Site Inc. now has a branch office at 17

Wellington Street, P.O. Box 1599, New Liskeard, ON, P0J 1P0. Phone: 705-622-0872. **Ryan Seguin** is the managing OLS.

Thomas MacDonald is now with **Hopkins Chitty Land Surveyors Inc.** located at POB 64, 133 John Street, Napanee, ON, K7R 3L4.

Hugh S. Coutts is now with **Adam Kasprzak Surveying Ltd.**

Simon Kasprzak is no longer with **Adam Kasprzak Surveying Ltd.**

Peter de Haan is now the Managing OLS at **TBT Surveyors Inc.** located at 1918 Yonge Street, Thunder Bay, ON, P7E 6T9. Phone: 807-624-5160.

Douglas Jordens is now the managing OLS at **TBT Surveyors Inc.** located in 56 King St., Dryden, ON, P8N 2Z4 (formerly a branch office of **exp Geomatics Inc.**).

TBT Surveyors Inc. now has a Consultation Office located at 408 Scott Street, Fort Frances, ON, P9A 3M8 (formerly a branch office of **exp Geomatics Inc.**).

John Beerkens and **Paul Quesnel** are no longer with **exp Geomatics Inc.**

Shajieeshane Rajakulendran is no longer with **Young & Young (Etobicoke 2006) Inc.**

Elliott and Parr (Peterborough) Ltd. is now a wholly owned subsidiary of **J.D. Barnes Limited.** **Shawn O'Connor** is the managing OLS.

THE AOLS IS PLEASED TO ANNOUNCE THAT THE FOLLOWING ONTARIO LAND SURVEYORS WERE SWORN IN:

Farzad Salehi	2010	May 25, 2017
Mark Girin	2011	May 31, 2017
Keene Maulion	2012	May 31, 2017

What Social Scientists Can Learn from the History of Land Surveying

By Tracey L. Adams

There is an extensive body of social science research that examines professions. Scholars investigate what professions are, how they are formed, and whether professional work differs in meaningful ways from other types of work. A lot of this research focuses on the medical profession, although there is a good body of research on lawyers, nurses, accountants, and various other professionals. Virtually no-one studies land surveyors. Although surveyors are among the oldest professions in Canada, they are a regularly forgotten group.

This is a problem, I believe, because land surveying has a unique history among Canadian professions. Understanding this history can help scholars understand the place of professions in Canadian society in the past, and perhaps the present, better. This said, I must confess that in my forthcoming book (*Regulating Professions in Canada: The emergence of self-regulation in four Canadian provinces*), I devote only a portion of one chapter to the emergence of a self-regulating land surveying profession in Canada, although I mention the profession briefly in other chapters.

In this short article, I want to take the opportunity to discuss the emergence of a land surveying profession in Ontario, and explain why I think its history is important for researchers.

The Sociology of Professions

Ask a sociologist how professions are made, and many will reply with a story such as the following. In the late nineteenth century, educated and skilled workers in certain occupations were upset by the public's lack of respect for their skills and abilities. Instead of seeking services from educated and trained practitioners, consumers often patronized unskilled people who offered services at a cheaper price. Those services were of poor quality, and consumers often suffered for their poor choices. To defend themselves from having to compete with cut-rate sellers of similar services, and to protect the public, these practitioners formed societies, and then petitioned their governments for legislation that would protect both practitioners and the public. This legislation made it a crime to provide specific services without a license, ensuring that only the educated and skilled could practice. The legislation also established or recognized a corporate body through which professionals

could govern themselves. This legislation benefitted practitioners who received more security, higher incomes and social prestige, and it benefitted the public who received better services.

As accounts go, this one is fairly accurate. The early history of the medical, dental, and accounting professions, along with some others, mostly follows this storyline. The details don't work in every instance. For instance medical doctors were not formally organized into a provincial association before being granted the right of self-regulation, and Medicine was regulated long before it became self-regulating in Ontario. Moreover, as I write in my book, this story completely glosses over the involvement of state actors – they did a great deal more than simply say 'yes' when professional groups asked for regulatory privileges. Still, the narrative is accurate enough that social science researchers have confidently declared that professions in Canada (like their counterparts in the U.S. and U.K.) were created by professionals, for professionals, with the 'help' of the state.

One look at the history of land surveying in Canada, however, raises questions about the accuracy of sociological accounts.

Land Surveying in Canada

As AOLS members likely know, land surveyors were very important in Canada's early days. Surveyors could be found as early as the 1600s in New France. Once Britain won the colony in the late 1600s, land surveyors were commissioned to survey and map the land for the British, and to demarcate plots, many of which were sold or given away as rewards for loyalty or service. The regulation of land surveying in Canada dates from 1785, the same year when legislation governing law and notarial work was first proclaimed. The "Ordnance Concerning Land Surveyors and the Admeasurement of Lands" provided instructions for the conduct of surveys and regulated surveyors' work. After 1785, surveyors were supervised and commissioned by a high-ranking member of the government, the Surveyor-General; to obtain a commission they had to undergo examination and provide an oath of allegiance.

Land surveyors, then, were among the earliest regulated professions in the colonies. Not only were they recognized

early in Quebec, but they were integral to the establishment of Ontario, and provinces west. Immediately following the American Revolution, Britain sought to settle Ontario with loyal British citizens, to ensure that the Canadian colonies did not follow the same path as their American counterpart. Loyalists – those living in the American colonies who were loyal to the British Crown during the Revolution – were promised land. Land surveyors were integral to the settlement process. Surveyors determined what land could be settled and farmed, and they laid out plots, roads, and entire townships. They established national and provincial boundaries, canals and Aboriginal reserves. They carved a colony out of the wilderness.

So important was this work that land surveyors were of keen interest to early colonial leaders in Upper Canada. The first Lieutenant-Governor, John Graves Simcoe declared the appointment of surveyors a priority, seeking men of great ability and integrity. At first surveys in Upper Canada were conducted under the 1785 Ordinance, but a new ordinance was passed in 1798 to regulate surveying work more closely in Upper Canada. Legislation passed in 1818 raised entry requirements for surveyors. Legislation passed in succeeding decades continued to raise standards for entry to practice, and strengthened the authority of land surveyors. For example, 1841 legislation made it illegal for anyone to interfere with surveyors in the conduct of their work. Moreover, penalties for the illegal practice of land surveying were implemented. Throughout this period land surveyors were commissioned and supervised by government officials. A board of examiners for entry to practice was established in the mid-19th century. At this time the regulation of land surveying in Ontario resembled the regulation of medicine; however, surveyors were subject to greater state oversight, and more stringent entry requirements. To practice medicine in Ontario in the 1850s, practitioners had to show proof that they had a medical degree, or pass exams. Land surveyors were not only examined, but had to provide testimonies of character, an oath, a bond, and they were questioned under oath. Colonial leaders appeared much more concerned with the efficacy and honour of land surveyors than other professionals at the time.

Land surveying became a self-regulating profession in Ontario in 1892. By this time, the province had been extensively mapped and surveyed. Provincial surveyors were less often employed on provincial government commissions, instead spending more of their time employed by municipalities and on local contracts. The typical land surveyor in the 1880s was increasingly an urban-dweller, hired for public works and smaller projects. It was in this context that surveyors began to organize. Ontario land surveyors got together in 1886, meeting in the Parliament buildings, to discuss forming an association. A few years later they discussed incorporation and self-regulation in response to

the growth of unqualified people doing work in the field. Members of the association met with government officials who responded favourably to the idea of legislation. The government stood to save money through self-regulation as the Association would become responsible for paying the cost of maintaining a board of examiners, and examining new practitioners. The bill passed through the Ontario legislature with no controversy.

What Social Scientists Can Learn from Land Surveyors' History

This history of land surveying resembles the sociological account of profession formation only slightly, in its very last chapter: Land surveyors organized partly because they were concerned about competition from the untrained. They requested legislation from the government, and were granted it. Focusing on this final chapter, however, neglects the rest of the story, which tells an important tale.

Land surveyors' history highlights the important role of the state in regulating professions. Land surveyors were considered one of the most important professions supporting the establishment of a new country in land-rich Canada. Although they received self-regulation later than lawyers and medical doctors, this may simply reflect their importance to the government, which may have been unwilling to delegate regulatory responsibilities in such an important area. Of course, it was state actors' themselves that were among the most important buyers of land surveyors' professional services. This likely provided another motivation for government leaders to regulate land surveying closely to ensure they received the services they wanted. When land surveyors achieved self-regulation it was during a time period when political leaders were less dependent on surveyors' services. Moreover, a self-regulating land surveying profession helped to save the government money, by taking over entry examinations, and other expenses associated with regulation.

Ontario land surveyors' history shows that professional services can be integral to the government, not just the public, and that self-regulation is not simply a gift benevolent governments bestow on professional groups, but that it can have concrete benefits for state actors too. These are important lessons for social scientists, who – hopefully – will turn more attention to studying the land surveying profession in the years to come. We have much to learn from you.



Tracey L. Adams is a Professor of Sociology at the University of Western Ontario. Her research interests include professions, and the changing nature of professional regulation in Canada. She is the author of the forthcoming book, *Regulating Professions in Canada*.

The Inaugural Meeting of the Senate — 1980

By Lorraine Petzold

As one looks over the pictures that fill the heritage files of the Association, memories come forth of people and events which filled our professional lives.

Cleaning out some photos recently I came across the photo (pictured at right) and what memories it holds. Past Presidents from 1960 to 1979 each of whom left indelible memories with the Councils and members. The picture was taken at the first meeting of the “Senate” in February 1980.

You will note that the gentlemen are wearing a large rosette which proudly proclaimed “SENATE” and ‘PAST PRESIDENT”. These badges were given out to the participants at the first meeting only.

At the recent 125th Conference, I was asked about the Senate.

When was it formed? Why did the Past Presidents meet? What authority does the Senate have?

In the late 1970’s the Past Presidents expressed a desire to meet informally with their old friends. The meetings consisted of a dinner at the Annual meeting with accompanying “spirits” and



The Senate of 1980 and the year that each served as President: Front row from left to right: Bill Brisco, 1963; Gren Rogers, 1975; Sid Hancock, 1972; Harry Currie, 1960; Don Endleman, 1978. Back row from left to right: Red Petzold, 1973; Fred Pearce, 1968; Mike Maughan, 1977; W.J. Wadsworth, 1966; John Barber, 1976; David Humphries, 1970; Jack Kirkup, 1971; Maurice Hewett, 1961.

lots of time to reminisce. Remembering this first meeting, Sid Hancock kept all entertained with his wit and humour. Sadly most of these Senators are no longer with us.

The Senate is an informal social group with no responsibilities or duties other than meeting and talking over old times and enjoying each other’s company.

Later in the 1990’s the Senate changed their get-together to a summer meeting with various Past Presidents hosting the event. Spouses/partners are now included in the event.



Advertiser's News

Leica Geosystems opens new Solutions Centre to Serve Growing Construction Market

Professionals in Eastern Canada benefit from an enhanced service centre, all-new rental resource, practical hands-on training and the opportunity to explore the latest technology firsthand.



Leica Geosystems has recently opened a new Solutions Centre to meet the evolving needs of construction professionals. Located in the Toronto offices of Leica Geosystems, the Solutions Centre has added staff and services to further support the success of its customers, partners and dealers in the region. Highlights of the new resource centre include:

- **Expanded technical service:** New resources have been added to support the growing needs in building construction, heavy construction, machine control, surveying, engineering, reality capture and interior finishing.
- **Easy access to an extensive rental equipment inventory:** Quick turnaround projects and last-minute scope expansions can be easily addressed through the all-new rental resource at the Toronto location. Whether professionals need to add to their GPS arsenal or want to test out the latest laser scanner, a full range of inventory is ready to ship anywhere in the region on short notice, and the experienced staff in the Toronto Solutions Centre is prepared to provide full support.
- **Practical hands-on training:** Whether professionals need to brush up on their hardware skills or learn a new software or workflow, subject matter experts can provide convenient one-on-one or group training sessions to help master the material.
- **Inspirational solutions showroom:** A comprehensive collection of the latest technology enables professionals to explore the potential of efficiency- and productivity-boosting solutions firsthand. Visitors can see and test drive the latest digital layout solutions like the Leica

iCON robot 60 and iCON build software; 3D machine control solutions such as the MSS400 sensors; surveying solutions like the powerhouse Leica Viva GS16 GNSS with Captivate software; professional reality capture with the Leica ScanStation P-Series; and even state-of-the-art solutions such as mobile mapping and UAVs.

“In both vertical and horizontal construction, companies are actively looking for ways to improve efficiency and increase productivity while streamlining their equipment needs to maximize their investments,” said Magnus Thibblin, segment manager of Leica Geosystems NAFTA machine control. “We offer modular solutions that fit their budget as well as their specific company size and applications. Our new Toronto Solutions Centre makes it easy to explore practical solutions and find everything they need to be successful.”

“The opening of the Toronto Solutions Centre is an exciting development,” said Andrew Gutman, acting general manager for Leica Geosystems Canada. “Professionals in Eastern Canada now have a trusted local resource for superior technical support, training and technology. We look forward to supporting the continued growth of our customers, partners and dealers in the region.”

To learn more, visit the Toronto Solutions Centre at 3761 Victoria Park Ave., Scarborough, Ontario, call +1 (647) 294-9453 or email torontosc@leicaus.com

Sites to See

Canadian Council on Geomatics - New Website

www.ccoq-cocg.ca

The *Canadian Council on Geomatics (CCOG)* was created in 1972. It is the major federal-provincial-territorial consultative body for geomatics. Its purpose is to advance geomatics activities between federal, provincial and territorial governments. The council's goal is to reduce duplication of effort between government bodies and to facilitate easy access of geospatial information for the benefit of Canadians.

Survey Review Department Forum The Referral Process

By Doug Reitsma, Survey Review Department Examiner

In the Spring 2017 edition of the Ontario Professional Surveyor, we identified the Comprehensive Review process, which is the method by which we satisfy our regulatory requirement to carry out an inspection program. In this article, we explore the process that can result from our assessment of the individual surveys.

The Draft Tabular Report, used in the Comprehensive Review process, identifies the regulations and includes an abbreviated synopsis of each rule or objective that may need to be satisfied. The draft version of the report gives us the opportunity to raise matters that have the appearance of being a deficiency, so as to instigate a discussion and clarify specific issues. At this point, the valuations are reflecting an interpretation that does not give the review of the survey the full benefit of the doubt, as the merit of the issues and their valuations are determined during the office visit discussion. The final determination of these matters ultimately formulates the basis for making any final recommendations regarding the operation of the firm. It is the office visit discussion that provides the opportunity to clarify matters and come to an agreement as to the validity of the issue(s) and the end valuation (if any) that would provide a fair representation of the degree of the deficiency. The benefit of this exchange is that it formulates interpretations that reflect the reasoning of the requirement for the Regulation, Guideline or Standard and how it was put in place to protect the public's interest.

In 2009, AOLS Council directed the Survey Review Department (SRD) to develop and implement a system that would provide a standard valuation of individual deficien-

cies to the Regulations, Guidelines and Standards for Surveys. The valuations are based on a score of '0' which represents compliance and a score of '10' which represents the worst instance of non-compliance. The higher the rating, the worse the impact of the issue becomes for the user of the survey and the correctness of the plan.

In those instances where the final valuation exceeds the maximum valuation permitted by AOLS Council, referral to the Registrar is the required course of action; however, it is usually accompanied by our recommendation to have the firm participate in a Referral Review. In the event of a firm being referred, the usual practise of the Registrar is to direct the Survey Review Department to initiate a second review of a few additional files, selected one year after the closing of the previous Comprehensive Review, from work done within that one-year period.

All of the firms or agencies that participate in the Comprehensive Review process, regardless of the final valuation, are requested to confirm their agreement (usually in writing) with any recommendations that were formulated from the discussion of the individual issues. It is the expectation that, with the implementation of the recommendations, there should be a measurable improvement reflected in the next Comprehensive Review five years hence. The same objective is intended in the Referral Review process, with the difference being that, due to the concerns developed during the Comprehensive Review, the participant is requested to create an action plan to define how the recommendations are to be implemented within a shorter time frame (i.e. one year). A Referral Review permits verifica-

Sites to See

Avenza Maps - Free Smartphone App

<https://www.avenzamaps.com/>

As the Canadian National Parks System celebrates the country's 150th birthday with free admission to all parks in 2017, seasoned outdoor adventurers, weekend warriors and day trippers alike are venturing into Canada's wilderness.

Avenza Maps is a free smartphone app that allows you to download high quality, professionally-created maps for offline use on your iOS, Android or Windows smartphone or tablet. Roughly 2/3 of the maps are free. *Avenza Maps* enables users to access PDF maps on their smartphones, utilizing their devices' built-in GPS receivers to mark their positions, routes, points of interest and more—all without data or Wi-Fi.

tion that the recommendations were implemented and that they are having a positive impact.

The review processes have been developed with the intent of providing opportunity for improvement. It is through the discussion of the interpretation and application of the

Regulations, Guidelines and Standards for Surveys that we can assist the membership in maintaining good survey and business practices, in order that the public interest may be served and protected.



Letter to the Editor

Dear Editor,

BRANDING THE SURVEY PROFESSION

Some suggestions from an old retired surveyor.

What business are we in? Currently we often describe our services based on the platform we are using – land, water, aerial or space. It's time to consider rebranding the Survey Profession using current terminology. We are not in the surveying/mapping business we are in the information business.

PROFESSIONAL SURVEYORS - Providing Geographically Integrated Information - GPS to GIS

PROFESSIONAL SURVEYING - Developing Geo-Systems Hardware/Software; Establishing Precise Global Positions; Locating and Marking Legal Land Boundaries; Measuring Contracts, Infrastructures and Developments; Digitally Sensing, Measuring and Mapping the Physical

Earth; Managing and Analysing Quantitative and Qualitative Geo-Information; and Communicating Information Derived from Geographically Integrated Data.

Branding is used as a way to remind owners and staff what business they are really in. From the above would the public and potential clients understand what services professional surveyors offer? If so advertise those services in-house and in other publications. When the profession is comfortable with what business it is in change the profession's name. We are no longer just in the Land Survey business, we are Professional Surveyors.

Ralph A. Smith, O.L.S. Retired



Bringing the Future to the Classroom

Humber Institute of Technology and Advanced Learning Geomatics Curriculum Redevelopment

By Akram Afifi

Humber Institute of Technology and advanced learning is one of Canada's leading postsecondary institutions, offering programs that emphasize a solid academic foundation and practical, hands-on learning. As one of Ontario's 24 colleges, Humber's broad mission is to provide learners of all kinds with access to opportunities for postsecondary education within Ontario's publicly funded higher education system. With more than 215,000 alumni and 50 years of experience, Humber continues to offer a wide range of high-quality educational options and experiences to students. In 2018 Humber is expecting to open the new Centre for Technology Innovation (CTI) in the North Campus. The new five-storey, 93,000 sq. ft. CTI facility will pioneer a new model of education focused on collaboration and partnership with the communities that

diploma program provides the students with the skills needed for a career in the growing field of civil engineering. Infrastructure encompasses all of the essential elements necessary for our society to operate and includes buildings, transportation (highways and transit), municipal services (water, wastewater) and highways using design codes and standards. The curriculum, designed in collaboration with industry, covers all aspects of infrastructure, from the inception of an idea to the completion of construction and it blends in-class academic learning with hands-on laboratory work. Additionally, students learn all the skills necessary to support design and construction including land surveying and geographic information systems (GIS), and drafting (AutoCAD, Civil 3D and Building Information Modelling (BIM)). At Humber, students learn from experienced faculty



Humber's Centre for Technology Innovation (CTI) North Campus
(<http://www.humber.ca>), Architect by Perkins+Will (<https://ca.perkinswill.com/>)

Humber serves and on technological advances that are needed for innovation, automated manufacturing and human-centered solutions for the 21st century. The focus will be on applied research & innovation in the emerging fields. In addition, the school of applied technology graduates are employed in almost every sector of the Canadian economy – business, industry and government.

Humber's Civil Engineering Technology advanced

and industry experts, many of whom work with Greater Toronto Area construction and engineering firms. Humber's strong reputation in the civil engineering industry can give graduates an edge in the employment market.

As the new trends in geomatics engineering technology become essential for all construction projects, the Civil Engineering technology team decided to take the initiative and redevelop the Geomatics courses to include the latest

technology and trends. The old Geomatics curriculum includes two land surveying courses (CIVL 101 Surveying 1 and CIVL 251 Advanced Surveying), MicroSurvey software course (CIVL 156 Surveying 2), and CIVL 319 GIS course. The surveying 2 course will be cancelled in the new curriculum and more time will be added to the surveying 1 course. In addition, Autodesk Civil 3D software will be replacing MicroSurvey in all the courses. The following table shows the surveying course's weekly lectures and lab hours.

Weekly Lecture/Lab time	Old Curriculum		New Curriculum	
	Lecture	Lab	Lecture	Lab
Surveying 1	1 hour (2 hours bi-weekly)	2 hours (4 hours bi-weekly)	4 hours block	
Surveying 2	1 hour	2 hours	Cancelled	
Surveying 3	2 hours	4 hours	2 hours	4 hours
GIS	3 hours	3 hours	3 hours	3 hours

In the old curriculum, the Surveying 1 course includes pacing, leveling procedures (computations and adjustments), total station traversing (computations and adjustments), hand drawing of a topographic survey, and the use of handheld GPS. However, the new curriculum will focus on the students' equipment proficiency and field testing including field notes and sketching, leveling procedures (computations and adjustments), total station traversing (computations and adjustments), Cad drawing of a topographic survey, and operation of GPS using virtual reference system (VRS). Data collectors will be utilized for the whole course. The old curriculum for the Surveying 3 course includes what is being introduced in the new curriculum for the revised Survey 1 course, i.e. leveling



Humber's Geomatics preparation for Fall 2017, left to right; Akram Afifi and Joe Markovic

procedures (computations and adjustments), total station traversing (computations and adjustments), Cad drawing of a topographic survey, and operation of GPS using VRS. For the new Surveying 3 curriculum, the course will focus on the broad view of the Geomatics industry, applications and tools including leveling and contour mapping procedures

(computations and adjustments), total station traversing (computations and adjustments), Autodesk Civil 3D detailed Topographic Survey, and GPS with different modes (PPP, VRS, and DGPS). In addition, new Geomatics trends, such as ground laser scanners (mapping and point cloud processing), and Drones (applications and purposes, flight preparation and data processing) will be introduced.

The GIS course will be updated to include web-mapping, cartography, GIS report writing, and image registration and rectification. For future curriculum development, Humber's

Geomatics team is planning to include LiDAR sensors and infrastructure monitoring systems. At the Civil Engineering Technology program advisory meeting, which included about 15

members from industry, government, and the Association of Ontario Land Surveyors, all of these modifications were presented and great feedback was received by all of the attendees. In general, the Geomatics team at Humber are working closely with industry partners in both curriculum development and applied research to better serve the community and have greater impact on the Geomatics industry. The Humber Geomatics team is now involved in several applied research projects with industry partners.

In addition, Humber Applied Research & Innovation helps faculty and student research teams collaborate with industry and community partners in order to help solve specific problems. Whether it is building a prototype, or coding a new business's website, or discovering the most efficient method for a company to reach its clients, a team of student research assistants works with a faculty member and an industry or community partner to create and innovate. Working on an applied research project within a team of passionate and determined Humber students and faculty not only provides a great experience, but it also helps build strong resumes and is a perfect opportunity to network with professionals. It allows students the chance to try new things, push themselves, and put the skills they're learning to use in a real-world situation - an experience that provides an understanding and appreciation for what's happening in the classroom and how it applies to real job settings.



Akram Afifi, PhD, EIT, is working at Humber Institute of Technology as a part-time instructor. His main goal is to keep the Geomatics courses current and to fit them to industry needs. For more information, Akram can be reached by email at Akram.Afifi@humber.ca

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EDUCATIONAL FOUNDATION NEWS

Congratulations to our Spring 2017 Award Winners

Lassonde School of Engineering (York University) - Geomatics Engineering students, **Katherine Sonier** and **Matthew Rhoddy** each received LE/ESSE 4670 Survey Law Awards for their academic excellence and for demonstrating a strong interest in cadastral surveys during the survey law course.

Loyalist College – **Samuel Tyler** was the recipient of the *Eastern Regional Group Award*, which is co-sponsored by the Eastern Regional Group. This award is presented to a graduating student for scholastic achievement and leadership in the Survey Technician Program.

Fleming College – **Jonathan Kelly** received the *GIS Award*, which is presented to the student in the GIS Applications Specialist Program who exemplifies leadership in project management.

Taren Koeth received the *Kawartha-Haliburton Surveyors Scholastic Award* which is co-sponsored by the Kawartha-Haliburton Regional Group and is presented to a student in the GIS-Applications Specialist Certificate program who attended Survey Camp and exemplifies leadership in the participation of

assignments, and prepared exemplary field notes. This year the award was named in memory of Thomas E. Lyons.

Thank you note to Costas Armenakis (Lassonde School of Engineering) from Award Winner Matthew Rhoddy

I wanted to thank you for being chosen as the recipient of the AOLS LE/ESSE 4670 Survey Law (Winter 2017), Geomatics Engineering Award and I wanted to thank The AOLS Educational Foundation for the generous scholarship.

My experience at Lassonde School of Engineering has been very positive and beneficial. The material covered, course instructor Izaak de Rijcke, and lectures by industry professionals have all contributed to this positive experience. I have a strengthened knowledge regarding survey law in general and particularly with respect to the province of Ontario. I have found and will continue to find the material covered in the course helpful and relevant along my current path as an articling student.

Again thank you all, Matthew Rhoddy.

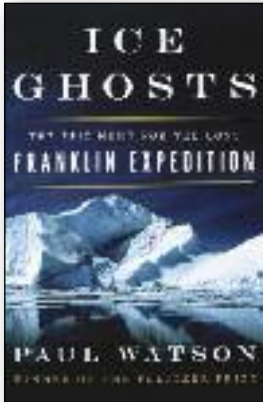
The AOLS Educational Foundation would like to recognize with thanks a donation made in the memory of David Bews.

BOOK REVIEWS

Ice Ghosts

The Epic Hunt for the Lost Franklin Expedition

By Paul Watson



Published by McClelland & Stewart, a division of Penguin Random House Canada Ltd.
ISBN 978-0-7710-9652-5

Spanning nearly 200 years, *Ice Ghosts* is a fast-paced detective story about Western science, indigenous beliefs, and the irrepressible spirit of exploration and discovery. It weaves together an epic account of the legendary Franklin Expedition of 1845 – whose two ships, the HMS *Erebus* and the HMS *Terror*, and their crew of 129 were lost to the Arctic ice – with the modern tale of the scientists, researchers, divers, and local Inuit behind the recent discoveries of the two ships, which made news around the world.

The journalist Paul Watson was on the icebreaker that led the expedition that discovered the HMS *Erebus* in 2014, and he broke the news of

the discovery of the HMS *Terror* in 2016. In a masterful work of history and contemporary reporting, he tells the full story of the Franklin Expedition: Sir John Franklin and his crew setting off from England in search of the fabled Northwest Passage; the hazards they encountered and the reasons they were forced to abandon ship after getting stuck in the ice hundreds of miles from the nearest outpost of Western civilization; and the dozens of search expeditions over more than 160 years, which collectively have been called “the most extensive, expensive, perverse, and ill-starred . . . manhunt in history.”

Information taken from inside the front cover.

Vimy

The Battle and the Legend

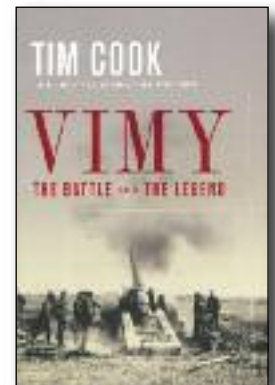
By Tim Cook

Why does Vimy matter? How did a four-day battle at the midpoint of the Great War, a clash that had little strategic impact on the larger Allied war effort, become elevated to a national symbol of Canadian identity? Tim Cook, Canada’s foremost military historian, examines the Battle of Vimy Ridge and the way the memory of it has evolved over 100 years. The operation that began April 9, 1917, was the first time the four divisions of the Canadian Corps fought together. More than 10,000 Canadian soldiers were killed or injured over four

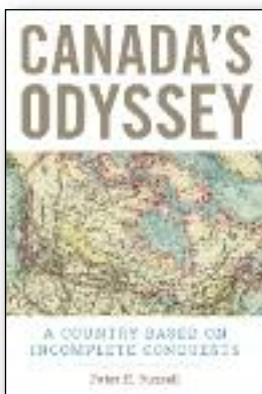
days – twice the casualty rate of the Dieppe Raid in August 1942. The Corps’ victory solidified its reputation among allies and opponents as an elite fighting force.

On the 100th anniversary of the event, and as Canada celebrates 150 years as a country, *Vimy* is a fitting tribute to those who fought the country’s defining battle. It is also a stirring account of Canadian identity and memory, told by a master storyteller.

Information taken from inside the front cover.



Published by Penguin Canada, a division of Penguin Random House Canada Limited
ISBN 978-0-7352-3316-4



Published by University of Toronto Press
ISBN 978-1-4875-0204-1

150 years after Confederation, Canada is known around the world for its social diversity and its commitment to principles of multiculturalism. But the road to contemporary Canada is a winding one, a story of division and conflict as well as union and accommodation.

In *Canada's Odyssey*, renowned scholar Peter H. Russell provides an expansive, accessible account of Canadian history from the pre-Confederation period to the present day. By focusing on what he calls the “three pillars” of English Canada, French Canada, and Aboriginal Canada, Russell advances an impor-

Canada's Odyssey

A Country Based on Incomplete Conquests

By Peter H. Russell

tant view of our country as one founded on and informed by “incomplete conquests”. It is the very incompleteness of these conquests that have made Canada what it is today, not just a multicultural society but a multinational one.

Featuring the scope and vivid characterizations of an epic novel, *Canada's Odyssey* is a magisterial work by an astute observer of Canadian politics and history, a perfect book to commemorate the 150th anniversary of Confederation.

Information taken from the publisher.

The Last Word

Celebrating our Association's Community Spirit Toronto's Northern Gateway Project

This year we have been celebrating our Association's 125th Anniversary and the historical role that surveyors played in building our province. Many of our members may not be aware of a permanent historical monument that was created as part of our association's 100th Anniversary celebrations. In 1990, the AOLS was invited to participate in a joint community/municipal government project to build a sculpture that would mark the centenaries of both the incorporation of the Town of North Toronto in 1990 and our Association in 1992.



Toronto's Northern Gateway Project

The sculpture was erected at the Northern Gateway Park at the intersection of Yonge Street and Yonge Blvd. The Association, knowing that this would be a great opportunity to recognize the contribution

of surveyors to the development of the City of Toronto, was able to enlist the South Central Regional Group and 26 firms to help sponsor it. Artist Jeff Goodman and Architect Craig Goodman were commissioned to design and build a 9-metre tripod holding a giant plumb bob. Three boulders were placed under the tripod on top of two circles of flagstones that surround the base and bear the names of the sponsors. The sculpture was officially dedicated in October 1994.

A full account of the project can be found in an article written by Tom Czerwinski in the Winter 1995 issue of the Ontario Land Surveyor.



Inscription on one of the boulders:

You are standing at Toronto's Northern Gateway. Surrounded by history, this former lookout has always been a prominent site. Until well into the 1850s, a tollgate stood nearby. Across the road, in the 1920s, passengers boarded the Yonge Street streetcar south or the Toronto and York Radial Railway Train heading north. Later, a farmers' market took over the site. During World War I, pilots trained in the field to the northwest. This entry marker, created in true community spirit, also commemorates the centennials of the former Town of North Toronto, 1990, and the Association of Ontario Land Surveyors, 1992.

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	1 time	4 times
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