Ontario Professional Surveyor



on the cover ...

Sergeant-at-Arms, Mel Truchon (Lara Croft) presided over the 121st AGM in Toronto, ON

also in this issue ...

121st AGM Photos

AOLS Consultative Selling Skills

Fish weirs, ktaronto & 13 other

riparian boundary fallacies

Geospatial in Canada: Some

Questions for the future

The AOLS Professional Liability

Program: Common Errors and

Loss Prevention Advice

plus our regular features:

Educational Foundation News from 1043 Book Reviews Industry News

Canadian Publications Mail Product Sales Agreement No. 40064685

Volume 56, No. 2 Spring 2013

ONTARIO PROFESSIONAL SURVEYOR



VOLUME 56, No. 2

Spring 2013

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ON THE COVER ...

Sergeant-at-Arms, Mel Truchon chose to portray the fictional character, Lara Croft; a strong and powerful female role that many young women can identify with. Lara symbolizes a younger generation coming into the profession, bringing energy and exuberance with it. Mel thought that Lara's presence would bring a bit of fun and maybe even a bit of comic relief to the meeting.

Professional
Surveying
in
Ontario

encompasses the Disciplines of

Cadastral,
Geodetic,
Hydrographic,
Photogrammetric
Surveying
&
Geographic
Information
Management



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President's Page

By Eric L. Ansell, O.L.S., O.L.I.P.



Wow, what a mind boggling couple of weeks. We have just come away from what I hope most of you will agree was a very successful AGM. The AGM Committee volunteers, the AOLS staff and I have taken away a number of lessons learned.

The AGM survey has provided some very positive and usable feedback and suggestions for next year which will be incorporated into the 2014 AGM as best we can.

As most of you know I first became involved with Council back in 2004. I finished one complete term and then rejoined Council a couple of years later. My years on Council have culminated in being sworn in as President on March 1, 2013. I don't know whether to refer to the coming year as an adventure or as a mission; I think a little of both.

I am hopeful that during the coming year we will become a stronger, more responsive and more representative association by working together, by identifying the needs of tomorrow, by meeting the needs of today, and by always keeping in mind our past, not only our accomplishments but also our failures and those endeavours which were a little less than successful. Our association must meet the needs of all our members, including all classes from retired members to professional members, while always keeping our principal objective of serving and protecting the public interest in mind.

I am humbled by this honour of being your President, to lead and represent our association for the next year, but I charge all of you to take an active role in this profession. The role you play is on two fronts. Firstly, we are a very small association limited both in the number of people available to do the things that need doing and in financial resources. When we compare our association with others, in particular Professional Engineers Ontario (PEO), we see a dramatic disparity in numbers. We have just over 600 members whereas PEO has 73,000, an impressive difference of 72,400 members.

I am absolutely amazed when I see the list of volunteers who step up to participate on the many committees that we have and who freely offer their time and energy. We are in fact less than 1% the size of PEO and yet we have an extraordinary percentage of members who are actively engaged in the activities of our association. A very unscientific count of those who have volunteered to be on at least one committee reveals that an amazing 168 members or 28% of our members are actively involved. I thank all of you who take an active role in our association and I invite those of you who want to contribute but just haven't been asked, to please put your name forward as a committee member.

But not only does our small association dictate the number of volunteers we can draw from but it also limits our financial resources. If we again make a comparison to PEO we see yet another dramatic difference in available resources. Annual fees for PEO are only \$220 as compared to ours which are \$1,500. But let's look at the total numbers not just the annual dues. PEO has 73,000 members at \$220 each which gives them an annual budget of over 16 million dollars from membership dues. In comparison, our association collects just under a million dollars in membership fees. It is pretty easy to see that we cannot do all of the things that a larger organization can but I think we all agree that our volunteers do a terrific job with what we have.

Secondly, I truly believe that we as surveyors must be ever diligent in following our Code of Ethics and practice ethics in everything we do as professional surveyors and in our daily lives. Ethics is not something we follow because we are legislated to do so but because it is the right thing to do in all aspects of our profession. So much of what we do as professionals, whether it is between ourselves and our clients, our employees or our fellow professionals, is dictated by our ethics. We are all very technically able to perform our jobs as surveyors but in the end we will not be judged and remembered by the bars that we planted or the plan that we produced but rather by how we delivered our mandate and how we connected with clients, employees, other surveyors and the public.

One very small example of becoming a truly ethics-based profession is our mandate of continuing education. I want to lose "mandatory" from our vocabulary when speaking about continuing education and/or continuing professional development. We should all be prepared to undertake continuing professional development in all aspects of our business, whether that is technical training (LiDAR, etc.), business training (accounting methods, contract law) or professionalism (ethics, conflicts of interest, etc.), without it being "mandatory". It should also be incumbent on the individual surveyor to ethically decide on what training fulfils the requirements of Continuing Professional Development (CPD). Courses need not be only offered and approved by the AOLS as there are many other courses being offered through other venues that we should make use of to complete the CPD requirements.

During the coming year it is certainly not my objective to have Council micro manage the association but rather establish policy and set the direction we all need to follow. Council will work to encourage and promote ethics everywhere in our profession, we will continue to work on and regularly revisit our strategic plan and we will be very

Geospatial in Canada: Some **Questions for the Future**

By Dr. Bob Ryerson, MCS, FASPRS

was asked "Would you be interested in writing an article for our magazine on what is happening nation-wide in the Geomatics Industry and maybe include something about GEOIDE (GEOmatics for Informed DEcisions)?" which I took to be shorthand for research and education. In a weak moment I said yes.

There are already a number of interesting and thought-provoking notes on geomatics or geospatial in Canada. I especially like ones by James Boxall at http://www.gogeomatics.ca/magazine/its-time-for-a-moon-shot-for-the-spatial-sector-in-canada.htm and Jeff Thurston at http://www.gogeomatics.ca/magazine/geomatics-leadership-in-canada-assessing-the-state-and-challenges.htm . Some have also said that our book "Why 'Where' Matters" offers some useful insights (www.geoeconomy.com).

We begin by highlighting a few of the points made (correctly, in my view) by Boxall and Thurston, and then we expand on some of the implications. Firstly, there are too many different organizations competing to speak for geospatial in Canada. This is a point I made in an editorial in the first edition of the GoGeomatics Newsletter (www.gogeomatics.ca). Secondly, geography and its importance are not well recognized. (This is an important theme!) Thirdly, there is a need for leadership in the face of global competition – and global opportunities.

Organization: Let's look first at what I call organization. The federal government has brought geomatics and earth observation under one ADM-level committee. This is a good first step. We can only hope that the provinces and territories

will echo this smart move and will be fully engaged and mapping and remote sensing are being brought under one Director General. During a time of government cutbacks, Canada's satellite receiving stations have been upgraded and the new radar satellite missions have been approved. There has been funding for C-CORE (established in 1975 as the Centre for Cold Ocean Resources Engineering) for a northern-focused activity in remote sensing, and topics such as oil spills in the Arctic and the research needs of the oil sands, including those related to mapping and remote sensing. Some years ago Canada invented the concept related to geospatial data of collecting data once closest to the source. The next step would be to build one set of data that is routinely updated using remote sensing and crowd-sourced data — and use it everywhere in government. This challenge will require the sort of cooperation across agencies and governments that the Canada Centre for Remote Sensing (CCRS) was founded upon — and still encourages. Recently a large contract was let to study the field — something I have been involved in several times in the past. But confusion remains. The confusion now comes in the number and range of entities engaged in the industry, as well as in scientific and technical areas. In some areas there are too many organizations, and in others none at all.

Industry is perhaps the most confusing. It used to be that geomatics firms were easily identifiable. Companies did mapping, land surveying, built image analysis systems or GIS software – they focused on geospatial tools and applications. A specialized geomatics industry association made sense and could function independently. Today more geomatics specialists work in firms that have a focus other than geomatics – be it land use planning, environmental assessment, forest management, engineering, retail or banking. Recent efforts to resuscitate the Geomatics Industry Association of Canada (GIAC) and bring in these "users" did not seem to work. (At least our company, long a Member of GIAC has not recently been asked for dues – a sure indication of inactivity!) My question is: What are the value propositions that will bring users and practitioners in geomatics into one industry group?

The next logical focus would appear to be on the individuals working in "geomatics" or "geospatial". The many people involved in the field are as difficult to identify (never



Bob Ryerson giving Keynote Address in Kuala Lumpur. Canadians are often invited to give keynote addresses at major international conferences on remote sensing, GIS, GPS, and land information.

mind bring together) as the employers for which they work - their work, their experience, and reasons for getting together vary dramatically. They involve researchers, teachers in post-secondary programs, technically oriented workers, students, and professionals, including some such as land surveyors who work in a regulated environment. Today there are separate organizations in remote sensing (recently split off from the space and aeronautics people), geomatics and land surveying. Furthermore, as people retire, renewals in the more traditional organizations tend to be down, and (dare I say as one of the older people!) those members left tend to be older and perhaps not as in-tune with the needs of a younger, more mobile workforce. This leads to what may become a vicious downward spiral. Why are members leaving the traditional scientific and technical organizations? Why are younger members not joining them? The usual reason is the lack of relevant services for members. But what is the answer? Simply stated, organizations that purport to serve our community must be relevant and provide value - to all members and, especially, to those who may become members. It is also safe to say that none of the existing traditional organizations can match the 5000 people on GoGeomatic's rapidly expanding mailing list. Why could there not be one umbrella group that might represent the full gamut of interests in the geospatial community? Perhaps GoGeomatics and the growing focus on social media are beginning to provide an answer.

As we talk of umbrella groups in geomatics, we must not ignore the importance of good science to provide the intellectual property that underpins our industry, the highly qualified people to do the work, as well as to educate future generations. GEOIDE produced first class research, over 1000 highly qualified personnel, built linkages between university programs across Canada that still exist, and a number of commercial entities have spun off. Even if GEOIDE has reached the end of its funding, it was a success. In some respects TECTERRA (www.tecterra.com) has replaced some of what GEOIDE did, albeit with a clear (and useful) focus on the commercialization of geomatics. Could an umbrella group involve a scaled-down version of GEOIDE to continue to foster linkages across a network of researchers focused on geomatics?

A Glaring Gap in Education. One of my biggest concerns looking to the future is that the Government of Ontario (and most of the rest it seems) has put all of its educational eggs into reading, writing, arithmetic and science – neglecting the importance of geography and location. Geography is defined by the Oxford dictionary as "the study of the physical features of the earth and its atmosphere, and of human activity as it affects and is affected by these, including the distribution of populations and resources and political and economic activities." This is obviously pretty important stuff. As a province and country we neglect it at our peril. Neglect will lead to poorer understanding of these who might buy our exports, and poorer understanding of the underpinnings of the current economy that is tied so tightly

that the study of geography is (and has long been) an important contributor to our success, and must be strengthened in our school system? (As a sidebar to this issue, we wrote our book in part for high school libraries and as a surveying book for the interested public and for universities and colleges...I can say for certain that it can be found in very few of the 909 high schools across Ontario, even though it has received very positive reviews by all of the teachers and geographers who have seen it.)

And once we convince the government of the importance of geography and location, what about the renewal of the land surveying profession? The Association of Ontario Land Surveyors has been grappling with the difficulty in attracting surveyors. It has been engaged in school outreach, presence of AOLS members at Geography Teacher events and the like. A study which I did over ten years ago as part of a larger study may be instructive. We found that land surveyors who saw their business as what might be called traditional cadastral land surveying saw their businesses contracting relative to inflation. They tended to have a gloomy view of the future. However, land surveyors who saw their business as cadastral work AND land information projected annual growth approaching 20% and were very positive about the future. Might there be a better way of showcasing the surveying profession and its relevance in the Google and mobile world of geography? While quickly noting that I am not a land surveyor, is this simply a question of branding and marketing?

Leadership. We have access to excellent research in the broad geospatial field. We have competent people in industry, government and academia. We have world class knowledge and capabilities in a number of geospatial niches. We have coming on stream a young and vibrant workforce looking for challenges. We have a good story to tell. Who will tell it? Usually such stories are told by leaders – by the strategic thinkers who emerge with a combination of technical understanding and an understanding of the political process, both how power works and how it is applied. In the USA it is the industry represented by Jack Dangermond, Kass Green, and a handful of others. On the organizational side it is the Management Association for Private Photogrammetric Surveyors (MAPPS), the American Society Photogrammetry and Remote Sensing (ASPRS), and others.

Where will the leadership come from in Canada? We used to rely on government. For example, from its beginning in the 1970s the Canada Centre for Remote Sensing (CCRS) aimed to have a strong reputation world-wide in this rapidly emerging and highly visible field. It began in 1973 with the first searchable and easily accessed library database in the field and continued by being the destination of choice for international scholars. It later worked with industry and Foreign Affairs and International Trade in the 1980s to develop a plan to showcase Canada's capabilities in the field through a variety of mechanisms. CCRS people led successful trade missions and managed to have a number of

Canadians embedded in technical advisory positions in UN agencies in Rome, New York and Bangkok. CCRS was also a leader in the development of what has become the important Committee on Earth Observation Satellites (CEOS). In the 1990s CCRS developed the GlobeSAR program to showcase Radarsat's capabilities. As recently as 2011 CCRS was recognized for this leadership with a major international award. With government cut-backs in general (and to foreign travel more specifically) and with changing mandates where will such leadership come from today?

The Future of Geomatics in Canada. I believe that the solutions to the problems and answers to the questions posed could well come from the development of an umbrella organization. That organization would have to be a home for very different constituencies. It would bring together:

- Academics and researchers seeking to publish and hold scientific conferences;
- Professional bodies such as land surveyors;
- Industry of two types:
 - Those primarily concerned with the development and sale of geospatial products and services; and
 - Those who are users of geospatial products and services; and
- Technical workers and professionals more interested in careers, in-service training, meeting with likeminded people, rather than reading or writing for scientific journals.

Such an organization would have to be flexible, use social

media, and at the same time meet the traditional requirements (both legal and others) of existing organizations. But within the right set-up existing organizations could maintain their identity and autonomy where it is important to them, and yet be structured to enable synergies and partnerships. What would existing groups gain? There would be strength in numbers and thus greater impact, shared administration, likely one big national conference and more focused regional conferences, and lower overheads. What would they lose? Some of the existing organizations would have to share support staff – which in the longer term is far better than disappearing altogether as has happened to some in the past – and as is my projected end for some of those now facing budgetary pressures.

A new national strategy would have to be developed – but a good start on that was made several years ago in a contract we did for the federal government that involved the federal government, academics, industry, the provinces, and municipalities. Could a new approach be developed? Of course! Australia has done something similar. And what is delicious irony, Australia did it in part to be more competitive and to respond to our past successes. If we don't so something, and do it soon, we will have squandered a lead that past leaders have given to us and Canada will be relegated to being a geospatial afterthought.

Dr. Bob Ryerson, CMS, FASPRS is President of Kim Geomatics Corporation in Manotick, Ontario. He can be reached by email at **bryerson@kimgeomatics.com.**

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aggressive in establishing and offering CPD courses throughout the year.

These three areas of effort are all tightly connected and we cannot focus on one without being mindful of the others. As I mentioned above, ethics is a very important issue and it will form the backbone of our strategic plan. Continuing Professional Development will also be a large component of the plan. Without all of the pieces in place we cannot fully adopt a strategic plan and put it into action.

Our current plan, which is a five-year plan, was developed and mapped out in September 2010. We are now half way through that five-year plan and we need to pull the current plan apart to see where we have missed our goals and objectives, to reassess the current goals and to introduce new objectives. We need to remap our plan and continue on a path that will see our association become a stronger and well respected association. Council is dedicating a two-day meeting in April to re-examine our strategic plan. This will keep Council focused on policy and direction.

Council will also keep their attention on the Ontario Digital Cadastre Corporation (ODCC). It may seem like a long time coming but we have seen significant strides this past year. I do not want to lose the momentum that we have right now. We want to use that momentum to propel us further down the road towards becoming a corporation which offers unique and desirable products to its clients, all the while working towards

becoming profitable for its members' benefit.

ODCC has been incorporated for just one year and there is no doubt that it struggled to survive through that first year, however, over the past couple of months the corporation has taken a sharp turn towards success. With a strong ownership and funding model we should see the ODCC become an innovative provider of cadastral data products and services that enhance the viability and competitive position of the cadastral surveying profession in Ontario to the mutual benefit of its members and its clients.

David Brubacher was hired on as a consultant to the corporation in late 2012 and at the AGM just a few short weeks ago he presented a very realistic ownership plan; a corporate structure which could see ODCC jointly owned by members of the AOLS and a newly incorporated Co-operative Corporation. David also presented a funding model that will, if adopted, allow various partners to contribute or invest financially in the corporation.

In closing I want you to know that I take on the duties of President of the Association of Ontario Land Surveyors very seriously. It is my goal to see our association grow and become even more respected throughout Ontario, Canada and in fact the world. I also want to see our association be more responsive to our members and to deliver what our members need. I will endeavour to meet the challenges that this coming year might bring.

Fish weirs, ktaronto & 13 other riparian boundary fallacies¹

By Dr. Brian Ballantyne, Surveyor General Branch, NRCan²

ABSTRACT

Given simplicity in riparian bounds (mostly water's edge, sometimes mean low/high water, ad medium filum in the absence of statute); gradualness in erosion; equity in apportioning accretion; and plethora in commentaries - let's not reinvent the wheel. Rather, let's debunk 13 fallacies of riparian bounds. Some fallacies are overt - set out verbally, on plans, through practice and in policy; others are covert - inferred through action and inaction.

PART A - CONTEXT:

This paper can be truncated to one phrase: "I ran down to the levee, but the devil caught me there," because it captures the ubiquity, paradox and fallacy of watercourses, and thus, of riparian boundaries. Watercourses are ubiquitous in law, in language, in mythology and in song. The first recorded boundary dispute focused on access to the Tigris River in Mesopotamia, 4,500 years ago (*Lagash v. Umma*). A rival is somebody who lives along the same stream, and if your watercourse is contaminated with buffalo manure (as the Republican River was in the USA), then you are literally located "up shit's creek." Caesar agonized before he crossed the Rubicon and the Ephraimites were forced to utter the word for stream (*shibboleth*) if they wished to cross the Jordan. Having driven to the levee we find that "the levee was dry" (McLean); adventures take place "up on Cripple Creek" (The Band); we pray that "the creek don't rise" (Lamontagne) and rely on a "bridge over troubled waters" (Simon & Garfunkel); when it does rise there is "high water everywhere" (Dylan) inspiring McKinley Morganfield to become Muddy Waters.

A watercourse is also a paradox – both sanctuary and prison: "The river was built to be a trap for the stupid." Watercourses are both good and bad; in both a physical and spiritual sense. We go to the watercourse to wash away sins, yet we often find the riparian boundary to be problematic. Contradictory edicts are issued: Annie Lennox orders: "Take me to the river" but Stevie Ray Vaughan is warned: "Don't stop by the creek, son."

PART B - PRINCIPLES:

Riparian bounds in Ontario are generally the water's edge on the day for most parcels (in the non-tidal regime).⁸ For example, water's edge has been used as the location and descriptor of the riparian bound of First Nation Reserves since May 1980.⁹ In the tidal regime, most riparian parcels are bounded by the line of mean high water (OHWM), although some parcels extend to mean low water (OLWM). Although the presumption that a riparian parcel extends to the middle of the water course (*ad medium filum*) has been largely eliminated in Ontario through legislation, it lives on for Reserves

The primary question, of course is: Does the parcel have a riparian bound? If yes, the riparian boundary principles can be truncated to:

- If a parcel is bounded by water, then there is the potential for the parcel to gain in area through accretion, owing to gradual deposition or retreat of the water.
- Conversely, there is the potential for such a parcel to shrink in area through erosion, owing to gradual wearing away of the soil or encroachment of the water.
- Accretion must be allocated fairly among abutting parcels, by proportioning the bounds, projecting the side bounds to a baseline, or using a hybrid technique, ensuring that all parcels continue to enjoy access to the water.¹⁰

Establishing and re-establishing riparian bounds through survey is very fact-dependent, and thus, fact-intensive. Given the simplicity of the definition of a riparian bound in Ontario, the elegance of the related principles and the plethora of commentaries on the subject, I am loath to reinvent the wheel. There is sufficient coal in Newcastle. Rather, let's expose the fallacies that are associated with riparian bounds, inspired by the caution in *Ellard v Tiny Township* (2012) to not commit "the logical fallacy of anachronism." The fallacy of anachronism consists of projecting 2013 moral and legal principles to a different context (distant in time and space).

- ¹ This is a truncated version of a presentation to the AOLS-AGM in Toronto (February 2013). It began life as a presentation to the CIG in Markham (September 2012) and has benefitted from critiques by Ron Stewart and David Lambden.
- ² This article does not necessarily represent the views of Natural Resources Canada or the Government of Canada. Of course, it might
- Hunter, et al. Friend of the devil. Grateful Dead. 1970.
- Rosenblatt. Kayak morning. 2012.
- Pratchett. Snuff. p.277. 2011.
- ⁶ I am indebted to Hugh Goebelle OLS, CLS for this pithy "sin-inversion" observation. September 2012.
- Of course, I am remiss not to refer to the fallacy linking the devil to watercourses: That the Inferno is exclusively hot (e.g. burn in hell; fire and brimstone). Rather, in the Fifth Circle of the Inferno, the wrathful and the sinful fight on the River Styx and sink to the bed of the River Styx, respectively.
- 8 Walker v. Ontario SCC (1975).
- 9 CLSR Plan 67082.
- ¹⁰ Andriett v. County of Strathcona No 20 Alta CA (2008).
- See: La Forest. Water law in Canada. 1973. Lambden. Water boundaries Inland. Chapter 6 in Survey law in Canada. 1989. Lambden & de Rijcke. Legal aspects of surveying water boundaries. 1996. Stewart. Surveying water boundaries: Not a simple task. 2005. de Rijcke. Water boundary issues eastern Canada. 2011.

PART C - RIPARIAN BOUNDARY FALLACIES:

Some of the 13 riparian bounds fallacies (deceptions, errors and unsubstantiated assertions) that follow are overt, explicitly set out in conversation, in writing, on survey plans, through field practice and in policy. Others are covert; they can be inferred through action and inaction, sometimes in policy and sometimes in practice. Thus, most of what follows is empirical; a few parts are somewhat speculative.

1. Fallacy of geography: That riparian bounds are consistent in location across Canada. Witness the debate that rages over title to beaches between proponents of water's edge¹² and proponents of edge of vegetation.¹³ Each is correct for his/her jurisdiction and each tries to foist on the other.¹⁴ Rather, water's edge is the riparian bound in Ontario¹⁵ and for lakes in New Brunswick.¹⁶ Eight other provinces use the edge of terrestrial vegetation as the riparian bound, based upon statute, statutory interpretation by the courts,¹⁷ survey practice and Crown policy. New Brunswick uses *ad medium filum* for the boundary on non-tidal watercourses.¹⁸

Many of my colleagues have asserted since 2011 that neither water's edge nor OLWM are used on Canada Lands; that OHWM as reflected in the vegetation edge is used consistently across all Canada Lands; and that water's edge is inappropriate as a boundary. Surely, Brebeuf was martyred, Bethune doctored to his death, Parks sat at the front of the bus and Mandela laboured in the quarry to end such bigotry, prejudice and intolerance. Was their sacrifice in vain?

2. Fallacy of parochialism: That unpalatable principles from other jurisdictions in Canada are inapplicable in Ontario. The Alberta Court of Appeal has affirmed twice that accretion cannot extend a riparian parcel beyond the nominal parcel, such as a 1/4 section of 160 acres or section of 640 acres. What of a parcel in Ontario defined as all that part of the north 1/2 of lot 4, concession 3, lying north of the Shibboleth River, if the river gradually moves south out of the lot? Surely the parcel does not extend across the concession road so as to follow the river into concession 3?

- 3. Fallacy of Ozymandias: That riparian bounds, as "monuments in their own right" are the best, least fallible, "considered the safest boundary of real estate." Such assertions invoke the traveller from an antique land who saw "Two vast and trunkless legs of stone ... and on the pedestal these words appear: 'My name is Ozymandias, king of kings: look on my works, ye mighty, and despair!" Rather, yes and no. Yes, riparian bounds are both natural and "readily accessible to surveyors." However, they are often difficult to re-establish on the ground, have the potential to move in location, and have the potential to change character (to become fixed in location if the water moves quickly). And the safety of the
- 4. Fallacy of the obvious: That all parcels that touch water are bounded by the water's edge and thus enjoy riparian rights.²⁵ Rather, it is dependent on the intention of the grantor and the description of the parcels. The Gull River Reserve has a rectilinear southern boundary that merely crosses a river thrice, and 1/4 section and legal subdivision parcels in Saskatchewan were granted partly as upland and partly as well-defined bed. Also, it might well be that a parcel was not riparian when created, but owing to geophysical erosion (either gradual or quick) it is now partly submerged.²⁶
- 5. Fallacy of permanence: That if created as a riparian parcel, then always a riparian parcel. Rather, riparian rights are dependent on the parcel touching the water. If a strip of land exists between the parcel and the watercourse through the development of an island²⁷ or through legislation (*Great Lakes Shoreline Right of Passage Act*²⁸) then the parcel ceases to be riparian. Nature is capricious.
- 6. Fallacy of being law abidin': That surveyors' practices and customs reflect legal principle. Rather, there are many examples in Ontario of surveying to the HWM in the face of consistent case law since the 1850s that water's edge is the boundary and that high water is not a boundary.²⁹ Along Lake Erie between 1890 and 1905, Ross OLS was "dedicated to the principle of the high water mark."³⁰ Along the Ottawa River, the "conventional wisdom" was to use high water mark

de Rijcke. Does a presumption exist that a natural boundary is located at the water's edge? Geomatica. v64-n2. pp.257-264. 2010.

Ross & Hopley, The water's edge and the ripple effect of judicial error in the Common Law, Journal of Environmental Law & Practice, v16, p.239, July 2006.

Cole. Boundary surveyors and scholarly activity: Mutually exclusive? Geomatica. v65-n4. pp.404-405. 2011.

¹⁵ Walker v. Ontario - SCC (1975)

¹⁶ Merriman v. New Brunswick - NBCA (1974).

Lawrence v. BC - BCSC (2010); Flewelling v. Johnston - Alta CA (1921); Resort Village of Island View v. Romashenko - Sask CA (2010); Miller v. BC - SCC (1975).

Boyd v. Fudge - NBCA (1964).

¹⁹ Pitt v Red Deer – Alta CA (2000); Johnson et al v. Alberta – Alta CA (2005).

Lambden. Water boundaries – Inland. Chapter 6 in Survey law in Canada. 1989.

de Rijcke. Does a presumption exist that a natural boundary is located at the water's edge? Geomatica. v64-n2. pp.257-264. 2010: Quoting Angell (1877).

Percy Bysshe Shelley. 1818.

²³ Walker v Ontario – Ont HC (1971); para 13.

²⁴ Stewart. Surveying water boundaries: Not a simple task. 2005.

I use riparian rights to represent only those things are that are important to re-establishing boundaries – the doctrines of accretion and erosion. Of course, a parcel with a non-riparian boundary can enjoy access to the water.

²⁶ Volcanic Oil & Gas v. Chaplin – Ont CA (1914).

²⁷ Queens County v. Cooper - SCC (1946).

²⁸ Bill 103 before the Ontario Legislature, passed first reading on June 6, 2012.

²⁹ Parker v. Elliott – Ont CA (1852).

Ontario v. Walker – Ont HC (1971); para 33.

as the boundary until the 1970s.31

This fallacy is predicated³² on all land surveyors being qualified to render a riparian boundary opinion. Rather, research reported in *The Onion* reveals that only 62% are qualified to render such an opinion (38% of people are neither entitled nor qualified to have opinions,).³³ The remainder lack both the will and the experience, forged on the anvil of rigour, succoured by educational seminars and tested by adoption by other surveyors and by the courts. To wit, 20 provincial land surveyors were recently canvassed for their experiences in reestablishing riparian boundaries; 50% of respondents were comfortable abdicating such responsibility to the province and a further 15% of respondents avoided such surveys.³⁴

- 7. Fallacy of nature: That artificial regulation/control of water (primarily raising levels by people) means that flooding has occurred, that the water has encroached quickly, and that the riparian boundary is now fixed in a submerged location. Rather, the effect on the boundary depends on the effect of regulation. If it is merely to hold water back during spring to avoid downstream flooding (as on the Qu'Appelle River), or to smooth natural fluctuations according to a rule curve (Lakes Simcoe and Couchiching),35 or to reduce summer highs and increase winter lows so as to produce electricity (Peace River, Kootenay Lake) then there is no sudden encroachment of water. The riparian boundary continues to have the potential to move gradually.
- 8. Fallacy of temporal consistency: That government action is consistently hailed or assailed. Rather, there is little consistency. On the one hand, the 1911 *Beds of Navigable Waters Act* is usually hailed as a good thing, because it asserted the public right in the beds in the public interest (electricity generation). On the other hand, the 1940 amendment to the Act that imposed HWM in Ontario for 11 years is usually assailed as a bad thing, because it represented expropriation of private beaches without compensation ("... the amending clauses were seen by the public to be confiscatory"). 37
- **9. Fallacy of attitude polarization:** That showing HWM (back of beach) on a survey plan means that

- a strip of riparian land was excepted from the area that was subdivided.³⁹ Rather, the character and location of the boundary is entirely dependent on the intention of the subdivider/developer. Did he/she intend to retain the beach or to create new, smaller, riparian parcels?⁴⁰ It is also dependent on the era Was the survey done between 1940 and 1951 when legislation set out HWM as the riparian boundary (see plan of part of Lot 47 & 48, Front Concession, Township of Plympton)?
- 10. Fallacy of anachronism: That actual navigability at the time of survey or grant decides whether the bed vests in the Crown (BNW Act). Rather, the test is relaxed in three ways: If the parcel is <u>capable</u> of navigation at the <u>present time</u> using any means (including <u>recreational</u> floats) then the watercourse will be inferred to have been navigable at the time the parcel was created. Of course, the inference might not be made if there is evidence that the watercourse was non-navigable at the time of the Crown grant, but evidence of such kind is rare.
- 11. Fallacy of infallibility: That all riparian boundary cases (disputes decided by the courts) establish principles. Witness the kerfuffle caused by the *Ellard* and *Lackner* decisions⁴² rendered 12 days apart in July 2012, in which the courts rendered opposing judgements based on similar facts. Rather, most cases use existing principles and focus the investigation on the facts (what did the landowner intend, what did the surveyor demarcate, has the water shifted, and so on). For instance, *Canoe Ontario v. Reed* did not set out that a riparian proprietor can block a navigable river with impunity.⁴³
- 12. Fallacy of tidal consistency: That OHWM/ MHWM is used exclusively in the tidal regime to define the boundary between the upland parcel and the foreshore (which vests in the province). Rather, at least six national parks use low water as the boundary; four use OLWM, one uses LWM and one uses average LWM.⁴⁴
- 13. Fallacy of Rousseau: That First Nations did not have parcels riparian or otherwise; "the idea of boundaries is a Eurocentric principle." This fallacy is reflected in the Jean-Jacques Rousseau⁴⁶ lament:

Lackner v Hall – Ont SC (2012); para 41.

Strictly speaking, this is an independent fallacy, but I was constrained to 13 fallacies.

According to Chicago's School of Behavioural Science. The Onion. Issue 43-21. May 23, 2007.

One of the results of a study that the Surveyor General Branch of NRCan commissioned in March 2010.

³⁵ Stewart. Surveying water boundaries: Not a simple task. 2005.

Benedickson. Private rights and public purposes in the lakes, rivers and streams of Ontario, 1870-1930. Chapter 7 in Essays in the history of Canadian law. 1983.

⁷ Lambden & de Rijcke. Legal aspect of surveying water boundaries. p.162. 1996.

³⁸ Lord, et al. Biased assimilation and attitude polarization. Journal of Personality and Social Psychology. 37(11). pp.298-2109. 1979: "The mere availability of contradictory evidence rarely seems sufficient to cause us to abandon our prior beliefs or theories."

⁹ Ellard v. Township of Tiny – Ont SC (2012).

Lackner v. Hall – Ont SC (2012).

Re: Coleman and Ontario - Ont HC (1983); Simpson v. Ontario - Ont SC (2011).

Ellard v. Township of Tiny – Ont SC (2012); Lackner v. Hall – Ont SC (2012).

³ Canoe Ontario v. Reed – 1990 (Ont Sc).

Wapusk, Forillon, Ivvavik, Aulavik, Auyuittuq and Quttinirpaaq.

MacLaren, Barry & Sangster. Tsilhqot'in Nation v. British Columbia. Survey Review. 43(320). pp.123-136. 2011.

Rousseau. The Social Contract & Discourses. 1762.

The first person who, having enclosed a plot of land, took it into his head to say this is mine and found people simple enough to believe him was the true founder of civil society. What crimes, wars, murders, what miseries and horrors would the human race have been spared, had some one pulled up the stakes or filled in the ditch and cried out to his fellow men: "Do not listen to this imposter."

Rather, First Nations revelled in non-Eurocentric parcels,47 and enjoyed rights attached to those parcels that were both exclusive and hereditable (e.g. fishing sites around the Salish Sea⁴⁸). Closer to Markham, Ontario, five substantial Huron villages have been excavated, dating from the 1400s to 1600s, each with areas of 4ha and populations of 2,000.49 They were located along various watercourses, including the Humber, the Don and West Duffins Creek and had boundaries demarcated with wooden palisades up to 10m in height: "A social boundary of some importance; if necessary it can be defended." Aboriginal peoples continue to define and demarcate their own boundaries. To believe otherwise is to engage in a conspiracy of Swiftian proportions⁵⁰, akin to the 9-11 Truthers.⁵¹

D - BONUS FALLACY:

14. That "Toronto" means either the meeting-place at the mouth of the Humber River⁵² or the swaying trees on the peninsula/islands.⁵³ Rather, Toronto is named for the fishing weirs that have existed at the narrows between Lakes Simcoe and Couchiching for some 4,500 years. The Mohawk word *ktaronto* means "where there are trees standing in the water," and refers to the stakes used to make the weirs.⁵⁴ The weirs appear in the historical record in

1615, as Champlain journeyed past: "... a strait, where the great catch of fish takes place by a means of a number of weirs which almost close the strait: leaving only a small opening where they set their nets in which the fish are caught."

- Given the absence in French (and English) of the kt-sound, *taronto* began to be associated with various watercourses and places soon thereafter:⁵⁵
- Bernou's map of 1680 showed Lake Simcoe as Lac de Taronto (lake of the fish weirs).
- Belmont's map of 1680 showed Lac de Tarenteau (Lake Simcoe) and R de Tarenteau (the Severn River, flowing from Lake Couchiching to Georgian Bay).
- Coronelli's map of 1688 showed Lake Simcoe as both Lac Taronto and Les Piquets, a reference to the pickets that comprised the weirs.
- By 1686, the canoe route between Lakes Ontario and Simcoe, via the Humber and Holland Rivers was known as Passage de Taronto.
- Lahontan referred in 1697 to Georgian Bay as Baie de Toronto.
- Del'Isle's map of 1730 showed Lake Simcoe as Lac de Taronto
- Mitchell's map of 1755 showed both Toronto L (Lake Simcoe) and Ft Toronto (at the mouth of the Humber).
 The fort was established in 1720.
- By 1764, Lake Simcoe was known as both Lake Toronto and Lac aux Claies (corrupted to Lac de Clies, from the French word for wattle or screen).
- The settlement on Lake Ontario is referred to as Toronto in 1785 and Torento in 1788.



Dr. Brian Ballantyne advises on land tenure and boundaries for the Surveyor General Branch of Natural Resources Canada. His interest in riparian stuff includes boundaries, fallacies and wherries. He can be reached by email at **Brian. Ballantyne@NRCan-RNCan.gc.ca** for further discussion.

- ⁴⁷ Ballantyne. Aboriginal title in Canada: Boundaries, parcels & lessons for Sámi lands. NACS Text. 2013.
- Wadewitz. The nature of borders: Salmon, boundaries & bandits on the Salish Sea. 2012.
- Birch. Coalescence and conflict in Iroquoian Ontario. Archeological Review from Cambridge. 25(1). pp.27-46. 2010.
- Scene: A coffee shoppe in London, 1713. The just-signed Treaty of Utrecht means that vast swaths of Canada will be available for colonization, and a group of drinking buddies the Duke of Wellington, the Earl of Sandwich, Lord Chesterfield, Sir Cardigan and Jonathan Swift imagine vast markets for their wares. Four of them dream of foisting their inventions footwear, food, sofas and sweaters, respectively on an unsuspecting Aboriginal population. Their table-mate, Swift, has nothing to offer except satire. Desperate to save face among his cronies, weary of their abuse ("Hey, Swifty, the demand must be staggering for clever words in a land that has 27 words for snow"), he harks back to a boundary dispute on his patron's estate, and fixes on parcels. "That's it, you wankers," he exclaims, "I hereby claim the right to foist parcels on Aboriginal peoples in Canada." "Brilliant," responds Chesterfield, with just a hint of envy, because he realizes that sofas are useless without parcels on which to place them. What follows is 300 years of parcel-foisting by Swift's agents and successors.
- Taibi. The great derangement. 2005.
- 52 Scadding. Toronto: Past and present. 1884.
- 53 Smith. Sacred feathers: The Reverend Peter Jones (Kahkewaquonaby) and the Mississauga Indians. p.20. 1987.
- 54 Steckley, Toronto: What does it mean? Arch Notes, 92(3): 23-32, 1992.
- 55 Allen, Wa-nant-git-che-ang: Canoe route to Lake Huron through Southern Algonquia, Ontario Archeology, No.73, pp.38-68, 2002.

Sites to See

Earthcache

www.earthcache.org

An EarthCache is a type of geocache that is listed on www.geocaching.com. EarthCaches use additional guidelines when developed so that they provide a unique experience - a learning experience about Earth science! The Geological Society of America (GSA) administers the listing of EarthCache sites around the world, see www.geosociety.org.

The AOLS Professional Liability Program Common Errors and Loss Prevention Advice

By Mark Sampson, B.B.A., F.C.I.P.

In consultation with John Breese and Dan Dzaldov, B.SC., O.L.S., O.L.I.P.

had the pleasure of attending the AOLS AGM in Toronto this past February. I also had the opportunity to co-present a seminar on common mistakes made by surveyors (over and over again), and suggestions by the Insurance Advisory Committee on how to avoid/prevent these errors.

The co-presenters were: John Breese, Maltman Group International, Primary Adjuster for the Professional Liability Insurance Program, and Dan Dzaldov, B.Sc., O.L.S., O.L.I.P, Chair, Insurance Advisory Committee.

For those members who did not have a chance to attend, here is a summary of our presentation.

Common Errors

1) Layout and Elevation Errors

A significant source of claims under the AOLS Professional Liability Insurance Program relates to errors in setting elevations and how elevation information is used during the layout process. This includes:

- Setting of benchmarks for use by clients or other subtrades and entities.
- Incorrect cut information being provided to clients for foundation excavation caused by calculation errors, i.e. adding or subtracting errors or use of an incorrect reference, i.e. top of footing elevation instead of underside of footing elevation.
- Errors in establishing elevations during topographic surveys which result in problems with locating structures, or issues with the calculation of earthworks, i.e. adding or subtracting errors in calculation of overburden, etc.
- Relying on benchmark or elevation information provided by other parties. These elevations are sometimes marked on moveable objects such as fire hydrants, tops of curbs, tops of manholes, etc.

What can you do to avoid Layout / Elevation errors?:

- Look around, the most common issues could have been avoided by noticing that what was staked does not fit in. When the Committee reviews layout errors, we often say: "Did they not notice that it looked so wrong"?
- Ask, ask, ask. Surveyors can bring in benchmarks to a site but why not ask for a temporary benchmark from the engineer, or site super to check into. Clearly, don't just check into the supplied temporary benchmark - as you do not want to rely on their benchmark and possible error. Crews should advise their office of any discrepancy.
- Write cut on notes FROM STAKE so that when they are

checked in the office you will know what was written. Provide cuts on the stake-out sheet so there is a back-up for



Co-presenters of the seminar, from left to right: Dan Dzaldov, John Breese and Mark Sampson.

what was done. Take a picture of the stake after noting cut, showing cut and the conditions around the stake... this will provide proof of cut and of stake in case it is moved, which is often the case.

2) Setback Errors

Many claims involving surveyors involve errors with regards to calculation of setbacks, i.e. front, rear or side yard setbacks. This is very common in residential layouts and some commercial layouts. These result from:

- Mistakes made in locating boundaries.
- Errors in mathematical calculations.
- Failing to check house plans or changes in model or reversal of elevation.
- Failure to check for prior minor variances or subdivision agreement variations regarding local bylaws because of special circumstances or unique topography.

Most front and rear yard setback issues can be resolved by minor variances. Very minor side yard issues can be resolved in the same way; however, more serious setback infringements can result in demolition and reconstruction of existing structures. In some cases where buildings are completed before the issue is discovered, this results in significant upgrades being required to windows and doors to comply with fire separation requirements and/or building code issues.

What can you do to avoid Setback errors?:

Put the onus on the client to provide setbacks. Put it in writing that if they do not provide the setbacks then they acknowledge that you are not responsible.

Do not rely on the architects. Ask, ask, ask. When site plans and architect floor plans do not match, it is not the surveyor's job to figure it out. Usually it means someone gave the surveyor the wrong version. It is also important to have good communication within your survey office so that whoever is calculating a building has all the latest plans that include such things as road widenings, which may have just been approved or requested by the client.

3) Commercial Layout Errors

Another issue which causes significant claims for surveyors relates to layouts involving complex commercial buildings. These problems include:

- Gridline errors.
- · Foundation issues.
- Errors re piles and/or caissons, etc.

Many times, these problems can be traced to plans being out of date, surveyors using plans not intended for construction or being provided with preliminary plans which might have been used for obtaining building permits. Problems have also been found to relate to the use of different formats in reproducing plans, i.e. digital, pdf and AutoCad. Also, many claims arise out of poor communication between the surveyor, the architect, the engineer and/or the contractor which results in errors or mistakes which require correction.

What can you do to avoid Commercial Layout errors?:

- Similar to Setback Errors: put the onus on the client, do not rely on the architects, Ask, ask, ask, and insist on good internal communication.
- Do not rely only on the CAD files, get the paper set and make sure they match. Keep a paper trail of the versions;, normally construction starts before they are finished or they have checked the drawings. The paper is what governs. If they say use the CAD, get it in writing and then decide if you agree to do so.
- Do not calculate buildings on site. Do not provide notes or cut sheets without an office check. Be careful what you give at the site. Consider a different (client only) layout sheet with only offsets and points numbers.
- Keep track of when the work has been checked and docket the time as a back-up.

4) Water Boundaries

Some of the more complex and expensive claims made

against surveyors arise out of surveys of properties bordering lakes and rivers. These claims include:

- Setback errors for new construction.
- Failing to identify title issues, i.e. the existence of Crown reserves or shore road allowances.
- Boundary issues created by failing to identify encroachments or adverse possession.
- Errors in the interpretation of historical plans such as Crown patents, original land grants.
- · Poor research of older surveys.
- Confusion regarding interpretation of the meanings of terms such as high water mark, top of bank, accretion or erosion and their effect on the location of water boundaries. We have also seen problems regarding opinions and surveys of the existence or non-existence of excess lands created by the subdivision of lands and whether or not it was the intent of the landowner or surveyor to include excess lands or beach front in the subdivided lands or retain same.

What can you do to avoid Water Boundary errors?:

- Water Boundary surveys require proper research. If a surveyor does not normally do water boundaries and still wants to take on a job, then it is recommended that he/she seek advice or consult with other surveyors who are more familiar with these surveys.
- Consider ramifications to stating on a plan that a body of water is Navigable. Get an opinion from the Ministry of Natural Resources and refer to it when communicating with your client.

If you have any other questions with regards to the Professional Liability Program, please contact me directly. **Mark Sampson,** BBA, FCIP, Senior Vice President, The CG&B Group Inc., by phone: 905-948-2631 or by email: **Mark.Sampson@cgbgroup.com**

Calendar of Events

May 6 to 10, 2013

FIG Working Week 2013

Abuja, Nigeria www.fig.net/fig2013

May 28, 2013

ISPRS VCM 2013 Workshop

Regina, Saskatchewan www.geoict.yorku.ca/vcm2013

June 3 to 6, 2013

HxGN Live

Las Vegas, Nevada http://conference.hexagon.com

June 5 to 7, 2013

Joint CIG Annual Conference & EOGC'2013

Toronto, Ontario http://eogc2013.blog.ryerson.ca

June 18 to 21, 2013

ACLS National Surveyors Conference and AGM

Niagara Falls, Ontario www.acls-aatc.ca

July 6 to 9, 2013

Survey Summit

San Diego, California www.esri.com/events/survey-summit

The Difference a Click Can Make How the Internet and Social Media has Changed the Way we Market our Businesses

By Nigel Esmond D'souza

ince the emergence of the Internet as a marketing platform, businesses everywhere are clamouring to keep up with one another to establish a presence online. The Internet has fundamentally changed the way return on investment is determined with the abundance of new analytic tools. These tools specifically pinpoint the number of people travelling to your website, how much time they spend on a particular page, which site they were on prior to navigating to your site, which search term they Googled to find your business, what country they are located in, what type of Internet speed they have, what size of monitor they are using... and so much more. Unlike traditional forms of advertising such as television, radio, billboards, etc., there is a lot of 'guestimating' used to predict the amount of impressions advertisers are getting for their dollar. For example, you cannot absolutely know how many eyeballs are glued to the television nor adjust for how many people may have decided to spend this time using the washroom.

A few years ago, something amazing happened for advertisers; people started using real names and identities online for the first time. This represented a fundamental shift in the behaviour of those who played online from being skeptical and cautious to being trusting and sharing. In the past, aliases were commonly used as usernames to join communities and comment on a various range of niche topics — think of forums as an early form of social media. Once genuine relationships and reputations were built through discussion, people naturally started to share more information about themselves online. With the advent of Facebook

Officially, social media is "an umbrella term that defines the various activities that integrate technology, social interaction, and the construction of words, pictures, videos, and audio."

as a digital marketing platform, advertisers get four key pieces of information when you sign up: your name, your age, your gender and your email address. In addition to all those analytic tools mentioned earlier, advertisers are now leveraging these key variables to make decisions and target advertising specifically to a deliberate set of demographics. It is for this reason



that savvy marketers are pulling major advertising dollars from traditional, "fatty" mediums and are pouring these resources in to Internet-based advertising. Not only is it more efficient, it is much easier to justify to your bosses the results of each dollar spent on a campaign.

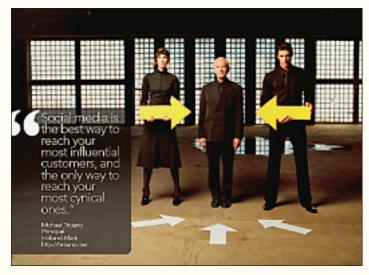
If you are your own boss, it is easy to see why optimizing each dollar you spend and leveraging each hour of your time invested into marketing is essential to growing your businesses at a reasonable cost. Beyond impacting the bottom line directly, there are a number of ways social media specifically can help your business.

Public Relations

Social media is a great outlet for those interested in your business, brand or product to stay on top of the latest news related directly to your company. Have you just hired a new employee? Are you expanding your territory? Have you won an amazing new contract? Are you participating in a local charity event? All of these things can be announced via social media, and depending on the maturity and engagement of your follower base, can be spread very swiftly.

Customer Service

One initial concern of some of our clients at Xen Impact is the online exposure of negative feedback by unsatisfied customers. We tend to encourage our clients to look at this as an opportunity to grow as a business and to provide a frustrated customer with a compelling solution in a very public space. Addressing a negative situation in this manner and positioning yourself as a company who cares, will go a long way towards benefiting from positive word of mouth in the future.



Loyalty Building

Building brand evangelicals, loyal people who will gladly advocate for your business, is a key ingredient to building trust to prospective customers. Only 14% of people trust advertising whereas 78% of people trust consumer recommendations (Source: Neilsen Global Trust In Advertising Survey, 2007). We like to say that ideally when something bad is said about you online, the ideal scenario will be one where a brand loyalist steps in to defend you by responding with a positive experience directly related to the issue raised. Don't forget, getting someone to publically recom-

mend you will almost certainly translate to that exact customer returning for more business.

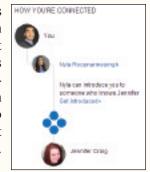
Collaboration

The Internet has always been a place to collaborate instead of compete, build on top instead of starting from scratch. Use social media to find new ways of doing things differently. Being able to learn something new is a significant benefit for anyone looking to expand their knowledge and discover new techniques with the help of others. It is also a great source to get a recommendation on a specific piece of new equipment that someone has experience using, or gain advice on how to attract and retain new graduates.

Networking

Several people build their sales pipeline through networking online. Identifying a need can be done through a simple search on Twitter. If you would like to meet someone in a prospective organization, an online tool such as LinkedIn would help you find out any connections you have to people in that company. If there are just one or two degrees of separation between you and the decision maker of that organization you might even have the opportunity to ask your mutual friend to connect you to one another. Social media also allows for a basic level of interaction prior to a real life encounter. There are so many success stories we can name which began with an online introduc-

tion and led to personal encounters and furthermore, business growth opportunities for both parties. What this does is warms up the sales process and provides an environment where people are armed with common interest on which to discuss possible opportunities that would benefit both parties involved.



Thought Leadership

Without a doubt, being at the forefront of someone's mind when they think about specific things related to your industry is of utmost importance to attracting new business. It is not a bad idea to be well known for characteristics like reliability, affordability, and exceptional customer service. Blogging has provided a great avenue for industry experts to share their wealth of knowledge and expertise. Many decision makers in the research process of their search will come across related blog posts which may even speak directly to the problem they are having. As a result, the next time a similar problem comes up they intuitively know where to look for answers and may even engage you directly to provide them with a solution to that problem.

Remember:

Social media is a complimentary medium to your overall marketing strategy

If your product sucks, social media won't fix it However if your customer service sucks, social media can help

If your repeat business sucks, social media can help

If your company's word of mouth sucks, social media can help

Source: What the F**K is Social Media: One Year Later

In a recent survey at one of my past AOLS social media seminars, we found that roughly 78% of AOLS members are on Facebook. As a result of these findings, AOLS decided to create a Facebook fan page to keep their community together and to foster interaction between its patrons. The association is also on Twitter, and has a large, active community on LinkedIn.

For those of you looking to create a social media presence but don't know where to begin, follow these few guidelines to help you get started.

The Preliminaries

To begin, it is best to understand exactly where you stand in the market place. This process involves reviewing your company's business and its sales programs. It is important to identify specifically how a prospect is brought into the sales funnel and is subsequently converted into a customer. Why do people choose you versus any other number of options?

The Competitive Landscape

The next step is to paint a picture of what your competition is doing. Join competitors' LinkedIn groups, Facebook pages, YouTube channels, Twitter accounts and other social media member sites to understand the types of ways they are interacting with their communities. It is also a good idea to set up Google web alerts to email you notifications any time a specific competitor or industry is mentioned in blogs and articles online.

The first 90 days

The first 90 days are critical to the success of building a solid foundation to propel your social media campaign forward. As such, it is essential to allocate a realistic and reasonable amount of time and or resources to execute the program during this time. This is the time you set up and populate various major platforms, Twitter, Facebook, LinkedIn and if necessary some secondary ones, YouTube, Instagram, StumbleUpon, Flickr, and SlideShare, etc.

You then have to follow and connect with several hundred people on these platforms. It's important to meet people relevant to your industry as these people will provide the greatest value to you and your goals of growing your business. Identify who the key influencers of the community are and take deliberate steps to connect with them. If you are having trouble trying to find a relevant audience, start with your competitors' communities.

Commit time to interacting and adding value to established communities (like the AOLS LinkedIn group!) and updating your social media in regular intervals with meaningful content.

If you have trouble organizing your resources in a way that maximizes your output of content and interaction, there are options available for you to do so. The Federal Government sponsors many short term internship opportunities in exchange for the employment of a local PR, media and recent English graduate to be employed for Internet marketing initiatives. Beyond that there are numerous social media and PR agencies who are affordable, professional and results driven.

At Xen Impact we have over 20 years of experience marketing Business to Business (B2B) clients online. We have gained enormous insight about various industries and have realized that there is a place for social media in even the most traditional types of industries. Xen Impact commonly participates in online discussions leading up to key tradeshows, or helping our client's sales staff follow up with someone they may have connected with at the event. In any case, if you are thinking about changing directions, launching a new brand campaign or just itching to know what consumers are thinking about your business, product or brand, the answers are closer than you think.

Nigel Esmond D'souza is a Toronto based entrepreneur and cofounder of Xen Impact, a digital media agency that builds progressive campaigns for its clients, which successfully helps businesses leverage the Internet to accelerate business growth and brand value. He can be reached by email at **nigel@xenimpact.com**

Convocation Address

By George Wortman, P.Eng., A.O.L.S. Honorary Member

irst, let me extend my congratulations to each of the new surveyors who were just commissioned as well as all the award winners. It is so good to see twelve new surveyors this year, along with their families and supporters. This is a great achievement and it is a milestone you will always look back on, but, today I want to ask you to look forward with me and consider this question — "Do you know where you want to go with your professional career, and do you have a plan to get there?"

Generally, I believe the idea behind the "charge" is to provide some advice to the new surveyors. However, as I look around this room and see all the brainpower, willpower, experience and self - sufficiency, I am probably the least qualified to provide advice about surveying. So, I will try to share some observations based on my career journey and hopefully you may find something helpful, perhaps even inspirational, as you embark on your career and try to answer my question.

Maya Angelou, a famous American poet, historian and civil rights activist once said – "I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." So here is the feel good part of my talk. Many older surveyors will already have heard this story so please bear with me.

It is about the old surveyor telling the new surveyor how to be sure they will never get lost. The old surveyor said "As long as you have just one bar left in your kit, you can never get lost". The young surveyor did not get it. So, the old surveyor explained. "When that time comes that you think you are lost out there in the bush, all you have to do is drive that last bar into the ground and go sit down and wait. After a while, you will hear a rumbling sound and through the bush will come some heavy equipment operator. Their DNA is wired to take dead aim at survey bars, so they will come toward you and drive right over your bar. Just follow their trail out to the highway!"

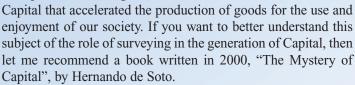
You already know that I am not a surveyor by training or experience, so it was quite an honour to be asked to give this charge. My career was mainly in engineering and construction, but, over a decade ago, I was asked to serve as a Lay Councilor on the AOLS and I stayed there the full six years. Then a few years ago, came a pleasant surprise — when your Council made me an Honorary Member of this organization.

As brand new surveyors, I assume you have been pretty focused on completing all the technical requirements to get your licence. Since that is well in hand, today I want to turn your thoughts to other things and talk about three interconnected themes: *History and Surveying, Privilege and Obligation, Opportunity and Inspiration*

History and Surveying

One of the things that struck me when I started as a Lay Councilor was the very long history of surveying and how essential that was to the development of Canada. Surveyors played such an important role in the division and settlement of the land and the preparation of the documents to help secure land rights and property protection.

Even more, the work of surveyors was pivotal in the generation of



To learn more about the place of surveying in Canadian history I went back to 1883 to scan the new Laws of Parliament of the Dominion of Canada, that year. Wow, did those laws cover a range of topics that may sound a little unusual today. Things like, Merchant Shipping, Militia and Defense, Fugitive Offenders, Surveyors and Missionary Societies. You will notice where surveyors are sandwiched in that list! Chapter 17 Section 87 of those laws was devoted to "Surveys and Surveyors" with a sub-text "Who Shall Be Competent to Survey Dominion Lands". I noticed that much of the regulation we have today was in place back there, 130 years ago. For example, Boards of Examiners and the oaths were similar to those we hear today. And, if you broke those oaths, you were charged with perjury and punished accordingly. By the way, the surveyor and the chainman had to take an oath.

Although, there is this powerful connection to history, we do tend to focus today on all the current things about surveying, like the amazing new technologies. We have broadened the categories of members, and we have strengthened the regulations in areas like Mandatory Professional Development, which brings surveyors in line with other forward thinking professions. It may even have brought some surveyors out to this AGM that have not been here for a while, and that is a good thing.

These current matters are all important, but my message in this first theme is; remember the roots of this profession and its key role in the development of our country. My hope is that you will pick up this mantle and carry it forward and make sure this profession continues to have a vital role in shaping the future of our country.

Privilege and Obligation

As you know, the laws of Ontario reserve the practice of surveying for licensed surveyors. This exclusive privilege is something to be cherished, respected and protected. This privilege only exists because your work is so critical; it is deemed to be in the public interest. Indeed, the main purpose of the AOLS is to regulate the practice for that purpose. The government puts lay persons on Council to assist and ensure that this purpose remains central.

Of course, with privilege comes obligation, so it is important that you understand your obligations under the legislation that governs your work. Let me share with you how this works for a sister profession - engineering. Their Obligation is a document crafted by Rudyard Kipling in 1925 (so engineers are new kids on the block compared to surveyors!). Following the swearing of that Obligation by an engineer, an Iron Ring is placed on the little finger of the working hand, and they are to wear that as long as they practice. As originally conceived, the Iron Ring rubs against the paper upon which the engineer draws and writes and signs. It is an ever visible reminder of the privilege they enjoy and their obligation to the public.

There is another obligation that it is important to understand and it relates to the limits of your mandate. There are other self-governing professions, like engineers, geoscientists and foresters that interface with your work. As work processes and technologies evolve, the regulatory bodies must always be diligent in clarifying those limits and instructing their members accordingly. There are protocols about these limits and if you need more understanding on that, then I suggest you contact the Registrar for guidance.

There are two AOLS processes, embedded in regulation, that I urge you never to become a victim of - Complaints and Discipline. You don't want your file to come before these committees. From my experience of six years on the Complaints Committee, I can tell you that it is pretty easy to be sure your file never arrives there. Just do your research, follow the standards of practice, treat your clients and their neighbours with respect, co-operate with fellow surveyors on the information requests and always follow high ethical standards. Do that, and you won't have to worry about those committees.

My wish would be that these committees had no cases, but, like other professions, a few members abuse their privilege and commit professional misconduct. When these committees carry out their investigations and determine that misconduct has indeed taken place, then they should act swiftly and strongly to ensure the public is not exposed further to those members. If these committees are inefficient at this, then they invite public outcry, and possible government intervention and that won't be good for the profession.

How often do we see in the news, corruption and scandal, in the conduct of business; sometimes even in connection with the delivery of professional services? There should be no tolerance for this in the surveying profession. So, again, just do good technical work and practice stellar ethics, and my belief is; not only can you take pride in what you do, but you can set your prices to make a good living.

Before moving to the final topic, please consider your obligation to do some volunteer work at the AOLS. You have less than 700 members while the engineer's organization is 70,000; they have a big staff and lower dues; they may not need a big volunteer effort to sustain themselves, but, the AOLS cannot survive, remain strong and renew itself without it. Please don't say "I am going to wait till I have time and get closer to retirement". The AOLS needs your energy and fresh ideas right now. You may be surprised at what you will learn from being involved with your colleagues on a committee, task force or Council, and the knowledge and contacts can only help your business and career.

Opportunity and Inspiration

Warren Buffett, who you know as one of the world's most successful investors, once said: "Anything good that happened to me could be traced back to the fact I was born in the right country (the US) at the right time (1930)". I agree that timing and place are important. Every year we hear about the famous "quality of life" index that considers several indicators, including employment. Canada ranks very high among the top 80 countries. In fact, we are in 9th spot and the US is in 16th spot. I wonder how Warren feels about that! So if you had to pick where in the world to get your surveyor's licence at this time, I think Canada and Ontario are good spots.

I believe this is a time of great opportunity for surveyors. In the big picture, there are many North American trends, with a strong technology component, that should link to surveyor opportunities:

Renewable Energy and Self Sufficiency – we are in the middle of a strong boom in renewable energy and shale gas and oil development.

Climate Change – there is growing evidence that our grandchildren may have a big problem to deal with, so who will track and map the emission sources, and measure the sea level rises and layout the new infrastructure along the sea coast?

Opening the Arctic - to resource extraction and shipping. *Urbanization -* smarter and denser cities.

So your opportunities are not only on the land and underground, but they are in the sky and in the water. Given this array of opportunity for the surveyor, what are you inspired to do? What do you really love? If you could just freeze time and dream — where do you want your career to take you?

Is it your present job, or maybe you aspire to a different job, or perhaps surveying is just a stepping stone to something beyond the world of survey? If you can find that inspiration and pursue it, then you may have a hard time to distinguish between work and play, and let me tell you – that is a happy place to be.

Let me close with a story that I hope will connect together History and Surveying; Privilege and Obligation; Opportunity and Inspiration. It is extracted from an article written by Donald Buhler, Chief Cadastral Surveyor, Bureau of Land Management. The man in the story was born in 1732, and was mainly homeschooled. This education included writing, ciphering, mathematics and geometry, which he excelled in. He began to apply his knowledge by using a surveyor's chain and compass, inherited from his father, to survey the lands of his family. At age 17, he was named the county surveyor. Yes he took an oath very similar to yours today and history showed him to be a man of great character and integrity. After surveying many lands he joined the military and used his surveying skills to make military maps and become an expert in military strategy and he eventually became the General of the Army. I have seen a few of his military maps and they are masterpieces.

He also had a big hand in survey reform. Then he became inspired to tackle national problems and he presided over the writing of the first Constitution and at age 57 became the nation's first President. By now, you will have guessed that the man in this story was none other than George Washington. He cont'd on page 26

121st Annual General Meeting

Neil Hetherington, Chief Executive Officer of Habitat for Humanity, New York City was the Keynote Speaker.



George Wortman, former Lay
Councillor and
Honorary AOLS
Member, delivered
the charge to the new surveyors at the
Convocation Luncheon.
His speech can be found on page 20.



The 121st Annual General Meeting was called to order as the Sergeant-at-Arms, Mel Truchon laid down the Standard Measure which historically was used to control the accuracy of surveys in Upper Canada.



Incoming President Eric Ansell (left) presented the Past President's gavel to Paul Benedict's wife Christine Benedict as Paul was unable to attend due to illness. Members Commissioned in the Last Year

Front left: Marc Baila, Goran Lale, Yahui Hu, Rafal Kaczmarek



Back left: Zachary Fiddes, Jayson Ladine Tom Jones and Jansky Lau. (M



Eric Ansell (left) presented a Citation to Eric Bundgard in recognition of his many years of service as a Lay Councillor.



Eric Ansell (left) presented a Citation to Don Houghton, OLS #7 at the Veterans' Dinner in recognition of his more than 60 year professional practice in surveying.

"Together Towards Tomorrow"



Dave Holt, Sales
Performance Coach of
Creating Tension for
Change, lead Facilitator for
the Canadian Professional
Sales Association, presented
the Continuing Education
Seminar and Workshop
"Using Sales as a Tool to
Create a Differentiated
Customer Experience". See
his article "Creating a
Differentiated Customer
Experience" on page 36.





s, Jim Nicol, Kevin Smith, David Tulloch, issing from photo Ali Gholami)



Christine Benedict (left) presented the AOLS medallion to Debbie Ansell.



Brent England (right) accepted a Citation from Eric Ansell on behalf of Ivan Dinsmore, OLS #823 at the Veterans' Dinner in recognition of his 60 years of professional practice in surveying.



Pat Hills from Cansel sponsored and had made special commemorative hockey glasses which were sold in support of the AOLS Educational Foundation. Thanks Pat!

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The Welcoming Party: A chance to mingle with the exhibitors, who all contributed a draw prize in support of the Educational Foundation.



The Scavenger Hunt winners: Left to right: Articling Students, Reuben McRae, Boney Cherian and Sophie-Rose Coté with the organizer, Mel Truchon.

Hockey Night at Maple Leaf Gardens!





There was something special about this year's hockey game at the AGM. Jack Monteith recalled the first time his father took him to see the Leafs when he was ten... seventy years ago. Twenty nine players made for a fast and spirited game with everyone trying their best to put just one in the net at Maple Leaf Gardens.

Thanks to all who played and to Pat Hills from Cansel for organizing the event.



Parliamentarian Jack Young, who is also a Veteran, was the Master of Ceremonies at the Veterans' Dinner.

Veterans' Dinner



Front left: John Gutri, Blain Martin, Ron Jason · Back left: Norm Sutherland, Dan Vollebekk, Drew Annable



Front left: Andrea Tieman, Brent Collett, Mart Himma, Colin Bogue · Back left: John Galejs, Pat Galati, Roy Kirkup, Martin Knisley, Kerry Hillis



Front left: Al Roccaforte, Russ Hogan, Paul Gregoire, Greg Bishop · Back left: Kirk Stidwill, Steve Balaban



Front left: Brent England, Chester Stanton, Bruce Baker, Eric Ansell - Back left: Marvin McNabb, Ken Ketchum, Rick Miller, Bill Merry



Front left: Doug Culham, Doug Culbert, Tim Hartley, Bob Gunn · Back left: Doug Hunt, Robert Harris



Front left: Guido Consoli, Rob Stirling, Stewart McKechnie, Maureen Mountjoy · Back left: George McFarlane, Dave Urso, Wally Kowalenko, Duncan Ashworth, Gary Auer, David Woodland



Front left: John Vinklers, Paul Torrance, Tom Glassford, Murray LeGris · Back left: Tom Bunker, Peter Moreton, Bill Buck, Alex Wilson, James Walker



Front left: Chris Sexton, Paul Riddell, Ross Clarke, Michael O'Sullivan - Back left: David Searles, Bob Clipsham, Russ Jones, Bill Card, Bill Bennett



Front left: Jim Hill, Bob Stephenson, Ardon Blackburn, Talson Rody · Back left: Bruce McMurchy, Ron Emo, Gord Good, Bob Tomlinson



Front left: Harland Moffatt, Doug Fowler, Gordon McRostie, Don Houghton · Back left: Jack Monteith, Wayne Brubacher, Roger Welsman, Fred Schaeffer

Convocation Address cont'd from page 21

died at age 67, and just months before he died, he completed his last survey. He was a surveyor as his first profession and a practicing surveyor at the end. And in between, he used this skill and experience to win military victories and build a new, united and democratic nation. He was a person of destiny, who had a sense of history linked to surveying, who understood how to connect privilege with obligation, and who seized the opportunities throughout his life; why, because, I believe he was driven by a powerful inspiration.

Today is the start of the rest of your career and I urge you to

look into the future and imagine what you want to achieve, who you want to be. I say this to all who are listening, don't just reactively stumble through your years and career. If you do not feel inspired, when you get up every morning, then, step off the treadmill and search now for your "George Washington" inspiration. When you find it, that will turn on your energy and direct your resources and skills, and if you are a person of "George Washington" character and integrity; then you will be well on the road to a happy and a rewarding career.

A necessary read for Land Surveyors: The Inconvenient Indian: A Curious Account of Native People in North America¹

By Izaak de Rijcke, LL.M., O.L.S.

his article is not a book review; it relates a current topic to a number of themes in Canadian society that are worthy of every professional land surveyor's consideration. It is not a polemic, but simply an effort to bring attention to some of the expected privatization initiatives for land on reserves into the perspective of what some writers are saying. The survey of Indian reserves, as it is understood under the Indian Act, is a matter left to Canada Lands Surveyors. The result is a frequent dismissal of the issue of land management and land surveying on reserves by provincial land surveyors. In this article we will be invited to consider the implications for land surveyors in Ontario that flow directly from matters that have all too often been dismissed because they are federal. After all, Canada Lands Surveyors deal with survey issues on Indian reserves, so why does this hold any relevance for Ontario Land Surveyors?

The topic of First Nation peoples is itself relevant to all land surveyors as it holds the same importance as for every citizen of Canada. A review of this book in the *Ontario Professional Surveyor* is likely to raise eyebrows – perhaps this topic does not belong here. Nothing could be further from the truth.

My interest in this book started in a Christmas shopping foray into a bookstore. The graphics on the cover were intriguing (not to mention the title), so I bought it for myself. It sat on a coffee table at home until references to it began to appear in newspaper book reviews and, most recently, in *The Walrus* magazine issue for March, 2013². Even Shelagh Rogers interviewed the author on her CBC radio show, *The Next Chapter*³. By then, I had finished reading it. To say "highly recommended" would be an understatement. To say "not for provincial land surveyors" would be dead wrong.

Thomas King, the author, coincidentally lives in Guelph and is a retired faculty member of the University of Guelph's English department. I have never met him. *The Inconvenient Indian* is not a novel; to his credit, he acknowledges the contribution made to the book by his wife, Professor Helen Hoy who is a faculty member in that university's history department. Part Cherokee Indian and an American, Mr. King relates a history of encounter by Europeans with indigenous peoples in North America. He successfully points out that the Canada/USA border is an imposition of Western history and politics; he postulates that to aboriginal peoples, it is irrelevant.

Judging from the title, one might assume some rueful irreverence towards indigenous peoples in North America. In fact, Mr. King does not take himself seriously to



make the label "Indian" a stumbling block. Rather, he names the elephant in the room (and does so repeatedly in the book), thereby facing the seriousness of the label head — on. The starting point for most professional land surveyors is to assume that the purpose of a survey is to either lay out new parcels by subdivision (create more Blackacres⁴), or to retrace the limits of the Blackacres already out there. In either case, Blackacres are ubiquitous to North America, and stretch from ocean to ocean. However, this quilt is the network placed over the vast areas that have been surrendered by treaty and subsequently surveyed into townships. This is a book which helps all surveyors understand the history of treaties and their impact on land ownership today.

It is not that this book is telling us anything new or earth shattering about boundaries or land. But then again, it does, through the juxtaposition of known facts - in novel ways. By making sense out of history, and in relating our place in history to the cycles that have passed – it offers a refreshing look at land as an invaluable resource and boundaries on that land as a social construct.

There is a certain sadness to this book. It lies in its ability to touch our attitudes and the lack of political leadership in North America to move beyond these attitudes.

"I have to stop here for a moment, because I'm struck by an amusing thought, albeit not an original one. One of our problems in understanding Indian history is that we think we don't have all the pieces. We believe our understanding of, say, the nineteenth century is like buying a thousand piece puzzle from the Salvation Army, taking it home, and discovering that one third of the cardboard squiggles are missing. Whereas, today, with our ability to record any detail, hardly anything of note goes unmarked. If the twenty-first century were a puzzle, we could well have more pieces then we might reasonably manage."

Notions of sovereignty and the idea of First Nations as a people with a national identity which exercised that sover-

¹ King, Thomas, The Inconvenient Indian: A Curious Account of Native People in North America, Doubleday Canada, 2012.

² Wyatt, K.C., Losing the Land Again; The risks of privatizing property on First Nations reserves. The Walrus, March, 2013, available at: http://thewalrus.ca/losing-the-land-again/ The writer makes the case for a careful consideration of

[&]quot;Backers of the First Nations Property Ownership Initiative regard its dismal legacy as a trivial aside, a laughable historical analogy: different time, different place. But as Cherokee novelist and 2003 Massey Lecturer Thomas King observes in his new book, *The Inconvenient Indian: A Curious Account of Native People in North America*, "When we look at Native–non-Native relations, there is no great difference between the past and the present.""

³ The full interview can be listened to at: http://www.cbc.ca/thenextchapter/popupaudio.html?clipIds=2331020745

⁴ According to Wikipedia, the name is used by educators in common law jurisdictions, particularly in the area of real property, to discuss the rights of various parties to a piece of land. See: http://en.wikipedia.org/wiki/Blackacre

⁵ Supra, footnote 1 at pages 18 and 19.

eign nation status seem to be too readily dismissed by our society. The separateness of First Nations into a multiplicity of peoples and subsets, or tribes, is really an imposition of notions of sovereignty that have been a legacy brought forward from Europe. Mr. King makes the argument that the distinctiveness of a people or First Nations as a distinct society is a reality that indigenous people really had no problem with. In his words:

"No one really believed that there was only one Indian. No one ever said there was only one Indian. But as North America began to experiment with its 'Indian programs,' it did so with a 'one size fits all' mindset. Rather than see tribes as an arrangement of separate nation states in the style of the Old World, North America imagined that Indians were basically the same. Sure, Mohawk were not Apache, Cherokee were not Cheyenne, but the differences among Native peoples were really just a matter of degree."

From a legal perspective, there has been a long recognition in Canadian courts of the treatment of First Nation peoples as sovereign entities in their own right. The negotiating of treaties and the predecessor of Canadian and provincial governments entering into binding relationships with First Nation peoples is a fact of history that makes Canada's legal landscape one of continuing obligations; the treaties were negotiated in good faith and the courts have had no hesitation in reaching to the "honour of the Crown" doctrine⁷ as a basis for asserting that these obligations remain very much alive today. Much like the engagement of Manitoba as a provincial party in the case referenced above, so too the case law reports are replete with decisions that impose implications for Ontario. This is not just a federal matter; we can see today that Ontario has regularly been engaged in litigation as a result of its place in Canadian history and its relationship with Canada under our constitution.

Surveyors in Ontario also pride themselves as Ontario Land Information Professionals, or OLIPs. Consistent with this claim, and with a view to developing land administration capability for municipalities, utilities and other branches of government that host or deal with large amounts of land information, the interest and scope of expertise has broadened sufficiently to entertain ideas of a cadastre. An emerging group of potential consumers in Canada of land administration expertise has now been recognized as First Nations with rights of self-government and control of their own land base.

King alludes to this in his book when he writes,

⁶ Supra, footnote 1 at page 83.

"In 2007, the United Nations passed its Declaration on the Rights of Indigenous Peoples, in which it recognized that indigenous people had the right to 'to self-determination' and that they could 'freely determine their political stylus and freely pursue their economic, social and cultural development.' The declaration doesn't use the word 'sovereignty' but for the forty-six articles that set out the rights and freedoms and responsibilities of indigenous people are close enough to sovereignty. At least, close enough for government to work."

This is not just speculation on the part of Mr. King. For example, the Westbank First Nation has considerable control and administration of its land base⁹. Furthermore, the *Yukon First Nations Self-Government Act*¹⁰ provides a framework through legislation that enables the self-administration of land resources and ownership. One might also consider the continuing federal government initiatives¹¹ which advance self-management as a goal, and implementation has been recently made easier with amendments to the *First Nations Land Management Act*.

"Participating First Nations are provided with funding to develop a land code, negotiate an individual agreement and hold a ratification vote in the community. These activities are laid out in a Community Approval Process Plan and this phase of activity is commonly referred to as the developmental phase. If the vote is successful, the First Nations move from the developmental phase into the operational phase of the Regime. Operational First Nations manage their own reserve lands under their own land codes, are no longer bound by thirty-four land management sections of the *Indian Act*, and receive funding for their land management costs." ¹²

If land information and the development of opportunities to manage land and resource data are worth pursuing for land surveyors in Ontario, how can these new initiatives be ignored? Moreover, how can we not want to understand the social and historic context in which these initiatives were born? This is no longer far away in another province, or distant in future time. Since 2004, the duty to consult has been an established obligation on the part of provincial governments. This was stated with utmost clarity in *Haida Nation v. British Columbia (Minister of Forests)*¹³, in which the decision's headnote states,

"The duty to consult and accommodate is part of a process of fair dealing and reconciliation that begins with the assertion of sovereignty and continues beyond formal

⁷ See, most recently, the Supreme Court of Canada decision in *Manitoba Metis Federation Inc. v. Canada (Attorney General)*, 2013 SCC 14. Although Metis interests in land arose from their personal history and not their shared distinct Métis identity, the court nonetheless resorted to the honour of the Crown as a duty that Canada and Manitoba owed to the Metis peoples. Ouoting from the headnote,

[&]quot;The ultimate purpose of the honour of the Crown is the reconciliation of pre?existing Aboriginal societies with the assertion of Canadian sovereignty. Where this is at stake, it requires the Crown to act honourably in its dealings with the Aboriginal peoples in question. This flows from the guarantee of Aboriginal rights in s. 35(1) of the Constitution Act. The honour of the Crown is engaged by an explicit obligation to an Aboriginal group enshrined in the Constitution. The Constitution is not a mere statute; it is the very document by which the Crown asserted its sovereignty in the face of prior Aboriginal occupation. An explicit obligation to an Aboriginal group in the Constitution engages the honour of the Crown."

From: http://scc.lexum.org/decisia-scc-csc/scc-csc/en/item/12888/index.do

From: http://scc.lexum.org/deci

⁹ See also the Westbank First Nation Self Government Agreement at: http://www.wfn.ca/docs/wfn_self_government_agreement.pdf

¹⁰ S.C. 1994, c. 35, with current version at: http://laws-lois.justice.gc.ca/PDF/Y-2.6.pdf

¹¹ See First Nations Land Management Act, S.C. 1999, c. 24, last amended in December, 2012, and available at: http://laws-lois.justice.gc.ca/eng/acts/F-11.8/

¹² From "Opting into the FNLM Regime" at: http://www.aadnc-aandc.gc.ca/eng/1327090675492/1327090738973

¹³ Haida Nation v. British Columbia (Minister of Forests), [2004] 3 S.C.R. 511, 2004 SCC 73. Available at: http://www.canlii.org/en/ca/scc/doc/2004/2004scc73/2004scc73.html Ontario was an intervenor in this proceeding.

claims resolution. The foundation of the duty in the Crown's honour and the goal of reconciliation suggest that the duty arises when the Crown has knowledge, real or constructive, of the potential existence of the Aboriginal right or title and contemplates conduct that might adversely affect it. Consultation and accommodation before final claims resolution preserve the Aboriginal interest and are an essential corollary to the honourable process of reconciliation that s. 35 of the *Constitution Act*, 1982, demands.

The scope of the duty is proportionate to a preliminary assessment of the strength of the case supporting the existence of the right or title, and to the seriousness of the potentially adverse effect upon the right or title claimed. The Crown is not under a duty to reach an agreement; rather, the commitment is to a meaningful process of consultation in good faith. The content of the duty varies with the circumstances and each case must be approached individually and flexibly. The controlling question in all situations is what is required to maintain the honour of the Crown and to effect reconciliation between the Crown and the Aboriginal people with respect to the interests at stake. The effect of good faith consultation may be to reveal a duty to accommodate. Where accommodation is required in making decisions that may adversely affect as yet unproven Aboriginal

rights and title claims, the Crown must balance Aboriginal concerns reasonably with the potential impact of the decision on the asserted right or title and with other societal interests."

Ontario is serious about engaging First Nations in developments that are proposed on public land owned by Crown Ontario. New legislation will come into force on April 1, 2013, under the *Mining Act*¹⁴, which will require significant consultation with First Nations.¹⁵

Most books have a central thesis or question that is addressed and *The Inconvenient Indian* is no exception. Towards the end of the book the reader will encounter the question, "what do Indians want?" The author answers the question but, instead of giving away the surprise ending, I will leave it for readers of the book to discover it themselves. If the answer to this question is of any interest or, remotely relevant to Canadians concerned with the future of Canada, this should be reason enough to purchase the book and consider the answer to the question in the context of the entire writing.

Izaak de Rijcke is a licensed surveyor based in Guelph, Ontario. He is a practicing lawyer, focusing on boundary and land title related issues. He has written numerous articles, coauthored books and taught seminars and courses for lawyers and land surveyors. He can be reached by email at: **Izaak@izaak.ca**

¹⁴ Mining Act, R.S.O. 1990, c. M.14, available at: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90m14_e.htm

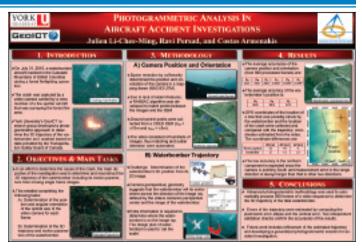
¹⁵ Prospecting, the filing of a claim, and the survey of a mining location will be required to be conducted "... in a manner consistent with the protection provided for existing Aboriginal and treaty rights in section 35 of the *Constitution Act*, 1982". O. Reg. 308/12, s. 2.

SEVENTH Annual AOLS Graduate Student Geomatics Poster Session Award Winners

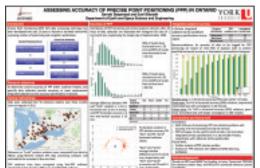
FIRST PLACE: Julien Li-Chee-Ming, Ph.D. candidate and **Ravi Persad,** Ph.D. candidate in Geomatics Engineering, GeoICT Lab, Department of Earth and Space Science and Engineering, York University, supervised by Dr. Costas Armenakis.

Photogrammetric Analysis in Aircraft Accident Investigations

ABSTRACT — This poster paper presents the photogrammetric methods and techniques developed for the determination from video images of the 3D trajectory of a water bomber aircraft that crashed on July 31, 2010 in the Cascade Mountains in British Columbia during a forest fire fighting operation. The crash occurred east of Fraser River and south of Siwash Creek and the Kanaka Bar Indian Reserve. The flight path of the fatal plane was captured on a sequence of video-images from a handheld video camera carried by a crew member of a fire spotter aircraft that was surveying the forest fire area. For this forensic photogrammetric case, the relevant topographic data, such as



digital maps and DEMs of the area of interest were initially collected, followed by video-camera calibration and enhancement of the video imagery. The determination of the location and orientation of the video camera frame images of the spotter aircraft was performed using a combination of photogrammetric space resection and bundle adjustment methods. Having determined the position and orientation parameters of the video image frames and having measured the image coordinates of the crash plane in each frame via feature video tracking, the 3D locations and roll, pitch and yaw angles of the water bomber plane along its trajectory were finally determined. The accuracy of the estimated trajectory of the fatal plane will be also presented. Email: julienli@yorku.ca, ravi071@yorku.ca



SECOND PLACE: Garrett Seepersad, Ph.D. Candidate in Geomatics Engineering, GeoICT Lab, Department of Earth and Space Science and Engineering, York University, supervised by Dr. Sunil Bisnath.

Assessing Accuracy of Precise Point Positioning (PPP) in Ontario

ABSTRACT — The Precise Point Positioning (PPP) GPS data processing technique has developed over the past 15 years to become a standard method for growing categories of positioning and navigation applications. The technique relies on single receiver point positioning combined with the use of precise satellite orbit and clock information and high-fidelity error modelling. The poster uniquely addresses the current accuracy of the technique, explains the limits of performance, and defines paths to improvements. For geodetic purposes, performance refers to daily static position accuracy. PPP processing

of over 300 IGS stations over one week results in few millimetre positioning rms error in the north and east components and few centimetres in the vertical (all one sigma values). Larger error statistics for real-time and kinematic processing are also given. GPS PPP with ambiguity resolution processing is also carried out, producing slight improvements over the float solution results. These results are categorised into quality classes in order to analyse the root error causes of the resultant accuracies: "best", "worst", multipath, site displacement effects, satellite availability and geometry, etc. Also of interest in PPP performance is solution convergence period. Static, conventional solutions are slow to converge, with approximately 35 minutes required for 95% of solutions to reach the 20 cm or better horizontal accuracy. Ambiguity resolution can significantly reduce this period without biasing solutions.

The definition of a PPP error budget is a complex task even with the resulting numerical assessment, as unlike the epoch-by-epoch processing in the Standard Position Service, PPP processing involving filtering. From the above analysis, the limitations of PPP and the source of these limitations are isolated, including site displacement modelling, geometric measurement strength, pseudorange noise and multipath, etc. It is argued that new ambiguity resolution and multi-GNSS PPP processing will only partially address these limitations. Improved modelling is required for: site displacement effects, pseudorange noise and multipath, and code and phase biases. As well, more robust undifferenced-phase ambiguity validation and overall stochastic modelling is required. Email: gseeper@yorku.ca

THIRD PLACE: Ravi Persad, Ph.D. candidate and **Manas Khurana**, student in Geomatics Engineering, GeoICT Lab, Department of Earth and Space Science and Engineering, York University, supervised by Dr. Costas Armenakis.

Road Surface Crack Detection from Oblique Video Imagery

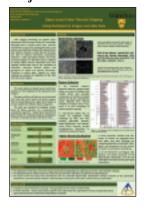
ABSTRACT — Assessment of road pavement surface distress patterns is an important component of the pavement management process. Pavement surface distresses characterize failures and distortions of the pavement surface structure. Common types of pavement surface distress are potholes, various types of cracks (longitudinal, transverse, alligator), and rutting. Conventional patrolling and visual inspections of pavement surface conditions face significant challenges, especially on high-speed and high-volume highways where road access and safety are of concern for the transportation authorities. These field-based assessments are also time-consuming, expensive and labor intensive.

In this poster we will present an approach for the automatic detection and classification of pavement surface distress patterns using imagery from

a moving forward-looking video camera. The developed crack detection method is based on the following main steps. First, a rectified image is produced from the video images, as a precursor for the planimetric detection of pavement surface distress features. Second, an image scale-space approach is used to define a proper image resolution for the detection of distress structures based on the level of detail of the distress feature. Third, salient distress patterns from the "smoothed" image are extracted using a curvilinear feature detector. Fourth, the pavement distress types are identified and classified. Finally, a severity index is computed for each image frame based on the type and extent of the detected pavement distress patterns. Email: ravi071@yorku.ca, manas111@yorku.ca

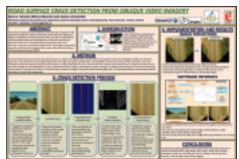
FOURTH PLACE: Haiyan Guan, Ph.D. candidate in Remote Sensing, Department of Geography and Environmental Management, University of Waterloo, supervised by Dr. Jonathan Li.

Object-based Urban Thematic Mapping Using Multispectral Imagery and Lidar Data



ABSTRACT — Using high-spatial-resolution multispectral imagery alone is insufficient for achieving highly accurate and reliable thematic mapping of urban areas. Lidar technology provides a comprehensive geospatial solution to the resource industry and government agencies that require accurate, cost-effective and timely data. Thus, in conjunction with Lidar data, the topological view can be enhanced to produce the complete high-resolution capture for mapping and modelling. This project explores the integration of lidar-derived elevation information with aerial multispectral imagery for land-cover classification. We take advantage of current advances in object-based image analysis and machine learning algorithms to reduce manual image interpretation and to automate feature selection in a classification process. A sequence of image segmentation, feature selection and object classification is developed and tested by the datasets in two study areas (Mannheim, Germany and Niagara Falls, Canada). First, to improve the quality of segmentation, a range image of lidar data is incorporated in an image segmentation process. Among features derived from lidar data and aerial imagery, Random Forests (RF), a robust ensemble classifier, is then used to identify the best features using iterative feature elimination. On the condition that the number of samples is at least two or three times the number of features, a segmentation scale factor has no particular effect on the selected features

or classification accuracies. The results of the two study areas demonstrate that the presented object-based classification method, compared to the pixel-based classification, improves by 0.02 and 0.05 in kappa statistics, and by 3.9 % and 4.5 % in overall accuracy, respectively. Email: h6guan@uwaterloo.ca



Industry News More Than a Pretty Picture - Golf Course Management & High-resolution Aerial Imagery

an an airplane flying "low and slow," shooting high-resolution multi-spectral imagery, help with sustainable management of your golf course? Or perhaps assist you with laying out a new facility?

Steve Apfelbaum, founder and principal ecologist at Applied Ecological Services (AES) answers enthusiastically in the affirmative.

"Every day we realize more landscape management applications of the aerial imagery we can acquire with our defense-grade, high-resolution, multi-spectral camera. From airport wildlife hazard assessments to wildfire risk mapping in remote backcountry, to management and planning in cities, parks, and golf courses—the possibilities keep multiplying," said Apfelbaum.

Much more than just pretty pictures, aerial images produced using this military-originated technology show fine enough resolution to detect objects as small as 9-12 inches in diameter, supporting precise on-the-ground measurements. On a golf course, for example, imagery can be used to keep tabs on spatially specific management concerns such as trespass or illegal dumping.

The "multi-spectral" aspect of the Leica RCD30 camera refers to the Red, Green, Blue and Near-Infrared spectral bands the camera is able to image. The Near-Infrared band allows the formation of spectral signatures, characterizing vegetation types (and other land surfaces) by how they uniquely reflect and absorb light. This information can also be correlated with such attributes as plant stress and health, seasonal growth phases, and long-term ecological changes, allowing a manager to remotely evaluate vegetation over large areas, such as golf courses, efficiently and cost effectively.

A fast turn-around is typical. An average 200-acre golf course can be flown in a half hour or less. Depending on the level of analysis needed, results can be made available quickly, within days to a couple of weeks. Managers can then respond to emerging problems with alacrity, allowing operations to keep moving along smoothly to keep customers happy.

At the Medallion Club (a golf course near Columbus, Ohio), AES scientists used basic aerial imagery to detect places where fairway construction had inadvertently broken historic farm field drain tiles resulting in unwanted flooding and drainage of adjacent wetlands. The situation had burgeoned to a dispute with the U.S. EPA. Imagery was used to help resolve the dilemma and avoid potential fines for unplanned wetland damages.

In northern Illinois, failing historic agricultural drain tile lines were contributing to poorly drained conditions, failing lawns, and tree disease at a national historic site and adjacent golf course. Imagery was used to provide early detection and mapping of tree stress. Linked to on-the-ground identification of a fungal disease, the landscape managers of both facilities were able to take prompt corrective actions and forestall a greater calamity.

One Illinois golf course used imagery to detect lawn areas that were over or under-fertilized, allowing for better targeted applications of expensive fertilizers. Encroachments of weedy invasive plant species were also mapped, again allowing grounds



University of Illinois Golf Club

managers to selectively focus their use of herbicides. Such targeted chemical applications not only save money; they also cut down on potential contaminants in runoff.

Golf courses, like airports, attract their fair share of geese, gulls, and deer (and other wildlife), which, in turn pose problems in terms of droppings and damage to vegetation. A golf course owned by the University of Illinois, located adjacent to the University's Willard Airport, was able to make imagery do double duty. The same imagery that helped the airport understand how to manage vegetation to minimize wildlife hazards was also used by their neighbor, the golf course. Together they are creating compatible and coordinated land management plans that minimize wildlife issues.

Aerial imagery can also be used to create accurate maps of the effects of rainstorms. A manager can use imagery to detect failing storm water sewers and drainage pipes, to trigger necessary maintenance and repair activity. In a proactive application, imagery can be used to map erosion upstream and downstream of a golf course. These images, combined with strategic field measurements, can be used by a golf course manager to respond to water pollution accusations that may be leveled at them when pollution problems arise in the watershed.

Far more than just a striking framed aerial photo on the clubhouse wall, high-resolution aerial imagery makes sustainable golf course management both doable and affordable.

Steven Apfelbaum, M.S., is the founder and principal ecologist at Applied Ecological Services (AES), the country's leading restoration ecology consulting firm. Apfelbaum received the Aldo Leopold Foundations' John T. Curtis Award for Career Excellence in Ecological Restoration in 2010, and he has been cited in *The New York Times*, the *Wall Street Journal*, and on *The Huffington Post*, amongst others.

In addition to his work at AES, Apfelbaum is the co-author of the *Restoring Ecological Health to Your Land series*, which shows readers how to restore property to its natural state, and author of *Nature's Second Chance*, a 30-year memoir of the restoration of his family's dairy farm near Juda, Wisconsin. For more information, visit **www.appliedeco.com.**

Creating a Differentiated Customer Experience

By Dave Holt, Sales Performance Coach of Creating Tension for Change, lead Facilitator for the Canadian Professional Sales Association and Presenter of the AGM Seminar: AOLS Consultative Selling Skills



rganizations are continually looking for ways to differentiate themselves in a very competitive marketplace.

With fierce competition it is getting harder and harder for organizations to differentiate themselves on product alone.

Customers demand more from the buying experience, the buying decision is no longer being made only on price it is also being made on the value they receive from the knowledge, advice and guidance of the sales professional.

The question becomes, is your organization's sales and service talent better than your competition's?

Sales professionals need to continually invest in their skills to become the best that they can be for their customers, themselves and their organization.

High performing sales professionals recognize that change requires them to stay up to date with product knowledge and at the same time encourage their customers to see them as advisors.

What have I observed from the best?

A differentiated customer buying experience is built on:

- What they do before
- What they do during
- ❖ And what they do after the customer interaction!

What they do before:

They get ready for their customer by:

- > Investing time in the customer relationship prior to the interaction whether in person or on the phone.
- > Leveraging tools and resources that create organizational memory and create a snapshot of the customer's current relationship with the organization.
- > Leveraging what is known about the customer, such as his/her interests, business and career.

What they do during:

The best provide value through their knowledge, guidance and advice to their customers during the customer interaction:

High performing sales professionals can very quickly get on the same *wavelength* with their customers.

High performers continually work at getting on the same *wavelength* with their customers by:

- > Projecting honesty
- > Demonstrating competence
- > Establishing commonality.

Discovery Skills

Helping the customer make the right buying decision is built on the foundation of a trusted relationship and the ability of the sales professional to create value.

Some of the fundamental skills that can be observed by a high performing sales person during effective client discovery are:

- 1. Getting the client ready and eager to participate in the conversation.
- 2. The ability to ask great discovery questions. Asking great discovery questions has many positive impacts on the client experience; customers respect salespeople when genuine interest is shown in their situation, problems, opportunities and interests.
- 3. The interchange of ideas promotes a sense of commonality as well as reciprocity. Asking great discovery questions gives the client an opportunity to provide the sales person with the necessary information to make a well informed buying decision.

High performing sales professionals are not afraid to ask hard questions but do it in a customer focused manner. They also know that sometimes what the customer says and what the customer means are often different. They use effective discovery questions to check the levels of urgency and importance to establish the reality of the issues that the customer faces.

Understanding Skills

High Performing Sales Professionals are great active listeners. They have the ability to:

- > Capture the customer's energy words through effective note taking.
- > Present back the customer's needs by including not only the facts but the feelings behind the facts.
- > Recognize the non-verbal cues from the customer which determine if they truly understand their point of view.

Solution Skills

High performing sales professionals do not sell products they provide solutions. Customers have the right to feel that their circumstances are unique and that their needs require solutions that are specific to them. Ultimately it is the goal of a professional sales person to demonstrate to their customers that the products and services that they represent will satisfy their needs and provide a solution that will meet

or exceed the customer's expectations.

High performing sales professionals know that product knowledge includes not just the facts about their products and services, but how they are applied and what they will do for their customers.

Commitment Skills:

High performing sales professionals understand that it's their responsibility to help the customer make the right buying decision. That commitment demonstrates to the customer that you understand their needs, that the solution you have outlined will meet their needs, and that you believe in your product and services, your organization and yourself. **Resistance to Commitment:**

Not all customers are ready to buy. High performing sales professionals also understand the concept of resistance and the resistance barrier. They know that objections indicate a resistance point for the customer and need to be understood. They also know that the majority of objections are not what they appear to be on the surface and if they have stuck to the fundamentals of selling, objections become more of a request for further information or simply misunderstandings.

High performing sales professionals also believe that objections are caused by the salesperson not the customer.

Keep in Touch Skills

High performing sales people stay in touch with their customers; they measure their ongoing relationship with their customers and implement high value *keep in touch strategies*.

High Value touch points might include:

- > Measuring the impact of the solution provided to the customer based on their needs.
- Providing valuable insight on topics of interest to their customers.
- > Introducing their customers to other team members in their organization.
- > Capturing information about their customers to ensure organizational memory.

High performing sales people succeed long term with their customers because they proactively initiate contact on a regular basis and work to maintain a continuous relationship.

Dave Holt, Sales Performance Coach of Creating Tension for Change, lead Facilitator for the Canadian Professional Sales Association can be reached by email at **dholt@sympatico.ca** for further information.

NEWS FROM 1043

Changes to the Register

MEMBERS DECEASED				
Sidney I. Richardson	863	Dec. 25, 2012		
Jim Andrew	1065	Jan. 22, 2013		
Roman Lawryshyn	1067	Feb. 1, 2013		
George Annis	1159	Feb. 5, 2013		
John Harvey	840	Feb. 22, 2013		
Dieter Zeuner	CR106	Mar. 17, 2013		
Edward Lanthier	860	Mar. 29, 2013		
RETIREMENTS/RESIGNATIONS				
Darko Poletto	CR172	Dec. 26, 2012		
Comy Progton	1752	Ion 1 2012		

Darko Poletto	CR172	Dec. 26, 2012
Gary Preston	1752	Jan. 1, 2013
George P. McFarlane	CR204	Jan. 1, 2013
Christian R. Kiar	1322	Jan. 1, 2013
Graham W. Bowden	1440	Jan. 1, 2013
William M. Fenton	1059	Jan. 1, 2013
Anton Kikas	1280	Jan. 1, 2013
Walter Kowalenko	1488	Jan. 7, 2013
John Bontje	CR191	Jan. 14, 2013
W. Ross Taggart	1326	Jan. 16, 2013
Richard A. Preiss	1539	Jan. 18, 2013
Michael J. Terry	1514	Jan. 31, 2013
Helmut Mitsche	1578	Feb. 1, 2013
Ronald K. Preston	1351	Feb. 1, 2013
J. Stanley Cotterill	1413	Feb. 26, 2013
David G. McGeorge	886	Feb. 28, 2013
John E. White	1477	Mar. 15, 2013

Members Reinstated

Walter Kowalenko 1488 Mar. 11, 2013

COFA'S REVISED

Tulloch Geomatics Inc. has acquired Paul Torrance Surveying Ltd. and it is now Tulloch Geomatics Inc. Paul Torrance is the managing OLS.

Mitsche and Aziz Inc. has closed their Toronto office. Aziz Abdelshahid is the managing OLS of the office in Richmond Hill.

Stantec Geomatics Ltd. has acquired Goodridge Planning & Surveying Limited in North Bay. Paul Goodridge will remain as the manager of the North Bay location of Stantec Geomatics Ltd.

COFA'S ISSUED

True Grit Surveying Limited

Thunder Bay, ON, February 1, 2013

Surveyors in Transit

Bruce Irwin is now with **Associated Engineering** in St. Catharines, ON, L2W 1A4.

Omari Mwinyi has moved to 1905 Pinegrove Avenue, Pickering, ON. Phone: 905-831-5485.

Adam Stephen is now with Miller & Urso Surveying Inc. in North Bay.

Bruce D. Pettit is now with Greg Bishop Surveying and Consulting Ltd. in Haliburton.

Blake van der Veen is now with Digital Survey Access Ltd. in Port Stanley.

Ronald H. Smith Ltd. is now located at 1575 John Counter Blvd., Kingston, ON, K7M 3L5. Phone: 613-547-1110.

The Parry Sound office of **Tulloch Geomatics Inc.** has moved to 5 Seguin Street, Parry Sound, ON, P2A 1A9. Phone: 705-746-8404.

Robert Woodcock is no longer with Paul Wilson Consulting Ltd. He is now with Greg Bishop Surveying and Consulting Ltd. in Haliburton.

Robert Naraine is now with J.D. Barnes Limited in Markham.

Mark Watson has retired his Cadastral Licence and is no longer working with Public Works and Government Services Canada. He has maintained his CofR.

David B. Searles Surveying Ltd. is now located at 255 Sherwoodtowne Blvd., Mississauga, ON, L4Z 1Y5. Phone: 905-273-6840.

David Kovacs is the managing OLS of **True Grit Surveying Limited** located at 1263 Innovation Drive, Thunder Bay, ON, P7B 0A2. Phone: 807-626-5640.

Ron Bridges is now with Altus Geomatics in Edmonton, AB.

Krcmar Surveyors Ltd. now owns the notes and records of John McSkimming OLS and McSkimming and Paul Surveying Ltd.

Doug Jordens is now with exp Geomatics Inc. in Dryden.

Walter Kowalenko is now with Land Survey Group Inc. in Toronto.

The Ottawa office of **Stantec Geomatics Ltd.** has moved to 1331 Clyde Avenue, Suite 400, Ottawa, ON, K2C 3G4. Phone: 613-724-4099.

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

Rafal Kaczmarek	1955	January 10, 2013	James Nicol	1959	January 14, 2013
Jayson F. Ladines	1956	January 10, 2013	Marc Baila	CR206	February 28, 2013
Zachary Fiddes	1957	January 14, 2013	Kevin Smith	1960	February 28, 2013
Yahui Hu	1958	January 14, 2013			

EDUCATIONAL FOUNDATION

Lifetime Members at March 31, 2013 (Individual)

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JAMES D. DEARDEN ARTHUR DEATH RON DENIS TERRY DIETZ DON ENDLEMAN WILLIAM M. FENTON CARL F. FLEISCHMANN ERNEST GACSER DONALD H. GALBRAITH BOB GARDEN JAIME GELBLOOM CHARLES W. GIBSON GORDON GRACIE HOWARD M. GRAHAM JOHN GRAY ROBERT C. GUNN ROBERT HARRIS JOHN M. HARVEY GORDON W. HARWOOD ED HERWEYER IAMES HILL HAROLD S. HOWDEN

ROY C. KIRKPATRICK CINDY KLIAMAN ANNE MARIE KLINKENBERG WALLY KOWALENKO LENNOX T. LANE RAYMOND T. LANE ANITA LEMMETTY OSCAR J. MARSHALL BLAIN MARTIN RAYMOND J. MATTHEWS LARRY MAUGHAN MIKE MAUGHAN KENNETH H. MCCONNELL JAMES A. MCCULLOCH SCOTT MCKAY RONALD G. MCKIBBON LAWRENCE A. MILLER PAUL A. MILLER MANOUCHEHR MIRZAKHANLOU W. HARLAND MOFFATT J.W.L. MONAGHAN PATRICK A. MONAGHAN

JOHN D. MONTEITH PETER MORETON JIM NICHOLSON DONALD W. OGILVIE FREDERICK J.S. PEARCE E.W. (RED) PETZOLD N. LORRAINE PETZOLD JOHN G. PIERCE HELMUT PILLER ROBERT POMEROY YIP K. PUN VALDEK RAIEND PAUL A. RIDDELL RONALD W. ROBERTSON TALSON E. RODY HENRY ROESER GRENVILLE T. ROGERS CARL J. ROOTH ERICH RUEB FRED SCHAEFFER ANDY SHELP H.A. KENDALL SHIPMAN

DOUG SIMMONDS JOHN SMEETON EDWIN S. (TED) SMITH RALPH A. SMITH TAD STASZAK JAMES STATHAM RON STEWART NORM SUTHERLAND MARK TULLOCH MIKE TULLOCH E. HENRY UDERSTADT DAN R. VOLLEBEKK BRIAN WEBSTER AL WOROBEC ROBERT H. WRIGHT GEORGE T. YATES JACK YOUNG GEORGE J. ZUBEK

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Members as of March 31, 2013 (Individual and Corporate)

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EDUCATIONAL FOUNDATION NEWS

STANTEC GEOMATICS

TERANET INC.

Report from the Annual General Meeting



The 12 poster entries were displayed in the main foyer

This year's AGM fundraisers were a great success. The Board of Directors of the Educational Foundation would like to thank all of the Exhibitors who provided a prize for

the Welcoming Party Exhibitor Draw and also Lena Kassabian, Julia Savitch, and Penny Castillo for selling the tickets. A huge thank you goes to Pat Hills from Cansel. Pat sponsored the commemorative hockey glasses (see page 22) which were ably sold by Foundation Board members, Nancy Grozelle and Shawn Hodgson at the Welcoming Party.

The Foundation would like to thank Foundation Board member, Wally Kowalenko, who was the auctioneer for the Charles Potter Circumferentor at the Open Forum. Andy Cameron was the highest bidder. He will have possession of the artifact for one year. The Foundation would also like to thank Jack Young and Andy Shelp who both stepped forward to challenge AOLS members to match their pledges to the Foundation. Our goal is to raise \$35,000 this year and thanks to those who accepted the challenge and offered a pledge, we may be able to make it happen.

The 7th Annual Graduate Student Geomatics Poster Session attracted 12 poster entries on a variety of topics from Ryerson University, York University and the University of Waterloo. The Foundation sponsors \$1000 for 1st place, \$750 for 2nd place, \$500 for 3rd place and \$350 for 4th place. The winning posters can be found on page 32. Thanks to our judges, David Stringer, Mel Truchon and Michael Matthews.

The Educational Foundation would like to recognize with thanks donations made in the memory of George Annis and John Harvey.

BOOK REVIEWS

THOM AS KING INCONVENIENT INDIAN LEGISLATION AND LEGIS

Published by Doubleday Canada ISBN 978-0-385-66421-9

The Inconvenient Indian A Curious Account of Native People in North America

By Thomas King

The Inconvenient Indian is at once a history and the subversion of history – in short, a critical and personal meditation that the remarkable Thomas King has conducted over the past fifty years about what it means to be "Indian" in North America.

Rich with dark and light, pain and magic, this book distills the insights gleaned from that meditation, weaving the curiously circular tale of the relationship between non-Natives and Natives in the centuries since the two first encountered each other. In the process, King refashions old stories about historical events and figures, takes a sideways look at film and pop culture, relates his own complex experiences with activism, and articulates a deep and revolutionary understanding of the cumulative effects of ever-shifting laws and treaties on Native peoples and lands.

Information taken from inside the front cover.

Planning Politics in Toronto The Ontario Municipal Board and Urban Development

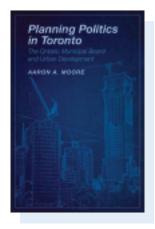
By Aaron A. Moore

The Ontario Municipal Board is an independent provincial planning appeals body that has wielded major influence on Toronto's urban development. In this book, Aaron A. Moore examines the effect that the OMB has had on the behavior and relationships of Toronto's main political actors, including city planners, developers, neighourhood associations, and local politicians.

Moore's findings draw on a quantitative

analysis of all OMB decisions and settlements from 2000 through 2006, as well as eight indepth case studies. The cases, which examine a variety of development proposals that resulted in OMB appeals, compare the decisions of Toronto's political actors to those typified in American local political economy analyses.

Information taken from the book.



Published by University of Toronto Press ISBN 978-1-4426-1259-4

Come on Over! Northeastern Ontario A to Z

By Dieter K. Buse and Graeme S. Mount



Published by Scrivener Press ISBN 978-1-896350-44-8

here can we see statues of some of the most significant North American explorers, the people who blazed the trails into the interior of North America? Where can we walk in the footsteps of the soldiers who achieved one of the most significant British victories at the outbreak of the War of 1812? What was the most exciting mining town in the first decade of the twentieth century? Where can we visit the home of the author of the Hardy Boys series? The general answer to all these questions is "Northeastern Ontario". The six districts presented in this book are

Algoma, Cochrane, Manitoulin, Nipissing, Sudbury, and Temiskaming. The boundaries of these political and judicial administrative areas are as artificial as most such lines across traditional and natural territories. However, they have a unity, tied together by the history of furs, forests, minerals, rail and road, by many First Nations and by many francophones. The last is one of the traits which, like the extent of mining, sets if off from Northwestern Ontario.

Information taken from the book.

The Last Word

Relocation of the historic Charles Morris Building, the home and office of the first Chief Surveyor of Nova Scotia

harles Morris was a captain in the Massachusetts militia in the mid 1740s when Britain and France were at war (King Georges War 1744-1748). In the spring of 1748 Governor William Shirley of Massachusetts sent Charles Morris

and fifty men from Boston to survey Nova Scotia's resources and identify areas suitable for settlement. Morris prepared a survey of the Bay of Fundy and the Acadian settlements in Nova Scotia and wrote a 100-page description of the colony, a *Brief survey of Nova Scotia*. This so impressed Shirley that he recommended that Morris be given further surveying work in Nova Scotia. Lord Halifax concurred and directed the governor of Nova Scotia to make Charles Morris the Chief Surveyor of Lands.



Image by Curtis Cando

In 1749 Morris laid out the original town plot of Halifax. He constructed an office, the *Morris House*, at the corner of Hollis and Morris Streets where he not only practiced the profession of surveying but also became the first town planner. His son Charles Morris II carried on his father's profession, which became especially busy when the United Empire Loyalists arrived at the end of the American Revolution looking for plots of land. He also

became Chief Surveyor.

"Charles Morris III succeeded his father as Chief Surveyor and laid out the road from Halifax to Annapolis Royal. His son, John Spry Morris succeeded his father as the fourth and last Surveyor

General of the Province: one post, one family, four generations and 102 years."

Slated for demolition in 2009, the Morris House was saved by the Heritage Trust of Nova Scotia, a diverse group of stakeholders and numerous members of the Ecology Action Centre's Built Environment Committee. It was lifted off its foundation and moved to a new location in north-end Halifax in January, over a 2 day period, 4.5 km away. Saving the house not only diverted waste from the landfill, it set a real

world example to encourage builders and developers to work with existing materials and to preserve a piece of history. The house will be rehabilitated as energy efficient and turned into an affordable home for young adults.

Information for this article was gathered from the Association of Nova Scotia Land Surveyors

¹ The Nova Scotian Surveyor, Spring 2011, page 14

4 times

Published by:

The Association of Ontario Land Surveyors (Established 1892) 1043 McNicoll Avenue Toronto, Ontario, Canada M1W 3W6 Phone:416-491-9020 FAX:416-491-2576 admin@aols.org * www.aols.org

Editor & Publication Manager:

Maureen Mountjoy, O.L.S., O.L.I.P.

Production Manager:

Lori Veljkovic

Advertising Manager:

Maureen Mountjoy, O.L.S., O.L.I.P.

Unless otherwise stated, material which originates from our membership may be re-printed with acknowledgment.

Printed by Colour Systems Incorporated Original graphics design by Uniq Graphics and Design, Toronto, Ontario

Computer implementation by nu Vision Images Inc., Toronto, Ontario

Views and opinions in editorials and articles are not official expressions of the Association's policies unless so stated.

The Ontario Professional Surveyor Magazine and its publisher accept no responsibility for these views and opinions.

Advertising Rates:

1st Cover	Not Sold	Not Sold
2nd and 3rd Cover	Not Sold	\$650
4th Cover	Not Sold	\$750
Full page 4 Colour	\$640	\$600
1 page B&W	\$440	\$400
1/2 page B&W	\$255	\$225
1/4 page B&W	\$175	\$150

1 time

Colour ads: Add \$50 for each colour up to 4 colours Inserts (supplied): Page rate plus 25%. (overleaf blank): plus 50%

Mechanical Requirements:

Printed Offset

Typed Page: 48 picas wide x 63 picas deep Bleed Size: 8-3/4" wide x 11-1/4" deep D.P.S.: 17" wide x 11" deep with bleed D.P.S.: 16" wide x 10" deep without bleed

Material Requirements:

Four colour: Colour separations supplied, type assembly and progressive proofs with colour bars. Black, black and one or two colours: Either film or art supplied with layout and copy; or complete assembly.

Circulation (This Printing)

Ont. Land Surveyors & Associates 926 Other Professional Affiliations 318 Advertisers 21

The *Ontario Professional Surveyor* Magazine is published quarterly as a medium of communication between the Association and its members. Readers are invited to comment and express their opinions on relevant subjects.

The *Ontario Professional Surveyor* Magazine is distributed to all members of the Association.

Subscription Rates to others: \$40.00 per year or \$10.00 per copy. All rates to us - no provision for commissions or discounts.

Canadian Publication Sales Agreement # 40064685 Postage paid Mississauga / Gateway

> Published Quarterly: next publication deadline: May 15, 2013

ALL PRICES LISTED ARE SUBJECT TO 13% H.S.T.