

Ontario Professional Surveyor



www.aols.org

on the cover ...

Sergeant-at-Arms,
Kevin Kujala
(Indiana Jones)
Presided over the
123rd AGM
in Huntsville, ON

also in this issue ...

123rd AGM Photos
Building our Geospatial Future
Complaints and How to Avoid Them
Innovation in Geomatics Services for the
Consumer: If "Walmart Law" is here, can
"Costco Surveys" be far behind"?

plus our regular features:

Educational Foundation
News from 1043
Book Reviews
Sites to See

Canadian Publications Mail Product
Sales Agreement No. 40064685

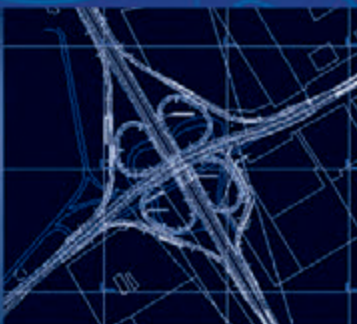
Volume 58, No. 2
Spring 2015

MEASUREMENT SOLUTIONS

GCX2 GNSS ROVER

Compact
Rugged
Affordable

*Perfect in
combination
with a Robot for
Hybrid mode*



Turn-key solutions for surveyors worldwide.

As surveying specialists, we back our products with the industry's most complete service and support capabilities, including regionally-located sales managers, technical support, online help, product training and a certified repair and service facility.

SOKKIA

1050 Stacey Court, Mississauga Ontario L4W 2X8 905-238-5810



CONTENTS

AOLS AGM Keynote Address - Building our Geospatial Future - Susan MacGregor.....	4
We are not in Kansas anymore: GeoAlliance Canada and moving ahead as a community with a shared identity - James Boxall.....	10
Innovation in Geomatics Services for the Consumer: If “Walmart Law” is here, can “Costco Surveys” be far behind? - Izaak de Rijcke.....	14
Ninth Annual AOLS Graduate Student Geomatics Poster Session Award Winners	18
Former AOLS Lay Councillor Eric John Bundgard becomes an Honorary Member of the Association of Ontario Land Surveyors - Eric Ansell	20
123rd Annual General Meeting – Photos: Royal Dream Photography	22
Annual General Meeting - Exhibitors and Veterans’ Dinner	24
Convocation Address - Nancy Grozelle	26
Complaints and How to Avoid Them - W.D. Buck	30
Land Records Research in the State of Vermont - Harris Abbott	38
The AOLS Professional Liability Program: Features, Benefits, and Risk Management Advice - Mark Sampson	40

REGULAR FEATURES

President’s Page	2
News from 1043	13
Sites to See	19
Calendar of Events	28
Educational Foundation	36
Book Reviews	43
The Last Word - Indiana Jones – Kevin Kujala	44

ADVERTISERS

Sokkia	2nd cover
Carlson Software	3
Mark IT Locates	5
GENEQ Inc.	7
Surv.ca	8
Leica Geosystems Ltd.	9
Dias & Dias	10
Hunt Surveys	11
Hayward Iron & Metal	12
Archive Search	13
Tekmet Ltd.	21
Northway/Photomap/Remote Sensing Ltd.	29
Cansel	31
The Connectors Insurance Group Ltd.	33
The CG&B Group	35
GeoShack Canada	37
J.P. Morasse Inc.	39
Topcon Positioning	41
T2 Utility Engineers	42
Trimble	3rd cover
MicroSurvey Software Inc.	4th cover

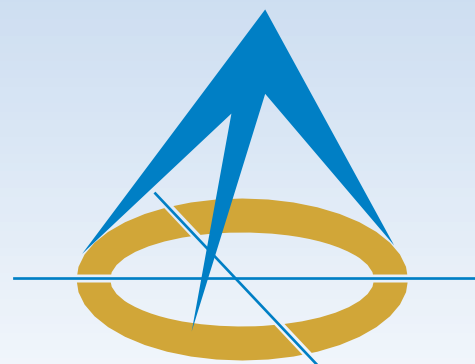
ON THE COVER ...

Sergeant-at-Arms, Kevin Kujala chose to portray the fictional adventurer and treasure hunter Indiana Jones. Read about “Indy” and why Kevin chose this character in The Last Word on page 44.

*Professional
Surveying
in
Ontario*

*encompasses
the
Disciplines of*

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





President's Page

By Travis Hartwick, O.L.S.



Wow! In the last month I have attended a Council meeting, two Annual General meetings, our Strategic Planning meeting and we have had an Executive Committee meeting. Talk about hitting the ground running!

It seems like yesterday that I was traveling to the regional group meetings and giving my candidate's speech. During "the tour" I spoke about keeping things simple at Council this year. That remains to be my intention. We only have nine days of Council meetings before the next AGM and if things are complicated nothing will be accomplished. I understand that simple does not mean easy and I understand that simple may be exhausting but my hope is that Council looks at each agenda item from the viewpoint of Section 2(2) and Section 2(3) of the Surveyors Act.

Section 2(2) speaks to the principal object of the Association which is to regulate the profession and govern the Association members so that the public is served and protected. Items of this nature will get the utmost attention at Council. Building the province-wide survey records index, developing our expanded profession and enforcing our complaints/discipline processes are good examples of some actions that if completed, can help us to regulate and govern our members as well as to protect the public. I believe that these items should be rigorously supported as this is what separates a self-regulating body from other types of associations.

Our Complaints and Discipline Committees have come under scrutiny in the past and we have heard members say that while the procedures are sound, the committees lack "teeth" in dealing with the items put before them - we are too nice, we are too "Canadian". I am not sure that this is 100% true; I guess only the Complaints Committee and Discipline Panels will know this. But what I do believe is that fair is fair and all members should be held accountable to the same standard. We have seen statistics at the regional group meetings that between the years 2000 and 2014, 75% of the members of our Association had no complaints filed against them. It is pretty hard to do anything these days without somebody complaining, at least once anyways, so to have 75% of our members with no complaints, I say "job well done". Unfortunately, there is the other side of the coin; four of our members have had a total of 37 complaints lodged against them. This represents 14% of the total complaints submitted to the Registrar between 2000 and 2014. We have to ask ourselves, what are these members

doing differently than other members? Are they in a "tough" section of town or the province? Do they have irreconcilable differences with other local surveyors? Are they in such a diverse business that they have several unrelated complaints? Are they not learning from the previous complaints lodged against them? How do we educate or mentor them to follow generally accepted standards and practices? How do we deal with the detractors in our Association?

To do nothing is not acceptable and, in my mind, contravenes Section 2(2) of the Surveyors Act. We must somehow show these members that we are serious about upholding and defending the rules and laws that govern our profession and we must band together to ensure that the Association has a unified voice.

Section 2(3) of the Surveyors Act speaks to establishing, maintaining and developing standards of knowledge and skill, qualification, and professional ethics, and promoting public awareness. Council must support the Continuing Education Committee, the Academic and Experience Requirements Committee, the Complaints and Discipline Committees, and the Public Awareness, Geomatics Recruitment and Liaison, and University and College Student Liaison Committees. Council and the strategic planning group have already put some thought to this and have etched it into our Association's Strategic Planning Document which will be unveiled in early April via a Webinar.

So there you have it, the year in a nutshell. The plan sounds simple but the execution will be difficult. I am sure that many hurdles will present themselves along the way. I am very happy with the composition of Council this year. We have representation from private practice, municipal government and provincial government. I have had the privilege of knowing several of the Council members for many years and I can vouch that they are of high moral character, enthusiastic and committed to the cause. I trust that Council will provide the leadership to overcome the hurdles and move the Association forward to continued success.

I took the liberty of looking up the definition of leadership via Google. Leadership is defined as: "a process of social influence in which a person can enlist the aid and support of others in the accomplishment of a common task". I hope that Council can count on your help and support as we endeavor to complete our tasks this year.

I very much look forward to serving as your President this year and I welcome your comments and suggestions on how we can make the Association even better than it already is.



Carlson for Surveyors

From field... to finish

NEW BRx5 GNSS Receiver

Combined with SurvCE4.0, get highest positional accuracy, plus:

- 270-channel receiver
- Dual Bluetooth ports
- Dual hot-swap batteries
- OmniSTAR capable
- Each receiver can be configured as Base, Rover or Network Rover

Power Your Field
Data Collection With –

Carlson SurvCE

Produce Your
Deliverables With –

Carlson Survey

And the world's
most reliable data
collector just got better...

NEW Carlson Surveyor2

- Faster Processor
- Long-range Bluetooth
- Extended Battery Life
- Larger, Brighter Display Screen
- Easier To Use
- More Options
 - Integrated camera
 - 3G modem
 - GNSS receiver



Advanced Technology
to Improve Efficiency

Carlson CR2/CR5 Robotic Total Station

- Perform measurements automatically
- Track target continually
- Speed staking out
- Get maximum accuracy
- Center accurately & easily



© Copyright 2014 Carlson Software, Inc. All rights reserved. Carlson Software is a registered trademark of Carlson Software, Inc. All other product names or trademarks belong to their respective holders.

For more information: Call or email your Carlson
representative, Gary Rosen, grosen@carlsonsw.com
603-648-2525 or 877-207-4626 • www.carlsonsw.com

Since 1983



Carlson
...For the Total Project

AOLS Annual General Meeting Keynote Address

Building our Geospatial Future



By Susan F. MacGregor, O.L.S., O.L.I.P., Surveyor General of Ontario

Good afternoon. I'm going to take a page from Izaak de Rijcke's book and state that I make no guarantees or warranties for the information, accuracies or advice in this presentation. Nor does the material contained herein reflect the opinions or policy of the Ministry of Natural Resources and Forestry or the Government of Ontario. Stated another way, your Surveyor General may be completely out of touch. So be kind!!

Twenty five years ago, I passed my final exam to become an OLS. I was the last to find out.

After a hot sticky day in the field, I came back to the office through the field entrance into the basement. I was greeted by a celebration with my husband and all the staff of Yates and Yates.

The next day, I was taken to the best restaurant in town by the partners, Don and George Yates and Michael Terry, given a gold bracelet (that I'm wearing today) and told my salary would double.

A month later I was sworn in by Michael O'Sullivan in the presence of my very large family. Lorraine Petzold presented me with an OLS pin, which I'm wearing today. It was a gift from Red Petzold, for whom I had worked the previous summer.

I felt quite special, kind of like the carpet walk at the academy awards. And then on Monday, I rejoined the crews back in the basement.

I want to talk to you about where we are currently, and then coincidentally enough, our geospatial future.

I believe we have a strong foundation, but the actions we take over the next couple of years present an opportunity to shape and invigorate our profession, to serve the next generation.

Let me explain why I believe this and then focus on what I think we need to do, to achieve the best possible position for the future.

I believe we have a strong foundation but let me give you five reasons I think this.

First reason: our people. There's a lot of silver hair in this audience. Mine included. The collective knowledge in this room is staggering. We have served the public well, and desire to continue to serve the people of Ontario.

I'm seeing members and firms becoming more adaptive in their skill sets and the products they deliver. Many have joined with other firms for economies of scale, and are taking a multi-disciplinary approach to the complex demands of the public.

Second: Opportunities for work abound. Traditional sectors are busy;

- municipalities are refreshing their control monuments,
- higher quality mapping is needed to support emergency response initiatives anticipated with global warming,
- and cadastral work is increasing as the public begin to understand the limitations of title insurance.

Traditional sectors such as mining, oil and gas, roads, and housing require our services, now, more than ever.

There has, and will continue to be an explosion of tools to make data collection simpler and faster, and new markets are opening to those professionals willing to offer their services, to ensure proper procedures are followed, problems are fixed and the data delivered meets the needs of the client.

New technologies still require old principles of measurement, control, redundancy, error evaluation; all things we are well versed in and have applied throughout our careers.

Our third foundation: Our legislation and regulation, while it can always be improved, is positioned to draw in the broader membership by providing a home for all branches of surveying (geographic information management, geodetic, cadastral, photogrammetric and hydrographic). This is unique across Canada.

We have modified the entrance requirements to the profession without dropping our standards.

- We have provided flexibility within the education and articling process, to accept job experience as well as academic requirements.
- Competency-based learning plans have been established as alternatives to time and place bound formal education.
- We have introduced continuing education to ensure our members are continually learning and training for the future.

Fourth foundation: Strategic planning is embedded in our day to day operations of the Association. We have developed a living and breathing strategy, we set 100-day action plans, which are regularly reviewed and the plan is refreshed every year. We are embarking on the next 5-year strategy in just a couple of weeks.

While we struggled at first, we are improving our ability to execute our plans and things are getting done.

As part of our strategic thinking we are looking well beyond our own jurisdiction and building stronger linkages across the country. Many of our members contributed to the Canadian Geomatics Community Round Table discussion and are working hard to bring our fragmented industry together.

cont'd on page 6

MARK ✓ IT™

LOCATES INC.

**MARK IT RIGHT
THE FIRST TIME**



**CAMERA INSPECTION
SEWER LOCATES & MEASUREMENTS
BOREHOLE CLEARANCES
CONFINED SPACE ENTRY
GPR SCANNING
SUBSURFACE UTILITY ENGINEERING - ASCE 38-02
PRIVATE LOCATES**

Initiation and coordination of all Ontario One calls and other public utility requisites.

info@markitlocates.com | 1-855-337-9202 | markitlocates.com

Lastly, Communication from the AOLS to the members has increased **dramatically** with In Sight, webinars, and polls to canvas for input.

It's resulted in a much more engaged and informed membership.

Having informed members allows initiatives to move forward, initiatives such as the Ontario Digital Cadastral Corporation and most recently, discussions on a province-wide survey records index.

We as a group are reaching consensus quicker, gathering input more efficiently and course correcting in accordance with input from the members. Where we used to see split votes in the past, we are now seeing support on topics that have lagged on for 30 years.

For the first time in my career I believe we are collaborating and moving forward as a cohesive unit.

We live in exciting times, where whole industries are seeing unprecedented changes. Our profession is clearly built on strong foundations. You can all be proud of your collective accomplishments.

But we can't take our foot off the gas pedal.

I believe the actions we take over the next couple of years present an opportunity to shape and invigorate our profession, to serve the next generation.

But we have a couple of challenges. Let me share what I believe are two significant challenges we are facing, then I will offer some specific actions that might help us shape the future.

Challenge One: Our numbers and our age.

We currently have 560 surveyors. What's the right number? Some would suggest the membership is right sizing, others would suggest we are becoming too small as a profession.

I am led to believe we need more surveyors, not fewer. I'll give you three reasons why I think this.

Reason one: In Ontario we have one surveyor for every 24,000 citizens. Every other jurisdiction across Canada (except Manitoba) has one surveyor for every 10,000 citizens. If you recall Manitoba is flat and open. This means that Ontario is underserved by half, when compared to the rest of the country.

Reason two: Our membership is clustered in Toronto. If you live and work in the GTA, you would likely agree that the industry is well represented because competition is strong.

If you live and work in Southern Ontario, centres outside the GTA, you would likely agree, you're just meeting demand because you're very busy, and can't find help to replace key positions.

If you live in Northern Ontario, I suspect you have been pricing work to turn it away. This suggests an undersupply of surveyors.

Third reason: We need more surveyors. Market opportunities that could benefit from a surveyor's input are being responded to by less qualified technical staff.

Surveyors are being called in to correct problems after they occur, to bring projects to conclusion. I see this occurring in several industries; mining, wind power, and construction, to name a few.

The lack of qualified surveyors may result in higher costs to these and other industries.

We might debate the right number of surveyors for a while, but we can't disregard the aging membership. In the next 5-10 years, 75% of this room will be retired.

Having turned 52 a couple of weeks ago, I'm at the tail end of that 75% and I'm eligible to retire in 6 years. When you consider it takes 6-7 years to produce a new surveyor, we'll need a **minimum** of 50 new students entering a survey program, each year, to replace the current number of members.

We're not alone in this issue of numbers and age. Many industries feel they are fighting a global war for talent. A GLOBAL WAR, for talent. The industries who can attract and retain the best and brightest, win the prize.

So that's our first challenge, our age and our numbers.

Our Second Challenge: Our profession is the best kept secret.

Our clients don't know us, or our services. They wonder why their bill is so high. The crew appeared to be asleep in the truck for the first hour, and spent the rest of the morning wandering around.

The general public don't seem to know us either. If they've heard of a surveyor, they believe we just measure. They suspect that, with the right equipment, anyone can establish boundaries. And of course, coordinates are the cure-all for all boundary problems.

Add to this confusion the fact that the average citizen is overwhelmed daily with information. Information that is abundant, easily accessible and can be blended and manipulated to take on the appearance of products that appear to meet any number of purposes.

How are the public to distil credible information from the less credible?

This is not their problem. This is our problem.

How are we going to explain the demands and the value of our profession in a way that makes sense? What are the benefits to them? Are they going to stop and listen?

That's our second major challenge: Our profession is a well-kept secret.

So what!! Our profession is small, we're aging and we're a well-kept secret.

I see a tremendous opportunity here.

Think about it. Because of our numbers and age, our entire membership is going to turn over in the next 5-10 years.

Money and effort invested now will ensure the best skills and knowledge are drawn into the profession to serve the next generation.

The actions you take today, the way you respond to these challenges, are critical in determining the future of the profession, and the future of your companies.

I offer three things you can do to invigorate your business, and shape our profession.

First thing: Become an excellent communicator.

Communicating well is hard work, but if you do it well, it increases your likelihood of success. Your communication skills permeate every aspect of your work life.

It influences:

- how you market your company to the public,
- how you explain your services to your clients,
- how you collaborate on projects with other professionals,

- how you convey information and direction to your staff,
- how you attract talented people to join your team,
- how you transition from a small company to a large company,
- how you convey good news,
- how you convey bad news.

Communication is like yeast in the bread. If it's tired and dead, your bread will be flat. If it's fresh and active, your bread will rise.

Strong communication skills are without a doubt, a key ingredient for every surveyor.

When we think of communication, we think of oral and written communication.

This type of thinking is limiting our potential audience, and reducing our sphere of influence. Clients today are expecting to perform research on your company and understand your services. They want to become knowledgeable consumers, before they make any attempt to contact you.

A couple of firms have ventured into this arena and should be applauded for their efforts. Successful firms are looking at their websites and structuring them to focus on their client's needs and questions, rather than what you want to tell them.

Social media channels like Twitter and LinkedIn are gaining followers, growing in popularity, and quickly becoming mainstream communication tools.

So become an excellent communicator.

The second thing you can do to invigorate your business and shape our future:

Develop a strong succession plan now. If your organization is anything like mine, you'll see huge turn-over in the next few years and you'll want to be ahead of the game, not doing it on the fly when things start to fall apart.

Have you assessed who's leaving?

When are they leaving?

What skills are needed to replace them?

Are those skills sufficient to meet the needs of the next 5 years?

Where can you find that skill set?

What knowledge needs to transfer?

How will you ensure that knowledge transfer occurs?

In our generation, it's been the employer's choice. The baby boom generation created an abundance of employees. Now, one third of the population will be supporting two thirds of the population in retirement.

The days of posting a job and hoping the right person shows up, are quite gone. You'll have to be creative to attract the best and brightest.

You'll need to target your search, woo your potential employees. You'll need to market the benefits your company has to offer. Don't assume potential employees know what you do and why it's important. You may want to hire a head hunter or offer signing bonuses to fill specific skills.

You may choose to elevate the knowledge and skill of existing staff by providing a variety of tasks, new experiences or continuing education. You may want to attract talent from

cont'd on page 8

GENEQ inc.
Scientific Instruments

GEOMAX
Part of Hexagon Group

GENEQ is proud to announce a new partnership with GEOMAX as a new addition to our survey product line

Geomax is a member of the prestigious **HEXAGON Geosystem Group** offering the most affordable survey instruments on the market.

Swiss technology and quality that you can afford.

- ✓ Robotic Total Stations
- ✓ Total Stations
- ✓ GPS / GNSS Receivers
- ✓ Digital and Automatic Levels
- ✓ Grade Lasers and more

Sales - Rentals - Service

WWW.GENEQ.COM

10700 Secant St., Montreal, (Quebec), H1J 1S5, Canada
P: 514 354-2511 | 1 800 463-4363 Fax : 514 354-6948 | info@geneq.com

abroad or support a high school student through university or college.

Be deliberate and invest financially and creatively, in a succession plan.

Finally, and most importantly, we need to give a lot of thought and attention to the future needs of our clients.

When was the last time you asked your clients if they were happy with your service, if there were ways you could improve the products you provide them?

Understanding your client's needs will inform the type of skills you want to hire. I can't predict the desires of your clients, but I know they'll have high demands of the profession.

Your ability to offer advice and solutions to meet your client's needs will distinguish you and set you apart from the rest.

I believe the next generation of surveyors will be superb communicators.

They'll be adaptive to new technologies, they'll have good research skills, be able to analyse large amounts of data, have judgement and agility to identify gaps, and fill those gaps with their services.

My charge to you:

Become excellent communicators,

Invest deliberately and creatively in succession planning,

And ALWAYS consider your client's needs.

I believe this profession has strong foundations and the

actions we take over the next couple of years present a tremendous opportunity to shape and invigorate our profession to serve the next generation of citizens.

If you haven't picked up on it, there is some urgency to our actions, so I'll leave you with 3 things to do.

Replace yourself. Hire a student; high school, college or university (it doesn't matter). Treat them like gold and consider supporting their education. Leave them with a positive impression of surveying. Don't wait for someone else to do it for you.

Over the next couple of days, start talking to colleagues about their successes with recruitment and retention of the best people. We develop much better solutions when we work together, than any solutions we could possibly develop as individuals.

And lastly, and do it right now. I'm being bossy, but we're action people.

If you own a company or are a department head, turn on your phones.

Yah, I'm giving you permission to turn on your phones for 2 minutes.

Make an appointment with yourself to start succession planning.

That's it.

If you book the time, you'll do it.

Now, turn off your phones.

Enjoy your meeting. Thank you.



Easily Upload, Organize, and Sell Your Plans.

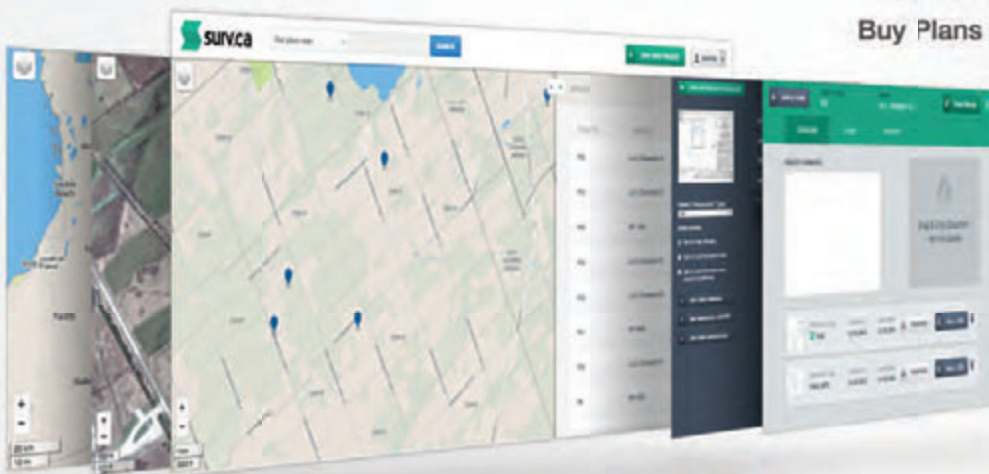
Drag and Drop to Upload.

View Maps and Imagery.

Search by Addresses and Keywords.

One-Click to Make Plans for Sale.

Buy Plans and Field Notes Securely.



Visit www.surv.ca!



Surv.ca Ltd.
blake@surv.ca
519-495-8749

It's more than just a box on a pole... It's the whole nine yards that matters.

It's a team effort of hardware, software, network, and support that gets the job done. Whether it's easy access firmware updates, user-friendly software, reliable RTK network, or a local helping hand, we have your back when the going gets tough. Can you count on your instrument manufacturer for the whole nine yards?



For more information, contact Don Edgar:
(P): 416-572-8486 (E): don.edgar@leicaus.com
gnss.leica-geosystems.us

- when it has to be **right**

Leica
Geosystems

We are not in Kansas anymore: GeoAlliance Canada and moving ahead as a community with a shared identity

By James Boxall

It seems to be a normal procedure when starting an article or a speech to make sure one quotes a famous person or delivers a profound statement about how times are tough, or maybe wonderful, and why we need to do more, with less, or change and adapt. So I guess if you read this, perhaps it's best that you insert here your favourite statement, metaphor or cliché; or perhaps a cat video that has gone viral on Facebook along with a picture of a beautiful sunset and a quote from some leader or champion long since dead.

What does this have to do with the Association of Ontario Land Surveyors (AOLS) and the future of our industry? Simply put I hope to be able to express to you why I think it is time for us all to pull back the curtain on Oz (oops, I inserted an analogy). You remember that scene in the Wizard of Oz? "Don't pay any attention to the man behind the curtain." The real message in that scene was that we far too often get caught up in the *image* of leadership and forget that the truth is far stronger and more interesting. We tend to focus on the headline or the tweet of 140 characters, and we ignore the real human need to take time and reflect upon what it is we need to do and, most of all, why.

I noticed this during the process of taking our Canadian Geomatics Round Table into a new phase now that we have delivered a strategy based upon community input, as well as an action plan that will require more effort, collaboration, resources and time. It came to me during a chat with an author, Carl Honore, who wrote the books "Slow Fix" and "In Praise of Slow". Contrary to what you might think, the books were not about being lazy or not working hard. It was about how we need to pause and sift through the issues and concerns; how we have to allow ingenuity and creativity to bubble up so that real solutions can be found.

We face real problems in our sector. One of the biggest problems is an old issue that does not seem to want to ride off into the sunset. Pulling back the curtain, I can tell you that one of the more frustrating things has been the time spent on trying to define our sector or community, and the names we attach to our profession. There is value in that, and we as humans always differentiate between each other. It is why the first three questions we ask at a party are "what's your name, where are you from and what do you do?" But to argue for 30 years over a term that does not define all of us who are involved in this sector is not very wise (although I gather it is part of our Canadian culture).

So in terms of moving ahead, we argued over the term to be used for an umbrella organization. The term does not define

the sector nor the professions. It defines the group and what it seeks to do. GeoAlliance Canada is about the people involved in the geocommunity. One could say that in itself it is too broad. Does that include geopolitics?



Funnily enough, yes. Because we are involved in geospatial intelligence (GeoInt) and we deal with issues that are related to boundaries, conflicts and disputes on land, in the air and on or under water, we do end up influencing how we control territory. But the focus is on the notion of an Alliance. It is a group of groups who seek to raise profiles, identity, and leadership and have the ability to promote what needs to be done and the resources that should be channeled into those efforts. It isn't a lobby or advocacy group, but it certainly will try to show that we are of value to the wider community. It is to raise our profile so we can attract new people into the industry, all parts

www.BATTERYREVIVAL.com

Send your batteries to the company Land Surveyors have come to trust since 1994

Battery Re-celling:
Total-Stations, Radios, Drills, etc.

Data Cable Repairs

Bar Finder Repairs

www.magnetic-locator-repair.com
www.batteryrevival.com

(416) 977-0070

Dias & Dias Electronics
1992 Davebrook Rd, Mississauga, ON, L5J 3M5

of the industry. It is about the next generation.

What does this have to do with the AOLS and surveyors? The AOLS was one of the first groups to endorse the Declaration for Geographic Education. Clearly there was value seen in that document and the values and actions it was promoting. The AOLS has a tradition and history that we need to celebrate. It has a role to play in the future of our GeoAlliance and the future of showcasing the value of what we do. But the AOLS is very much like most of the groups in our sector – the people across the “geo-domain” – who haven’t been able to explain the reality of what we do nor its value.

And this is where we have to be more honest and not focus internally about trying to explain why one group or part of the sector is different or more important than another. We have to turn the tables and focus on what the wider community – the public and decision makers, the children and teachers, and the media see in us that they enjoy and appreciate. This is why the GeoAlliance needs to focus, as a first step, on the linkages across the sector to promote the value of all we have done for centuries to map Canada.

Yes. I used that word. The dirty “m” word: Map. I don’t define the map according to the piece of paper in my hand or even the app on my phone. When I see a map, I see all the people across the sector who had a hand in creating it. I see the geodesist and surveyor; the cartographer and geographer; the toponymist and geomatican; the remote sensing and GIS analyst, and more. I also see the parent and the teacher. I see

people all the time come to understand complex issues around them through maps when other forms of understanding and communication fail.

We have been given a gift. To be blunt and crass, this coming year is International Map Year – endorsed by our international associations and the UN. It is also going to be the 150th anniversary of our country’s confederation in 2017. So for the next two years we will have a chance to celebrate our past, present a future in all the ways we contribute to mapping and to showcase this to our whole country and the world during what should be a very happy celebration. To accomplish this we need the whole community to come together. We need to develop a program to communicate this to all ages and areas of our country. We need to showcase how all of us do work together across our geocommunity to support the health and vitality of our country. We need to pull the curtain back and be more direct and honest with people.

I would also suggest we can use other specific things like Geography Awareness Week in November. Why do we have a GIS Day? Why not a surveying day? Why do we not all celebrate this to explain to those who are not in our sector the value of what we do? Another specific is the move towards open data. I am always surprised how such a small number of people in our sector are involved at the highest level of discussions about open data and open government – while at the same time that community recognizes that 90% of the


cont'd on page 12

BATHYMETRIC SURVEY SOLUTIONS
provided by: **Underwater Topographic Mapping**

Featuring the: Unmanned Surface Vehicle (USV) by Clearpath Robotics

Setting the **NEW STANDARD** for quality, more and better data, fast, efficient
Unmanned = **SAFETY** for staff, **REDUCED LIABILITY** for owners/ stakeholders

Storm Water Ponds
Flood plain mapping/
watershed analysis
Monitoring/ in-water
construction
Legal surveys/
water boundaries
Mapping shallow
waters
Materials loss/
insurance claims



on-board RTK GPS,
sonar, IMU, remote
Survey grade
+/- few cm. level

The “20/20” view of
the underwater
topography

Flexible contracts,
subcontracts, partner,
OLS firms/ engineers,
contractors

Underwater Topographic Mapping (UTM2020) is a division of Hunt Surveys Inc. (Ontario Land Surveyors)

Serving Ontario as the “go-to” source for **BATHYMETRIC SURVEY SOLUTIONS**
For more information visit our web-site www.UTM2020.com or contact us by email/ phone at:
office@UTM2020.com huntdouglas@hotmail.com 1-800-604-2037 416-347-4351

value of what they see is based upon the geospatial information that we have created and know well.

The point I wish to end on is that we have for far too long focused inwardly. The public (define them as you like) get “maps”; they love “maps”. They are the items that are used the most and downloaded from the Internet (except for the cat pictures and pithy quotations). It is time that we explain that those maps – in all their forms – are there because of our sector and our work. It’s time we join forces to deal with these truths which, in the end, will help one of the most pressing problems that we all face. And yes, I know the average age of surveyors is somewhere around 55. I know recruitment is difficult and the industry is under pressure. But focusing inwardly doesn’t fix it. We need to join forces and be a little more creative with our efforts within a much broader community of groups and agencies that really do “understand our value” and then express that to the wider community. We can’t be humble about it. We need to raise our collective voices because, really, we are stronger together than apart.

By the way. These words are not new to me nor can I say they are 100% my own. In 1991 I heard Roger Tomlinson utter words similar to these at a conference where he warned one community that they would be in trouble if they ignored the connections of their work to that of others in the sector. Those words stuck with me. Sadly, Roger is no longer with us. I

know the AOLS held him in the highest regard, as did I. His words are just as true today and I dare say more important, as too much time has passed us all. We have a chance. We have a few years of events, actions and public profile opportunities to tap into. But if this moment passes now, we may not get another chance for many decades if at all.

I think, like the Wizard of Oz, some of our predecessors who built our sector and blazed the trails might just say that, in the end (like the tin man, scarecrow and lion) we already had the heart, brains and courage to do the things we have to do. It’s time we join together as a community to use the best that each of us has to develop a shared leadership. It’s time we explain to Canada and Canadians why we are the most important sector of all. Without all that we do – across all our domains – nothing would be possible. The power of “where” and “location” are more critical today. The challenges we face demand our full attention. The curtain has been pulled back. And we can move ahead, slowly maybe and reflecting upon our great traditions of the past, but move ahead we must.



James Boxall (james.boxall@dal.ca, @jamesGIS) works at Dalhousie University. He is currently Co-Chair of the Pan-Canadian Geomatics Community Roundtable, and a Governor of both the Nova Scotia Museums and the Royal Canadian Geographical Society.

HAYWARD IRON & METAL

13 Edvac Drive, Unit #5
Brampton, Ontario L6S 5W6

NEW

NEW

- ◆ **IRON BARS** Square or round, all standard sizes, pointed and stamped
- ◆ **LAYOUT PINS** Solid - 18" and 24"
- ◆ **SPIKES & NAILS** All Standard sizes
- ◆ **ROAD BARS - ROCK BARS** 5/8" and 1" Any length
- ◆ **WOOD STAKES** Bundled and pointed
- ◆ **DEALER FOR BERNTSEN CUSTOM IDENTIFICATION PRODUCTS**

Tel: 905-457-0150 Fax: 905-457-0542
Long Distance: 1-800-787-7420

ONE STOP SHOP FOR ALL YOUR STEEL AND WOOD NEEDS

SERVICE AND DEPENDABILITY SINCE 1978

NEWS FROM 1043

Changes to the Register

MEMBERS DECEASED

Robert John Ure	796	Mar. 19, 2014
Eathel (Red) W. Petzold	830	Jan. 16, 2015
Donald W. Endleman	943	Feb. 12, 2015
Lawrence U. Maughan	981	Mar. 17, 2015
Alexander (Alec) C. McEwen	784	Mar. 29, 2015

RETIREMENTS/RESIGNATIONS

Douglas R. Bruce	1230	Dec. 31, 2014
Joseph Rady-Pentek	1318	Dec. 31, 2014
Peter Thorpe	1603	Dec. 31, 2014
Marvin M. Chau	1531	Dec. 31, 2014
Regan G. Reshke	CR131	Dec. 31, 2014
Eric M. Cronier	1704	Dec. 31, 2014

COFA'S ISSUED

Precision Ontario Land Surveying
Port Stanley, Ontario, February 2, 2015

Frontop Surveying Inc.
Markham, Ontario, March 13, 2015

GEOPLAN Surveying Ltd.
Toronto, Ontario, April 1, 2015

COFA'S RELINQUISHED

William A. Mascoe Surveying Ltd.
St. Catharines, February 9, 2015

COFA'S REVISED

Was: Kirkup & Ure Surveying Ltd.
Is: Kirkup Mascoe Ure Surveying Ltd.
St. Catharines, February 9, 2015

Surveyors in Transit

Mart H. Himma is now with **NRCan – Surveyor General Branch** located at 606 - 55 St. Clair Avenue East, Toronto, ON, M4T 1L8. Phone: 416-973-1006.

Allard V. Flim is now with **OPUS Stewart Weir** located at Suite 140 - 2121 Premier Way, Sherwood Park, AB, T8H 0B8. Phone: 780-410-2580.

Thomas Gondo is no longer with **Stantec Geomatics Ltd.** in Markham.

Richard C. Dixon is no longer with **Jewitt & Dixon Ltd. (a Division of Kim Husted Surveying Ltd.)**.

Francis Lau is now with **Annis O'Sullivan Vollebakk Ltd.** located at 500 - 14 Concourse Gate, Nepean, ON, K2E 7S6. Phone: 613-727-0850.

Tony D'Amico is no longer with **Intergraph Canada Ltd.**

Rugged Geomatics Inc. has opened a new consultation office located at 97 Pine St. South, Timmins, ON, P4N 2K1. Hours: 8:00 AM - 5:00 PM on the first week of each month. Phone: 807-468-8516.

Nath Prashannath Segaran is now with **Hunt Surveys Inc.** located at 45-A West Wilmot Str., # 207 Richmond Hill, ON, L4B 2P2. Phone: 905-764-8759.

Blake Campbell van der Veen is now the managing OLS at **Precision Ontario Land Surveying** located at 36197 Lake Line, Port Stanley, ON, N5L 1J1. Phone: 519-495-8749.

Roy Kirkup is now the managing OLS at **Kirkup Mascoe Ure Surveying Ltd.** located at 49 Eastchester Avenue, St. Catharines,

ON, L2P 2Y6. Phone: 905-685-5931.

William A. Mascoe is now with **Kirkup Mascoe Ure Surveying Ltd.**

The office of **Kirkup & Ure Surveying Ltd.** located at 96 Church St. in St. Catharines is now closed.

Tania Nenova Batchvarova is now the managing OLS at **GEOPLAN Surveying Ltd.** located at 135 Wynford Drive, Suite 406, Toronto, ON, M3C 0J4. Phone: 416-731-2717.

Jansky Tak Choi Lau is now the managing OLS at **Frontop Surveying Inc.** located at Unit 1 & 2 - 101 Amber St., Markham, ON, L3R 3B2. Phone: 905-947-0900.

The office of **MMM Geomatics Ltd.** at 1145 Hunt Club Road, Suite 300, Ottawa is now closed.

MGF Surveying Services is now located at 35 Victoria Street East, Unit 12, Alliston, ON, L9R 1T3. Phone and email remains the same.

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

Bahram Amirnezhad	1976	January 14, 2015
J. Paul Crocker	1977	January 15, 2015
Nath Prashannath Segaran	1978	January 16, 2015
Juan Diego Zapata	1979	January 19, 2015
Jason Chun-Ho Mo	1980	January 29, 2015
Conor McGuire	1981	February 25, 2015



416.742.1945

archive search

RESEARCH SERVICES

Aerial Photography Retrieval Services

MNR collections

Forest Resource Inventory 1946 - 1999

Ontario Base Mapping 1975-1995

Metropolitan Toronto 1947-1992

archivesearch@gmail.com



www.archive-search.ca

Innovation in Geomatics Services for the Consumer: If “Walmart Law” is here, can “Costco Surveys” be far behind?¹



By Izaak de Rijcke²

What is it about this title that piques readers’ interest? Could it be the big box store names as retailers? Does an opportunity exist for cadastral surveyors to provide geomatics services based on retail marketing? The answers, of course, are yes; but the key focus of this presentation lies in the word “innovation”. Our challenge is to not only think more outside the “big box”, but to let others provide the answers to these questions. The stated goal of this presentation to several hundred cadastral surveyors was a clear challenge: stop thinking like surveyors about your services and products and begin walking in the shoes of the public – your clients – and ask what is needed.

The View from the Inside

Specialists in any profession occupy a place of privilege in our society. This proposition may either be dismissed summarily, or it may startle readers. Consider what a lawyer in England recently wrote about the legal profession and lawyers:

Law does not exist to provide a livelihood for lawyers any more than illness exists to provide a livelihood for doctors. Successful legal business may be a by-product of law...but it is not the purpose.³

Dare we restate this proposition using the language of boundaries and surveying? If we do, it might read:

Boundaries do not exist to provide a livelihood for surveyors any more than illness exists to provide a livelihood for doctors. A successful surveying business may be a by-product of boundaries...but it is not the purpose.

This proposition may be even more disruptive than the thesis found in the quoted work: professions exist to serve the public and do *good* – the “business” of a profession can never overtake that purpose. When we are members of a profession, it places us on “the inside” and we risk the adoption of a perspective which serves ourselves. It is the risk of becoming preoccupied with searching for answers to the question, “who are we?” by looking to our own frame of reference. The familiar – the complacent - informed by our own history and comfort zone, limits our willingness (even our ability) to think outside the box. The key to breaking out of these restraints is to re-invent our thinking by seeking

guidance from clients and the public. It no longer serves a profession well to assert a confidence which is based on past accomplishments to claim that, “we know best”, “we are the geospatial specialists”, or “trust us”. Many elements of these claims may in fact be true, but the point is that they do not ensure relevance of the profession going forward into the future if these claims eclipse a core quality of listening to the client. This is more than placing the public interest first as a reason for our professional existence; it is placing the client’s needs first as a reason for our business existence. It is key to staying relevant.

The Emergence of New Service Delivery Models

Several professions are also exploring new modes of professional service delivery. In this paper we will focus primarily on the legal profession as a source of guidance in how such change is being received. Law is the example of choice in this paper because it is closely aligned with what cadastral surveyors already do (*i.e.* to mimic what a court is anticipated to do with survey evidence and the application of legal principles to the facts). Law is also a calling which, like cadastral surveying, has a strong background in upholding ethical principles and its members are expected to meet loftier obligations⁴.

The various options available for service delivery to the public by lawyers have usually been in the context of a traditional professional/client relationship, the elements of which are defined by the courts and the professional regulator. The contractual terms of the relationship and the exact duties may not always be articulated in a clear fashion and therefore do not lend themselves to being easily codified. “Traditional”, because there is an element of mystery; the professional has the power in the relationship and more often than not the need for the legal service is as a result of the legal system itself needing lawyers to translate its functioning for the public.⁵ Lawyers have, understandably relied on the perpetuation of this paradigm of service delivery – and why not? How much of this is true for cadastral surveyors and other branches of the geomatics profession?

What are the implications of this assumption? Are specialists and professionals the ones who are best suited to

consider change in the service delivery paradigm? For that matter, are they best suited to be the sole source for recommending change to public policy? In many instances in the past, the answer was yes. In more recent times, the answer is shifting perhaps to a tentative “no”. It is the public, as drivers of change, who are insisting on change. It is the public, made up of individual clients, which represents the marketplace. Clients looking in from the outside to the modes and varieties of service delivery have prompted calls for change. Yet, that same public is relegated to perhaps having no more than “observer status” at round table discussions which have occurred in recent years to bring sense, cohesion and structure to the geomatics industry in Canada. Lacking even basic empirical data about what clients really want and need, this process continues to unfold, but with no ear to what is really needed. This may seem preposterous to many readers as fear of losing control would always prevent the client or a representative from that public taking a seat at the head of that round table. This article will explore further how a number of innovators have recognized the importance of listening to the client in defining both service and product. Perhaps equally important is the ultimate reward in that implicit alignment with what the market wants and will pay for.

The “Walmart Law” Model

Let us consider some new developments in the marketing of legal services so as to allow these services to become “commoditized”. What is in fact happening in the field of legal services – steeped in history and tradition as it has been? Yes – “packaged” services, which can be standardized and streamlined so that the service no longer has much of a bespoke⁶ element to it are emerging as a new presence in big box retail stores. As land surveyors, we too may need to consider what is taking place across many regulated professions which are responding to what the public wants: something cheap, simple and easily understood. Most important, something that delivers value is especially appropriate today.

Change of this kind means that many members of the regulated law profession are responding to that public demand by focussing their marketing on a traditional commodity that may lend itself to becoming simplified⁷. The advertising is pitched to a lowest denominator that makes the professional service seem like it is accessible⁸. In fact the message infers that not getting the service would be irresponsible and unthinkable. Two recent entries into this domain include insurance brokers⁹ and real estate agents¹⁰.

Included among these recent entries is legal services. A recent issue of *Law Times* featured an article that described the arrival of “Walmart law”. More than just a coined phrase, the article featured the presence of a law firm within a number of Walmart stores in Toronto. A lawyer who was quoted in an interview stated,

... We’re going to focus on those areas of law that are somewhat commoditized, ensure that the same values and standards that we brought to our practices in our

*downtown office are maintained rigorously throughout our firm, and to do so through strict training and making sure that we don’t take on files that are obvious red flags.*¹¹

More than just an example of commoditization, the phenomenon was predicted in Susskind’s book, *The End of Lawyers?: Rethinking the nature of legal services*¹². It also did not go unnoticed in England. In an article which appeared in *The Law Society Gazette*, the opening of the legal services outlet was reported.

*The firm, which operates seven days a week until 8pm, promises simple wills for \$99 (around £53.50), with notarised documents from \$25 (around £13.50). [The founders] have pledged to open another three outlets in Walmart stores in Toronto by the summer, with further additions in ... Ontario by 2016 and the rest of Canada by 2018. ‘A lot of people are intimidated by lawyers. This is a non-intimidating setting,’ [a founder] told the newspaper. The lawyers say evenings and weekends are their busiest times, with [a founder] adding: ‘That’s when most lawyers have shut down their operations – that’s when we fly.’ The Law Society of Upper Canada, which regulates legal services in Ontario, is currently consulting on different models of non-lawyer ownership, including alternative business structures. Their proposed models include allowing non-law firms to offer legal services and to wholly own law firms – which could in theory allow a company such as Walmart an entry route into the profession. Law Society treasurer Thomas Conway said at the start of the consultation that ABSs could provide ‘more options and choices for consumers, thereby improving access to justice’.*¹³

A proliferation of new service delivery paradigms will continue in the legal profession as the disconnect between clients (service needs and a sense of value for what is delivered) and lawyers (fees based on billable hours is what I deserve to be paid) continues. In fact the public’s rejection of such lack of response to the market reality of what represents “value” has been recently echoed in a reported case from the Court of Appeal for Ontario¹⁴ in which the appropriateness of legal fees that were charged on the basis of the “billable hour” was challenged.

COURTS CRITICIZE THE BILLABLE HOUR

“[T]here is something inherently troubling about a billing system that pits a lawyer’s financial interest against that of its client and that has built-in incentives for inefficiency ...

The focus of the fair and reasonable assessment should be on what was accomplished, not on how much time it took.”

- Pepall J.A. *Bank of Nova Scotia v. Diemer*, 2014 ONCA 851 (CanLII)

1

cont’d on page 16

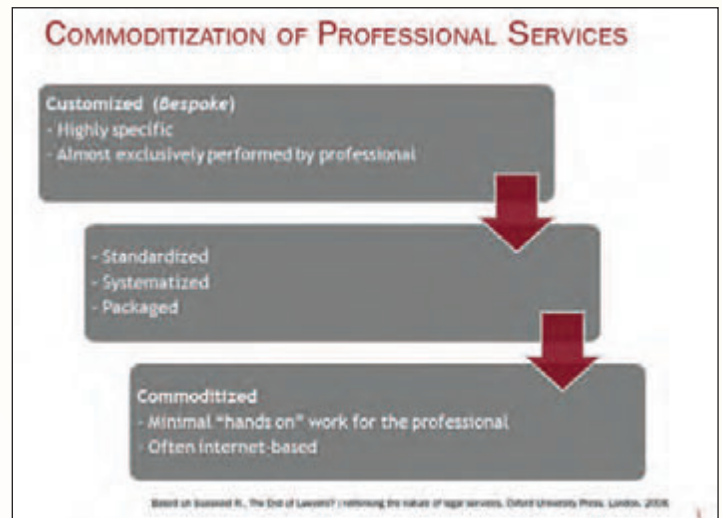
Legal work done in a receivership matter was charged at an hourly rate. Some of the services included travels by a lawyer from a downtown Toronto law firm to the courthouse in Stratford to deal with relatively simple motions. The court found that work that could have been delegated to an agent or to a junior lawyer did not deserve to be billed out at about \$600 per hour. The disconnect was recognized by the court: it focussed on the value of what was accomplished – not on the dollar amount resulting from an hourly billing multiplier.

Are there insights to be had for land surveyors from this inexorable march of commoditization? Is the public's appetite for location-based data, a driver that will help shape the role of the geomatics professional of the future? Similar questions are not only being asked by other land-based professionals, but the answers suggest that there may need to be a recognition that some work and expertise can (and should) be commoditized, while other aspects need to very clearly remain bespoke. Surveyors understand this only too well in terms of traditional work: the initial survey and staking out of a housing development or subdivision is mathematical, routine and mechanical work. However, the subsequent retracement of those original boundaries and the assessment of evidence can be much more complicated – it is the bespoke work that takes time, is costly, and produces results that are questioned by the public in terms of the perceived disconnect between their cost and benefit. Yet, it still needs to be done, and the demand for this expertise will no doubt remain. In that regard, commoditization will occur in respect of products and services which lend themselves to being commoditized. As examples, a contested divorce is not available at *Walmart Law*. So too, it is unlikely that a *Boundaries Act* process and hearing will be commoditized any time soon. The problems arise when lawyers think that an uncontested divorce needs to be charged out as if a trial had occurred. So too, fees for a routine cadastral survey task cannot find support in the public mind when charged out to a client at a rate as if a hearing had taken place. These are both examples of the growing disconnect between a sense of value and entitlement which *Diemer* has referred to.

Commoditization of Professional Services

In his book¹⁵, Susskind describes a continuum of services delivered by the legal professional, ranging from the highly specific, customized work performed by the professional (in the UK the term “bespoke” is frequently used to describe this type of work), to a more standardized (or systematized) service; it is packaged work that draws on past precedent and lends itself more to being delegated. However, it is this top level - the bespoke work – that takes time, is costly and produces results that can be questioned by the public in terms of there being a perceived disconnect between their cost and their benefit. It would not fit within the *Walmart Law* delivery model.

The focus for this model is on relatively routine products that have the potential to be commoditized – wills are an example. This is an example of the market being the predominant driver – and succeeding because profession-



alism issues are more easily resolved for routine services. Commoditization does not mean that difficult or complex work does not need to get done; it simply means that the more complex that the task becomes, the more likely it will not be commoditized and remain bespoke. Interestingly, this also means that the market refuses to value the simpler work in the same way, or at the same price point that a land surveyor may have used as a basis for previous business models. In that respect, as commoditization focuses on the simpler work, *Walmart Law* is unlikely to be a model for litigation or a contested divorce, just like an application under the *Boundaries Act* is unlikely to be a candidate for a packaged service.


Risks of Bundling in the Commoditization Process

Bundling¹⁶ is a natural phenomenon and driver in markets for which products and services have become commoditized. One can think of the home inspection service and preferred discounts on appliances as possible perks for first time home buyers who work with professionals in navigating that first purchase. However, the bundling of services can raise new problems, especially when the individual services that have been comingled are each subject to the requirements of consumer protection legislation or a professional regulator. A recent example appeared in the certification decision in a class proceeding in 2014. In *Sandhu v. HSBC Finance Mortgages Inc.*¹⁷, a decades-long relationship between a title insurer and a mortgage lender was questioned by the bank's clients. What had occurred was a bundling of services in which the title insurer was providing certain legal services related to the lender's mortgage documents (including document preparation, witnessing the execution of the documents and registration of the documents at the Land Titles Office). It was alleged that the product breached various consumer protection laws - British Columbia's *Business Practices and Consumer Protection Act*, *Financial Institutions Act*, *Trust and Loan Companies Act*, and the *Mortgage Brokers Act*. In broad terms, these pieces of legislation require full and detailed disclosure of the fees that would be incurred by customers borrowing money for mortgage purposes.

This matter is only at the certification stage but, more importantly, highlights how bundling may pose unexpected risks. For land surveyors, bundling may be viewed as having potential benefits. For example, research may suggest that home buyers would be more likely to purchase a survey product if it is a combined service with a bank appraisal and home inspection packaged together. After all, each one of the three services require an attendance at the site; there may be a savings in costs by rationalizing the collecting of information at the site for the three separate disciplines and thereby respond to a market demand at a more affordable price point. Of course this example is speculative and highly problematic in its own right. How do three disciplines train one collector of information for each of their respective services? On the other hand, do these 3 disciplines risk irrelevance by clinging to a traditional service for the sake of what has become familiar? For regulators, the potential problems may be equally daunting. What happens to a regulator's role when its members bundle their services?

Criteria for a Future Service Delivery Platform

What might a future service delivery platform for land surveyors look like? This is an unknown that must be determined with a forward thinking examination of the profession through a "curious" and well-rounded approach. Some general thoughts to consider as potential criteria for a forward looking platform include embracing the existing range of data sources that are currently available and challenging the current tools that are limited by Intellectual Property and data licensing rules. As professionals though, there is the ever-present duty of public protection. Being in a position to understand the reliability and inherent risks of spatial data that may not be well understood by public users is a huge opportunity. A cautious approach to the bundling of services with other professions is recommended when looking beyond the surveyor's traditional role. In the end the services are there for a consumer and there is legislation in place to protect that consumer. Boundaries do not exist to give us a job. Rethinking a "commoditized" survey product will challenge traditional assumptions and the platforms in present use, but it may succeed if we:

- sincerely consider options in a candid, non-defensive manner;
- are aware of the need to balance market forces with ethics/public interest;
- start any investigation and research of opportunities with the simplest of services first; and,
- enlist twentysomethings to tell us what it is in our skill sets that is important to them. 

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

¹ This article is based on a presentation given under the same name at the AOLS AGM in Huntsville on February 25, 2015. Walmart® and Costco® are trade names owned by their respective corporations. All rights reserved.

² Izaak de Rijcke is a practising lawyer and surveyor based in Guelph, Ontario and is often a speaker at CPD events for both professions and is also a presenter of courses and seminars through Four Point Learning – both in person and through on line delivery. See: <http://4pointlearning.ca/>

³ Susskind, R., *The End of Lawyers?: Rethinking the nature of legal services*, Oxford University Press, London, 2008, quoted in M. Kowalski, *Avoiding Extinction: Reimagining Legal Services for the 21st Century*, American Bar Association, 2012, at p. xiv.

⁴ Lawyers are "officers of the court" and although partisan advocacy is a core skill, it is not what defines their role in the legal process. Surveyors are "commissioned" and although this may be a vestige of the past, there is a sense of duty in the need to be objective and impartial when conducting a cadastral survey.

⁵ Some writers point to the importance of lawyers to the legal system. If each dispute which needed to be resolved in the courts had the parties represent themselves, the system would quickly grind to a halt.

⁶ Bespoke in Wikipedia is described as: "...an adjective for anything commissioned to a particular specification." "Custom-made", "made to order", "made to measure" and sometimes "hand-made" are near-synonyms, and "off-the-shelf", and in clothing "ready-to-wear", are the opposite. From: <http://en.wikipedia.org/wiki/Bespoke>

⁷ Law profession regulators in Canada have started to recognize the interest and need for a coherent response to these demands. In Ontario, a recently launched study has delved into a consideration of alternative business structures (ABS):

"The Law Society is considering whether it is in the public interest to liberalize its rules regarding the business structures through which lawyers and paralegals may provide legal services. This would permit what is known as alternative business structures, or ABS.

The Law Society released *Alternative Business Structures and the Legal Profession in Ontario: A Discussion Paper* on September 24, 2014, to seek input from lawyers, paralegals, stakeholders and the public. An overview of responses was provided for information to February Convocation. Individual submissions are available below.

The Law Society's ABS working group is reviewing the information received in order to report back to Convocation.

The Law Society has *not* decided whether ABS should be permitted in Ontario, and if so, to what degree. The ABS Working Group is assessing the feedback received and considering how to frame the issues for ongoing dialogue with the professions and the public. The Law Society will continue its study of ABS and the issues raised to ensure any innovative steps that may be taken serve the public interest and are balanced with appropriate regulatory oversight."

From: <http://www.lsuc.on.ca/abs/>

⁸ Accessible includes affordable.

⁹ "Your best insurance is an insurance broker", from *Insurance Brokers Association of Canada* at: <http://www.ibac.ca/>

¹⁰ "You don't have to worry about complicated details. You get knowledgeable advice from a real estate expert. Your transaction is completed competently and professionally. You can count on honesty and integrity.", listed as "Benefits of a Realtor", from *The Canadian Real Estate Association* at: <http://www.crea.ca/>

¹¹ *Walmart law already here*, Law Times, April 28, 2014, at: <http://www.lawtimesnews.com/201404283935/headline-news/walmart-law-already-here>

¹² Susskind, R., *The End of Lawyers?: Rethinking the nature of legal services*, Oxford University Press, London, 2008. References to the book and extracts appear in the presentation made to the AGM for AOLS in February, 2009, *Cadastral Issues on the Horizon: what are we in for?* See also article in the *Ontario Professional Surveyor* magazine, Spring, 2009, by the same title, and where it was noted:

Early in the book the reader is exposed to the concept of "commoditization". Commoditization involves the inevitability of professional services changing from being customized, highly specific and almost exclusively performed by the professional him or herself, to then include standardization, systematization, packaging, and ultimately, commoditization. The commoditized professional service is typically Internet based, it involves very little hands on work for the professional, and is generally understood to be highly affordable to the layperson. In terms of an Internet based product, the notion of a boundary or cadastral surveying plan identifying not only the improvements located on a property but, the position and evidence of the legal boundaries themselves, is an interesting thought. The concept is not, of course, novel – the last decades have seen the use of mathematical coordinates to fix or control the position of a boundary as an actively debated prospect.

¹³ Hyde, John, *Canadian firm opens outlet at retail giant Walmart*, The Law Society Gazette, April 24, 2014, at: <http://www.lawgazette.co.uk/practice/canadian-firm-opens-outlet-at-retail-giant-walmart/5040935.article>

¹⁴ *Bank of Nova Scotia v. Diemer*, 2014 ONCA 851 (CanLII).

¹⁵ Susskind R., *The End of Lawyers?: rethinking the nature of legal services*, Oxford University Press, London, 2008.

¹⁶ "Bundling" is the integration of two or more services or products so that a consumer encounters a new experience when purchasing that comingled service at the retail level.

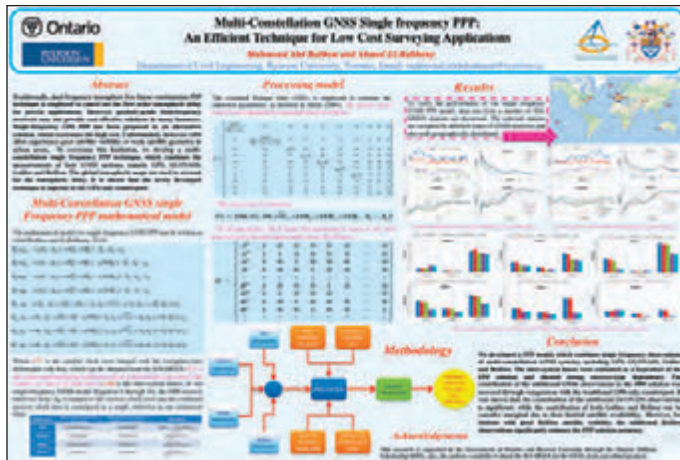
¹⁷ *Sandhu v. HSBC Finance Mortgages Inc.*, 2014 BCSC 2041 (CanLII).

NINTH Annual AOLS Graduate Student Geomatics Poster Session Award Winners

FIRST PLACE: Mahmoud Abd Rabbou, Ph.D. Candidate, Department of Civil Engineering, Ryerson University, supervised by Dr. Ahmed El-Rabbany.

Multi-Constellation GNSS Single frequency PPP: An Efficient Technique for Low Cost Surveying Applications.

ABSTRACT — Traditionally, dual frequency ionosphere free linear combination PPP technique is employed to cancel out the first order ionospheric delay for precise applications. However, geodetic-grade dual-frequency receivers may not provide cost effective solutions in many instances. Single-frequency GPS PPP has been proposed as an alternative solution, which overcomes the high cost. Unfortunately, however, GPS often experiences poor satellite visibility or weak satellite geometry in urban areas. To overcome this limitation, we develop a multi-constellation single frequency PPP technique, which combines the measurements of four GNSS systems, namely GPS, GLONASS, Galileo and BeiDou. The global ionospheric maps are used to account for the ionospheric delay. It is shown that the newly developed technique is superior to the GPS-only counterpart. Email: mahmoud.abdelrahman@ryerson.ca



SECOND PLACE: Salem Morsy, Ph.D. Candidate, Department of Civil Engineering, Ryerson University, supervised by Dr. Ahmed El-Rabbany and Dr. Ahmed Shaker.

Seabed Classification from Multibeam Echo Sounder Backscatter Data.

ABSTRACT — Marine scientists require more information about their environment and surrounding features for various applications, such as safe maritime transport and coastal zone management. Multibeam echo sounder (MBES) is one of the most widely used systems in hydrographic applications. MBES systems transmit and receive sound pulses, recording the travel time of sound pulses and the amplitude strength of returning pulses (i.e., backscatter). The backscatter data can be used for identifying sea bottom composition. In this context, a seabed classification

is presented from multibeam backscatter data. This work starts with producing a backscatter image from multibeam raw data for a study area at Cork coast, Ireland using CARIS (HIPS and SIPS) software. Then, an unsupervised classification algorithm – k-means is applied to extract four classes: rock, sand veneer over rock, sand, and fine sand. The classification results brought out up to 70% overall accuracy compared to an acoustic seabed classification map of the same study area. Email: salem.morsy@ryerson.ca

THIRD PLACE: Eros Gulo, M.Sc. Candidate, Geomatics Engineering, Department of Earth and Space Science and Engineering, Lassonde School of Engineering, York University, supervised by Dr. Gunho Sohn.

Building Occupancy Tracking Using Wi-Fi Signal Positioning Methods.

ABSTRACT — Occupancy information for a building and its spaces can play an important role in many purposes such as security, emergency preparedness, and energy consumption management, particularly when the information is multi-dimensional and updated in real-time. Existing solutions are investigated and their strengths and weaknesses are outlined, exposing the need for a more cost and resource efficient solution. To fill this gap, we present the research platform for our solution, the utilization of a Wi-Fi signal positioning method to determine the occupancy of rooms or areas in a building. We propose to obtain the signal strength information of building occupants' mobile devices from the access points of the building's existing Wi-Fi network (leverage existing hardware); input the information into an innovative fingerprint matching algorithm in order to determine the locations of the mobile devices (computationally light process); and using these computed locations, estimate the multi-dimensional occupancy of different parts of

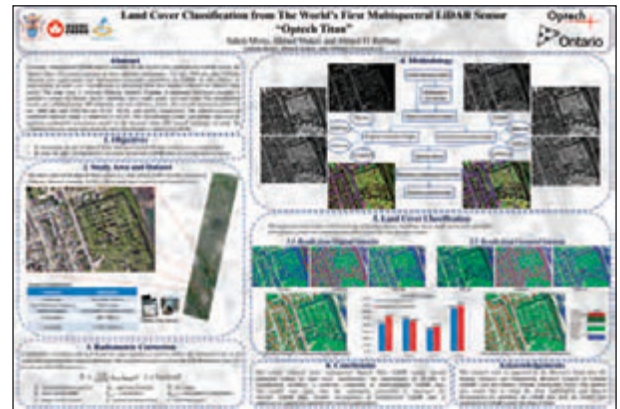


the building in real-time. We develop a method for extracting the signal strength information from the mobile devices using the Wi-Fi access points, and implement our proposed positioning algorithm within an application for the Android operating system. Finally, with an expansive publicly available data set of mobile device Wi-Fi signal readings, we also analyze the positioning algorithm's performance. Email: erosgulo@yorku.ca

FOURTH PLACE: Salem Morsy, Ph.D. Candidate, Department of Civil Engineering, Ryerson University, supervised by Dr. Ahmed El-Rabbany and Dr. Ahmed Shaker.

Land Cover Classification from The World's First Multispectral LiDAR Sensor "Optech Titan".

ABSTRACT — Currently, multispectral LiDAR data is available by the world's first multispectral LiDAR sensor, the Optech Titan. This sensor operates at three different wavelengths; 532 nm, 1064 nm, and 1550 nm, allowing new applications and information extraction capabilities for LiDAR. In this context, an improvement of land cover classification is presented from first dataset collected by Optech Titan sensor. The study area is covering Oshawa, Ontario, Canada. A maximum likelihood classifier is applied to extract six feature classes: buildings, trees, roads, grass, soil, and water. The classification results are validated using 200 randomly selected reference points. The overall accuracies from 532 nm, 1064 nm, and 1550 nm are 41.5%, 48.5%, and 34.0%, respectively. The overall accuracy of combined intensity image is improved to 65.5%. The classification results are further improved by applying radiometric correction model to the intensity data. The overall accuracy of using the combined intensity image data from the three wave-



lengths is improved to 69.0%. Email: salem.morsy@ryerson.ca



FIFTH PLACE: Ali Baligh Jahromi, Ph.D. Candidate, Geomatics Engineering, Department of Earth and Space Science and Engineering, Lassonde School of Engineering, York University, supervised by Dr. Gunho Sohn.

3D Modeling of Indoor Spaces Using Single Image.

ABSTRACT — Reconstruction of the spatial layout of indoor scenes from a single image is inherently an ambiguous problem. However, indoor scenes are usually comprised of orthogonal planes which their recognition along with the recognition of the objects can provide valuable 3D information of the scene. Most of the current methods define the scene layout as a single bounded box which is usually not applicable to the indoor corridors. The proposed 3D reconstruction method tries to overcome this problem by defining the scene layout as an integration of different boxes. This method relies on finding the ground-wall and ceiling-wall boundaries using the orthogonal vanishing points. Since in most of indoor spaces these boundaries are partially occluded, the proposed method tries to combine the essence of data-driven and model-driven approaches to create a physically valid cubic structure. Many scene layout hypotheses are created and evaluated by a linear scoring function to find the best fitting hypothesis to the image. The proposed method is fully automatic and no human intervention is necessary to obtain an approximate 3D reconstruction. Email: baligh@yorku.ca

Sites to See

GeoAlliance Canada

<http://cgcr.ca/en/geoalliance-canada/#>

GeoAlliance Canada is intended to provide an umbrella structure for existing geospatial organizations in Canada to pool their energies and resources to collaboratively address sector-wide strategic priorities. In the immediate future, GeoAlliance Canada is intended to become the essential vehicle to lead implementation of the Pan-Canadian Geomatics Strategy and the Action Plan developed and adapted by the community during the Round Table meeting in Ottawa, June 2014. GeoAlliance Canada is being proposed as the best way forward to implement that vision of community-based leadership.

Former AOLS Lay Councillor Eric John Bundgard becomes an Honorary Member of the Association of Ontario Land Surveyors



By Eric Ansell, O.L.S.

On February 27, 2015 at the President's Dinner and Dance at the AOLS Annual General Meeting, the Association of Ontario Land Surveyors honoured one of our past Lay Councillors, Eric John Bundgard, B.Sc. (Hon), J.D. with an Honorary Membership. Eric joins a select few of only five others who have been so honoured, they are: John D. Bogart, Dr. Gordon Gracie, N. Lorraine Petzold, George Wortman and Roger Tomlinson.

Eric obtained his Bachelor of Science with honours from Western University studying Physics. He pursued graduate studies in Physics at Western but then decided to change his career path to law and obtained his Bachelor of Laws from Queen's University in Kingston.

Eric has practised law in Ontario since he was called to the bar in 1992. He started his professional career with the Department of Justice where he litigated federal tax law and then entered into private practice in 1995. In the years since he has been working in a variety of areas including administrative law, employment law, mental health - consent & capacity law, and real estate law. Eric gained broad experience appearing as counsel before all levels of courts in Ontario, at numerous administrative tribunals, and in mediation sessions on behalf of his clients. He has also been an active participant at various legal conferences and seminars. Eric is with the firm Evenson Bundgard LLP in Toronto.

Of course another one of Eric's professional duties was serving an extended term as a lay member of AOLS Council. He was first appointed by the Lieutenant Governor in Council to a three-year term on October 5, 2005. Eric's appointment was as the "Legal Lay Councillor" in accordance with the requirements under the Surveyors Act. Recognizing the value that Eric brought to the Council table

he was reappointed for another three-year term. Given that Eric was appointed as Legal Lay Councillor, we could not let him escape his duties until a replacement could be appointed. Eric's term on Council was extended a second time to October 2012 resulting in 7 years on Council.

An Honorary Member is appointed by Council under Regulation 1026, Section 18 of the Surveyors Act and is described as a non-member who has:

Contributed significantly to the Association directly, through involvement on Council and/or its committees, been involved in the education or continuing education of the survey profession, or contributed significantly to the promotion of the profession.

Eric fulfils all of these requirements and then some.



During Council meetings, he was the quiet voice of reason, always recognizing his responsibility as a Lieutenant Governor Appointee. He always insisted that the public interest be held at the forefront of Council discussions and he didn't hesitate to remind the members of Council of that so that the public interest was served and protected. As Legal Lay Councillor, Eric also had the not so desirous responsibility of being appointed to all Discipline Panels during his

tenure on Council. He took his role on each panel very seriously and with extreme diligence to assure that the public interested was being served and protected. He also served as the Complaints Review Councillor, a role that required him to address the concerns of the public regarding the complaints process.

When Eric was leaving Council, Minister of Natural Resources, Michael Gravelle wrote in a letter to him;

"You can be very proud of the valuable contributions you made. I understand the profession has many initiatives underway to ensure they continue to meet the needs of the

public into the future and that this required a significant investment of your time and energy.

Your advice and participation not only helped to ensure that the public interest was served and protected, but you also can be congratulated for your vision to help shape the future of the profession”.

Eric’s dedication and passion for his new profession were evident as after receiving his Honorary membership he said:

“While I do appreciate the recognition of the honorary membership bestowed upon me, honour truly is owed to the Association for having given me the privilege and opportunity to contribute to its governance and to encounter a remarkable group of individuals who constitute the membership of the Association. Sometimes it may require the perspective of an outsider for a professional organization to appreciate how well governed it is. The AOLS membership needs to know what a quality leadership they have, and how well-governed it is. In my years of service on Council and



Eric John Bundgard, Honorary Member

various AOLS committees, I always have been tremendously impressed by the array of dedicated, competent, and intelligent individuals who have committed themselves to the effective governance of the Association.

Every professional organization faces its challenges, and the AOLS is no exception. What will help the AOLS meet its present and future challenges is for its members to participate actively in the facets of its governance. I echo the sentiment expressed by Paul Church in saying there is no better way to achieve effective governance of the Association than for its membership, especially its newer members, to become actively involved in the AOLS’s various committees and in its Council. Members thereby will meet new professional colleagues, make new connections, and contribute to the future success of the land surveyor professional and the Association’s effective governance.”

Eric truly deserves this honour and it was my great pleasure to present him with an Honorary Membership with all the rights and privileges therein.



TEKMET LTD

WWW.TEKMET.CA

TF : (800) 263-3291

PH : (905) 729-2673

FX : (905) 729-0280

EM : sales@tekmet.ca

Ontario’s Leading Survey Bar Manufacturer

- 37 Years In The Surveying Industry
- Prompt & Efficient Delivery
- On-line ordering now available
- Volume Discounts now available

All IB, SIB, & SSIB Bars Are Made To OLS Standards

Exclusive Supplier of THE BERNTSEN “EcoStake™”

Round - Square - Tubes - Pins - Control Bars - Monument Bars - Wood Stakes
Survey Washers - Mag Nails - Custom Bars

P.O. Box 10 - 6590 8th Line - Beeton, ON - L0G 1A0

123rd Annual General Meeting



Susan MacGregor, Surveyor General of Ontario was the Keynote Speaker at the Opening Ceremonies. A copy of her speech can be found on page 4.



Nancy Grozelle, Chair of the Academic and Experience Requirements Committee delivered the charge to the new surveyors at the Convocation Luncheon. A copy of her speech can be found on page 26.

The 123rd Annual General Meeting was called to order as the Sergeant-at Arms, Kevin Kujala laid down the Standard Measure which historically was used to control the accuracy of surveys in Upper Canada.



Incoming President Travis Hartwick (left) presented the Past President's gavel to Dasha Page.



Members Commissioned in the Last Year

Front left: Jason Mo, Greg Ford, Majid Fathi



Maureen Mountjoy (centre) recognized Paul Church (left) for his 30 years of volunteer service to the AOLS and his work with the Continuing Professional Development process and presented him with a Professional Recognition Award. Dasha Page (right) joined them in the presentation of the certificate.



Vicky Culbert (right), who is not a member of the AOLS, received a special Citation from Dasha Page for her exemplary volunteer service to the Archival and Historical Committee.

“Building our Geospatial Future”



Izaak de Rijcke presented a seminar titled *Innovation in Geomatics Services for the Consumer: If “Walmart Law” is here, can “Costco Surveys” be far behind?* See Izaak’s article on page 14.



Back left: Nath Segaran, Bahram Amirnezhad, Dacian Popa, Juan Zapata, missing from the photo J. Paul Crocker and Conor McGuire



Steve Page (left) presented the AOLS medallion to Debbie Travis.



Eric Ansell (left) presented former Lay Councillor, Eric Bundgard (centre) with an Honorary Membership for his significant contributions to the AOLS. Dasha Page (right) joined them in the presentation of the certificate. See Eric Ansell’s article on page 20.



Susan MacGregor (right) presented Neil Simpson, OLS #683 with a 50-year pin at the Veterans’ Dinner.

Event Sponsor



The CG&B Group, part of Arthur J. Gallagher Canada Limited represented by Mark Sampson, Senior Vice President.

Platinum Sponsors



Cansel



GeoShack Canada



Leica Geosystems Ltd.



Protect Your Boundaries represented by Vladimir, Maja, Saša and Tom Krčmar



Sokkia Corporation Canada



The Connectors Insurance Group represented by Bob Morrow and his wife Leslie



Tulloch Mapping Solutions



Enjoying the Meet and Greet on Tuesday evening (from left to right) Gitte and Jack Monteith and George and Janet Wortman.



Blain Martin purchases a ticket to support the Educational Foundation's Exhibitor Draw from (left) Penny Anderson, Lena Kassabian and Julia Savitch at the Welcoming Party.



Guests from other surveying associations and their accompanying persons pose with Dasha Page (front row) at the President's Dinner and Dance.



Pond Hockey at the AGM!

Thanks to everyone who joined us for the hockey game this year! I think you'll all agree that this is the way hockey is meant to be played; outside on a sunny, winter day while the sun is setting in the beautiful Ontario countryside. Looking forward to next year!



Parliamentarian Jack Young was the Master of Ceremonies at the Veterans' Dinner

Veterans' Dinner



Charlie Wilkins shared his thoughts about the book that he is writing on the history of the AOLS



Front left: Herman Wimmelbacher, Al Roccaforte, Frank Mauro, Daniel Kreze, Kerry Hillis
Back left: Larry Biason, Bill Bennett, Helmut Grander, James Walker, Ivan Wallace



Front left: David O. Horwood, Paul Forth, Ed Bowyer, Dan Dolliver, Ardon Blackburn
Back left: Greg Bishop, Curry Bishop, Bob Hawkins, John Jackson, Scott McKay



Front left: Colin Bogue, Andrea Tieman, Anne Cole, Brent Collett, Rob Mann
Back left: Marvin McNabb, Doug Hunt, John Galejs, Ron Stewart, Paul Torrance



Front left: Grant Bennett, Sue MacGregor, Eric Ansell, Bill Buck, Stewart McKechnie
Back left: Doug Jemmett, Russ Hogan, Blain Martin, Brian Maloney, Paul Church



Front left: Andy Smith, Leslie Higginson, Neil Simpson, Chester Stanton, Terry Dietz
Back left: Rick Miller, Don Brown, Paul Quesnel, Paul Miller, Jim Hill



Front left: Brent England, Robert Thaler, Maureen Mountjoy, Wally Kowalenko, Erich Rueb
Back left: Mike Tulloch, Tom Glassford, Peter Moreton, Duncan Ashworth, Alex Wilson



Front left: Gary Auer, David Woodland, Martin Knisley, Dan Vollebakk, John Goltz
Back left: Doug Culbert, Gord Good, Vladimir Krcmar, Murray LeGris, Paul Wyman



Front left: Al Worobec, Ken Ferizovic, Lynn Patten, John Gutri, Tom Senkus
Back left: Ed Herweyer, Paul Francis, Adam Kasprzak, John Boyd, Steve Gossling



Front left: Bob Clipsham, Tim Hartley, Jack Young, Norm Sutherland, Mart Himma
Back left: Michael O'Sullivan, Jack Monteith, Bob Fligg, Bruce Johnson, Ron Jason, Ted Williams, Drew Annable, Richard Murray

Convocation Address

By Nancy Grozelle, O.L.S.



The following is a copy of the “Charge to the New Surveyors” which was delivered at the Convocation Luncheon.

Good Afternoon,

I would like to begin by thanking the AGM organising committee for giving me the honour of presenting this year’s Charge to the newly commissioned Surveyors. It is however unfortunate that I am following last year’s speaker Mark Tulloch but I guess somebody had to do it ... **but** I was relieved to be told that they are trying to keep the meeting on schedule so I have interpreted that to mean ‘**please don’t ramble on for too long**’.

Since obtaining my licence the Convocation Luncheon has been the highlight of the AGM for me. The ceremony is a little friendlier today than it was in years gone by with the membership clapping the new surveyors in and presenting them to the membership before the luncheon and the formal proceedings have even started.

Hearing Bill Buck call out your names and provide a brief background for each of you makes it all seem so personal. You have all worked so hard for this day and to be able to finally see all of that work and commitment come to fruition **and** to be able to share that moment with your guests and colleagues is a feeling that you won’t soon forget.

For me the Convocation luncheon is where the members that make up this Association are at our best. It has been a sold out venue for as long as I can remember and attendance does **not** come with CPD points!

The reason the luncheon is sold out is that we are all anxious to meet the new members and welcome you into the Association. We are all very proud of our professional association and we have high expectations for all of you and I am sure you are all ready for the challenge!

Over the years we have had the pleasure of listening to some very eloquent speakers delivering messages like: “don’t accept the status quo”, “find your strengths and follow them” and the joys of hiring Generation Y Surveyors.

In preparing my speaking notes I was trying to figure out what it was I wanted to say and what message or perhaps words of wisdom I had to share – if any.

I quickly realised this was going to require some serious introspection! I was going to need to slow down and take a hard look at where I was in my life and career and reflect upon how I got here and by here I mean at the podium today.

As it turns out I think the answer is right in front of me – it’s because of the AERC that I am here. Not just as a speaker today but as a member of the profession and as the Chair of the AERC.

The AERC has been a constant in my career from the day I received my academic assessment to today. The AERC is

about growth and learning and it fits with my personal MINDSET.

MINDSET: What is mindset?

It’s the way we look at the world – people speak about someone having a positive or negative mindset and we all pretty much have an idea what they mean.

But there is another way to define mindset. Rather than a positive vs. a negative mindset consider for a moment the concept of a growth mindset vs. a fixed mindset.

I recently attended a Conference for Women in Engineering and one of the speakers referenced a book by Carol Dweck called Mindset. Being a pop-psychology junkie I bought and read the book. In it she talks about the concept of **Learning** or **Growth** actually being a **Mindset**.

Carol explains why “it’s not just our abilities and talents that bring us success – but whether we approach our goals with a fixed or growth mindset”.

She elaborates that you are raised to either have a fixed mindset – meaning your IQ and abilities are predetermined or a growth mindset in which you can increase your knowledge and skill.

I think most Surveyors by nature have a learning or growth mindset. Our profession is changing every day. The technology is changing so fast it’s almost impossible to keep up. Statute law is amended and rewritten as required to keep up with societal needs and even the common law is evolving with new decisions changing the way we interpret evidence.

We are always in learning mode.

Which is why I think it was the right time for the profession to initiate the Continuing Professional Development program as continued learning is a requirement to successfully move the profession forward.

The mandatory CPD program not only promotes continued learning, it has also breathed life back into the Association. With greater numbers attending meetings and volunteering on committees the members are now more engaged in the Association than they probably have ever been.

Always learn — learn always.

This is the motto for the Centre for Leadership and Learning in the Ontario Government. It very simply captures the notion that we are always learning and that we are learning in many different ways.

Mentoring is another way of learning and growing that does not involve formal academic training. Currently there is a big push in the government to try and formalize these mentoring relationships; matching potential leaders with

existing leaders to try and help them along their path.

One of the speakers at the Women in Engineering Conference made a statement that has stayed with me: “Don’t promote the path that you have taken but help others to find their own.”

That does not mean that you cannot learn from the journeys of others. I have learned as much from working for very bad bosses as I have working for truly great leaders. Interestingly they both can be very motivational!

This to me is the true role of a mentor. You - the members are all mentors for the newly commissioned Surveyors. Whether you are the Articling OLS, an OLS in the same firm, a government employee or a colleague, you have an inherent responsibility to help foster the growth of the new surveyors.

As newly commissioned Surveyors you may not realise how much potential you have. Your formal education coupled with your articles and experience makes you a very unique group of individuals brimming with potential. We are one of the few professions that demand expertise in two very different fields – boundary law and mathematics – **most of us do use both sides of our brain every day!**

The OLS brand, for lack of a better word, is recognised and respected the world over – not just in Commonwealth Countries but everywhere. Your licence is potential just waiting. Don’t be afraid of change or of trying something different.

A few years ago I went to hear Tony Dean, the former Secretary of the Cabinet of the Ontario Government, speak. His talk was interesting but what I took away from his presentation was the concept of the “stretch position”. The stretch position is the position that seems just a little outside of your comfort zone. It is the stretch position that will help you reach your potential!

Ethically we cannot accept work that we do not have the expertise to complete but we can partner and work with others that do to learn and expand our own expertise. Don’t let the Code of Ethics limit your work – if you are interested in taking on new work – new clients – find a way to do it.

I’m sure the Discipline Committee is just about ready to shoot me but the industry is changing every day and to be successful you will need to not only stay current but you will need to be looking at where the profession is going and what work is being generated in future years.

As part of my personal mindset I am always looking for new and interesting work and have tried not to shy away from opportunity. Over the course of my career I have leveraged my OLS designation and so far have had what I consider 3 very distinct careers.

Many of you do not know me or perhaps know me from presentations that I have made on the changes to the articling process or from some contracts that I managed while at MTO but I have been working in the industry since 1982 – that’s over 30 years!

To demonstrate my Mindset of learning, trying new things

and taking chances I would like to tell you a little bit about my 3 careers and my experience with **taking the leap.**

Don’t worry I won’t go back to my public school days!

Like many of you when I finished high school I didn’t know that I wanted to be an Ontario Land Surveyor – in fact I didn’t know such a profession even existed! Looking back it’s hard to believe I was ever so naive but believe it or not I wanted to be a Marine Biologist and envisioned myself working with Jacques Cousteau in the Florida Keys wearing my bikini all day, doing the occasional dive and sailing around on the Calypso.

I can almost hear John Denver singing when I say the word Calypso out loud! Nice.

Needless to say I hated biology and quit university to work for a couple of years. I stumbled onto Surveying while working in the Plant Department of the Scarborough Board of Education. The surveying crew needed a rod “**person**” and asked if I would mind helping out for a week. I started off holding the level rod and the dumb end of a chain and I loved every minute of it and needless to say I have never looked back!

I registered at Ryerson the following September and have worked in the industry ever since. I began working for Bennett and Norgrove in 1987 and when the market collapsed I took advantage of the 4-day work week and applied to the AERC for an assessment and returned to school to complete my requirements. I Articled to Bill



Bennett and obtained my licence in 1998, 11 years after leaving Ryerson.

Interestingly enough and thanks in part to the economy I worked for three different firms without barely changing desks. Bennett and Norgrove became Wm. E. Bennett which then became Bennett and Young.

I left Bennett and Young in 2000 after unsuccessful partnership talks. It was a very difficult decision to leave after 13 years as I had always envisioned myself as owning the firm but it was clearly time to go so - **I made the leap.**

Timing is everything and of course opportunity helps! I needed a change and a position became available with MTO at Downsview. Working in the private sector I was familiar with the legal and engineering work that the consultants did for MTO but didn’t have a clue what else they did.

Like so many government employees I thought I would give it a try for a few years until I figured out what I really

cont'd on page 28

wanted to do - that was 15 years ago!

It took a while to find my feet and to learn all of the acronyms. I clearly remember Robert Fulton the Senior Surveyor at the time taking me aside and explaining how I would grow into the job and that there was more than enough work and that there would never be enough hours in the day to get everything done. What he didn't tell me was how interesting and exciting the work would be.

One of the best kept secrets about working for the government is your colleagues. Almost all of your interactions are with your peers – engineers, surveyors, property professionals and lawyers. You very seldom deal with the public and I can tell you I didn't miss for one minute trying to explain to a homeowner why they needed a survey and why it cost so much!

In 2010 I joined MGCS as an Assistant Examiner – a job title previously referred to as Regional Surveyor. I can tell you that I was seriously worried about becoming a bureaucrat. The Assistant Examiners worked in the Policy and Regulatory Branch. I didn't even really know what that was – some days I still don't! Policy – really!

I love being a Surveyor and I was concerned that I was distancing myself from what I truly loved so I called around and found out everything I could about the job before applying. Sue MacGregor assured me that I was joining a very supportive group of consummate professionals. That helped to settle my nerves!

I did know all of the AES's and had worked with many of them to solve survey and registry office issues so I had an idea what they did and thought it might be a good fit for me. At least I knew they were not plan checkers.

I studied hard for the interview and when I was offered the position, again **I made the leap**.

Again, it was the right decision. The work is interesting and

challenging and almost no two days are alike. Mind you the learning curve was basically a vertical line but I learned that eventually someone will ask you the same question twice!

Interestingly my new boss, Bill Snell, was the AOLS Registrar when I received my licence. It is a very small industry.

I consider this to be my third career.

Just to recap that would be 13 years in private practice, 11 at MTO and I have now been with MGCS for 4 years and am still learning every day.

Initially I told you I was going to talk about my personal MINDSET and how it has shaped my career and how it relates to my work with the AERC, so the final piece of my speech today is on the AERC.

The AERC is a unique committee in that every member of the association has had the pleasure of articling - so for starters we all have firsthand knowledge of the committee. I also think that we all recognise and appreciate the invaluable role that the committee performs.

I felt very honoured in January 2005 when I was asked to be an Assistant to the AERC. Over the next 6 years I monitored several Articling students and hopefully helped several of you obtain your licence. I loved working with the students and tried my best to help them succeed.

In 2011 I was thrilled to be asked to join the Committee. This was a very exciting time for the AERC as I joined just as they were talking about revamping the Articling process. The Committee had been talking about revising the process for years but with the changing demographics of the membership it became imminently clear that the process needed an update **now**. We needed to be able to compete with other professions to attract the best and the brightest!

I am very proud to have been a part of the transformation of the Articling Process. I believe that we have managed to

Calendar of Events

April 28 to 30, 2015

GISTAM2015

*1st International Conference on GIS Theory,
Applications and Management*

Barcelona, Spain

<http://www.gistam.org/>

May 4 to 8, 2015

ASPRS 2015 Annual Conference

Tampa, Florida

www.asprs.org

May 13 to 15, 2015

National Surveyors Conference 2015

Winnipeg, Manitoba

www.acls-aatc.ca

May 17 to 21, 2015

FIG Working Week 2015

Sofia, Bulgaria

www.fig.net/fig2015

August 30 to September 2, 2015

UAV-g 2015 Conference

Toronto, Ontario

www.uav-g-2015.ca

October 18 to 22, 2015

GIS-Pro 2015 and NWGIS 2015

*Geography at the Nexus of Collaboration
Spokane, Washington*

www.urisa.org/education-events/gis-pro-annual-conference/

update the process to remove barriers and make it more attractive to potential candidates without sacrificing any of the rigour.

As you are all aware the AERC is one of the busiest and hardest working Association Committees. The members of the committee and the assistants to the committee care deeply about the students and the process and we all work together to ensure that the process is producing smart, ethical, talented Surveyors.

Surveyors, that “are” ready to contribute to the profession and society.

I would like to share with you one of my favorite quotes from Steve Jobs, and I am certain that he was thinking of the Surveying Profession when he said,

“Choose a job you love and you will never work a day in your life.”

My parting comments today apply to not only the recently commissioned Surveyors but also to the existing membership.

GET INVOLVED

A great place to start is with your Regional Group where you can meet the members in your area and learn firsthand the issues that the Association and the Membership are facing and you will earn CPD points!

Just show up - you will be glad you did and just being there will make you a more engaged member of your Association. You all have different strengths and diversity truly is a wonderful thing that will help to make our profession stronger in the long run. We don't need 500 Surveyors all

with the same skills and ideas.

Don't expect the membership to carry you for your entire surveying career. Step up, volunteer, and get involved. This is your Association and it's only as strong as its members.

You truly only get out of your Association what you put into it.

I would like to close today by telling you about an old episode of Modern Family. When I was asked to speak today my mind went back to an episode in which Alex, the brainy daughter, is asked to deliver the Valedictorian speech at her middle school graduation.

She prepares flash cards with a scathing speech designed for revenge against all of the cool kids who were mean to her over the years.

Thankfully her older sister Haley, the cool but not so bright daughter, intervenes and convinces her that the student body and parents just want a feel good speech and that no one was going to remember what she said but rather how it made them feel.

Haley's recommendation to Alex was to string together a handful of old rock lyrics.

Alex approached the podium and started into her rant but then looked out at the audience and took her sister's advice.

I would like to leave you today with these words of wisdom from Alex Dunphy:

“Don't stop believing” and “Let's get this party started!”

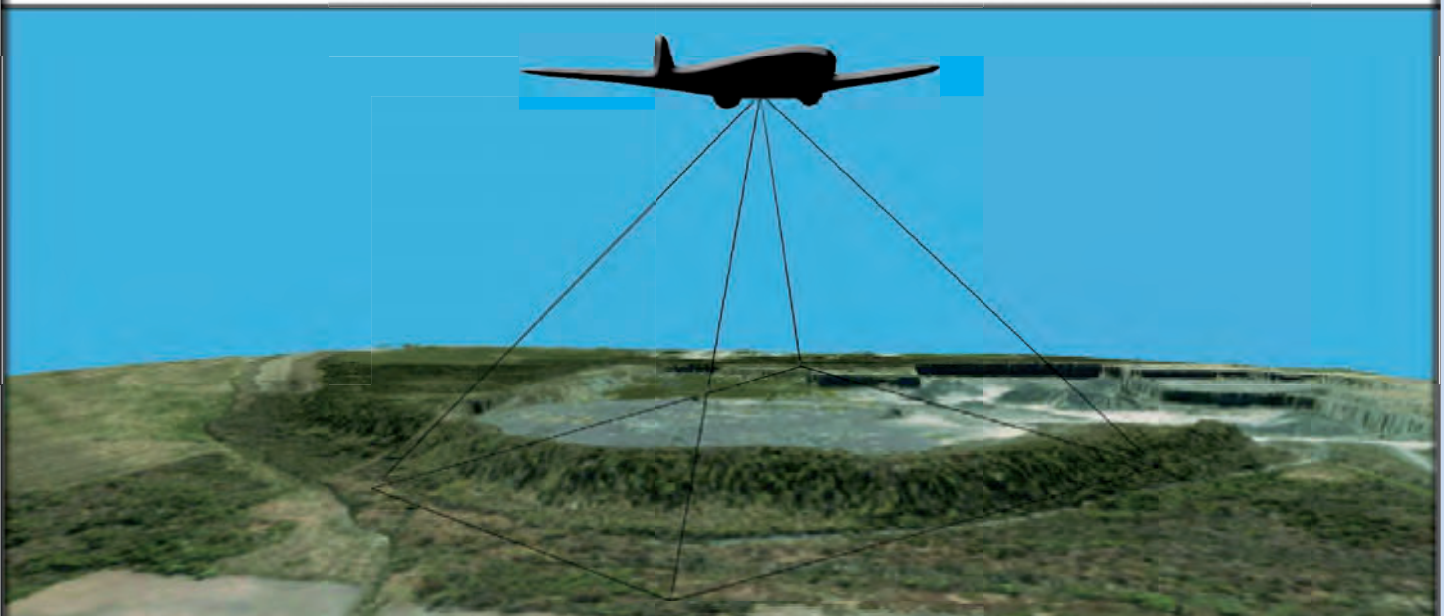
Welcome to the profession!



Northway/Photomap/Remote Sensing Ltd.

Unit 2 - 75 Hooper Road, Barrie, ON L4N 9S3
Tel (705) 730-6694 Fax (705) 730-6805

www.northway-photomap.com
pfrancis@photomapltd.com



**- The 2015 SPRING FLYING Season is in Progress -
ORDER YOUR PHOTOGRAPHY TODAY**

Complaints and How to Avoid Them

By W.D. Buck, O.L.S., C.L.S., P.Eng., Registrar

History

During the past 14 plus years of my tenure as Registrar I have processed over 260 official complaints. This is an average of just over 17 complaints per year, and ranges from a low of 10 in 2001 to a high of 30 in 2014. The number of official complaints does not begin to reflect the number of enquiries that AOLS staff receive regarding the behaviour of our members, most of which we are able to resolve without an official complaint being made. A quick perusal of AOLS Quarterly articles and Annual reports going back to the early 1960's shows that virtually all of the issues currently being addressed by the Complaints Committee have been around for at least 50 years and probably much longer. Unfortunately some of our members, both longstanding and recent need a reminder from time to time.

Complaints Committee

The Complaints Committee did not exist in its current form until the *Surveyors Act* 1987 was proclaimed in 1988. Before that, the Committee was formed by AOLS Council Motion. Council made the rules and there was no public representation on the committee. The 1987 version of the *Surveyors Act* introduced mandatory procedures and mandated the inclusion of both an elected Councillor and a Lay Councillor on the committee. In 2009 the Act was further revised to make both the elected Councillor and the Lay Councillor a requirement for an official meeting quorum. Other significant revisions in 2009 included the requirement for the committee to refer members to AOLS Council rather than directly to the Discipline Committee and the ability for the committee to refuse to consider a complaint if it was deemed to be "...frivolous, vexatious or an abuse of process."

The current committee has nine members, including two elected members of AOLS Council and one Lay Councillor appointed by the Lieutenant Governor-in-Council whose role is to independently represent the public interest. The Registrar is not a member of the committee but is responsible to ensure that complaints are processed properly as well as to prepare meeting agendas and minutes. Committee members represent both the private and public sectors as well as most geographic areas of the province. Meetings are held approximately every month, usually remotely using Go ToMeeting, and the Committee uses a private secure area of the AOLS website to view documents and exchange information.

The committee is currently composed of the following members:

Andrew Mantha	Windsor	Chair
Jeff Fee	Toronto	Council Member
Pat Galati	Toronto	Member
Bret Magee	Huntsville	Council member
David Kovacs	Thunder Bay	Member
Murray Purcell	Newmarket	Member
Mark Spraggett	Toronto	LGA Councillor
Michael Verdun	Keswick	Member
Bill Webster	Carleton Place	Member

Chart 1

Year	No. of Complaints	By Surveyors	By the Public
2000	20	2	18
2001	10	2	8
2002	14	1	13
2003	8	4	4
2004	19	1	18
2005	18	0	18
2006	21	2	19
2007	12	2	10
2008	17	1	16
2009	11	2	9
2010	21	5	16
2011	11	2	9
2012	23	6	17
2013	25	4	21
2014	30	3	27
Total	260	37	223

Statistics

During the Association's Strategic Planning session in April 2014 I presented some statistics regarding the 230 official complaints made between 2000 and 2013. The charts above and below, which have been updated to include the 2014 files, reveal some interesting facts.

Chart 1 shows the number of complaints that were made each year between 2000 and 2014 and whether the complaints were made by the public or by other surveyors.

cont'd on page 32



Take surveying to new heights



The **Trimble UX5** sets a new standard for mapping and surveying. This robust, user-friendly system with custom designed camera is highly efficient while providing accuracy as good as 2 to 5cm.

Benefits include:

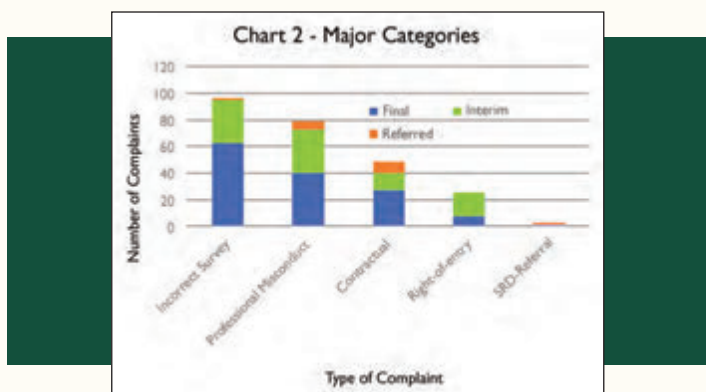
- An economical solution allowing companies of all sizes to engage in aerial mapping.
- A safe alternative to dangerous and limiting areas.
- Greater efficiency, giving the ability to collect and process data faster than traditional terrestrial-based survey technology.
- Versatility for use in a range of industries.
- Simple data processing with Trimble Business Centre photogrammetry module.



Chart 2 indicates the major categories of complaints. The majority of the Incorrect Survey category complaints are from members of the public who think that a particular boundary has been established incorrectly. Professional misconduct complaints include behaviour that public complainants deem to be unprofessional, but also include a significant number of complaints from other members, who recognize professional misconduct as defined in Regulation 1026. The Contractual category includes complaints relating to overcharging, work not completed or not completed on time and work that did not meet the client’s expectations. As you can see, the majority of complaints relate to accusations that a survey is incorrect or that there has been some sort of misconduct on the part of the surveyor.

This chart also indicates the decisions made by the committee, as allowed in the Act. “Final” indicates that the complaint was essentially dismissed, with no further action required by the member. “Interim” means that the member was not referred to Discipline or Council, but the committee did issue what is termed an Interim Decision that required some remedial action by the surveyor. Interim decisions are issued when the committee feels that a complaint does not warrant a referral for Discipline, but that the member should demonstrate to the committee that he or she understands and agrees that the action that resulted in the complaint had some validity and will not be repeated. The committee does refer to records of previous complaints and while they prefer to take an educational approach to relatively minor transgressions they will take a stronger approach to repeated complaints of a similar nature.

Although this chart shows the number of complaints that were referred on to Council or Discipline, it doesn’t show that **almost all of the “referred” complaints were made by one AOLS member against another**. This would seem to indicate that our members recognize the true meaning of

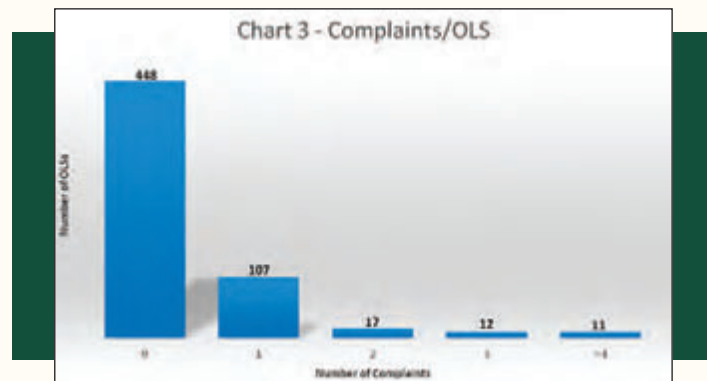


misconduct. Unfortunately the public has a much broader perception of what they feel constitutes misconduct or an incorrect survey.

Chart 3 illustrates the total number of complaints that were filed against members during the same 15 year period. As you can see, the vast majority of members (448) have not had a single complaint filed against them, and a further 107 members have received only one complaint. Of the members who faced a single complaint only 6 were referred

to Discipline or Council, and in every case the complaint was made by another member.

At the other end of the scale 11 members have each experienced 4 or more complaints during that same period. Regardless of the disposition of these complaints one would have to conclude that there are issues with the practices of these members. An analogy would be the auto insurance industry, which will usually forgive one accident, but will react very negatively to customers with more than one. Although not addressed in this article, members with multiple complaints may also have a higher proportion of the claims on our professional liability insurance and a proportionally greater effect on the overall premium.



The statistics also show that only 40 of the 595 members (6.7%) who were active during this period had more than one complaint, and that those members together experienced a total of 135 complaints, representing 55.8% of the total complaints. Twenty-three members (3.9%) had 41.7% of the total complaints.

Complaints by the Public

The Internet has allowed the public to be much more knowledgeable and sophisticated than it was only a few years ago. Many recent complaints submitted to the committee have contained 50 or more pages of information, including photographs, copies of Statutes and Regulations, AOLS Bulletins and even case law. The availability of so much information means that the public’s perception of what is required by a surveyor can be unrealistic and that the behaviour of our members and the services that they provide are being more closely examined. Negative publicity suggesting that some self-governing professions protect their own has resulted in a public that is mistrustful of the concept of self-governance, and more and more people are requesting a review of their complaint by the Complaints Review Councillor or are contacting their MPPs or other authorities when a complaint decision doesn’t go their way.

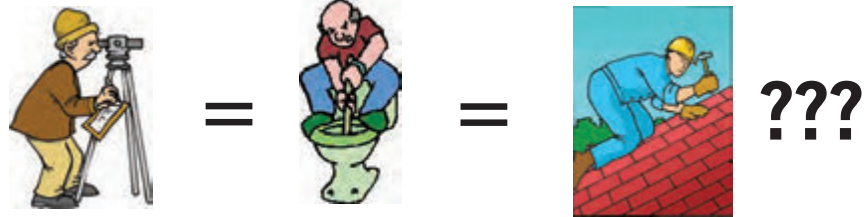
Major Categories of Complaints

Chart 4 illustrates the same major categories of complaints but indicates whether they were made by other members or by the public.

Incorrect Survey

Almost 40% of complaints are related to the perception

cont'd on page 34



Does your employee benefits agent/broker/consultant think surveyors are the same as plumbers or the same as roofers?

MOST DO!

You don't wear "one-size-fits-all" shoes!

You don't wear "one-size-fits-all" pants!

Why put up with a "one-size-fits-all" benefit plan?

Why not enjoy a plan that is "custom-tailored" for surveyors with special features you won't get anywhere else?

Your fellow surveyors have helped us custom-design the Land Surveyors Group plan over the past 24 years!

They told us what they wanted or needed, and we made changes.

Why not call Bob @ 1-888-747-7707 and have a look at a plan that is "custom-tailored for surveyors"?

Looks are free!



ROBERT J. MORROW CLU RHU CEBS

THE CONNECTORS INSURANCE GROUP LTD.

SUITE 101, 299 GLENVIEW AVENUE
OSHAWA, ONTARIO L1J 3H5

(905) 721-7569 (905) 721-9154 fax
1 (888) 747-7707 toll free
bob.morrow@theconnectors.com

Chart 4 - Types of Complaints Analysis

	Total	By Surveyor	By Public
Incorrect Survey	97	8	89
Professional Misconduct	79	21	58
Contractual	49	6	43
Right-of-Entry	26	0	26
SRD Referral	3	3	0
Total	254	38	216

that the member has provided an incorrect survey. Although 60% of these were dismissed, 40% did require further action on the part of the member, and two were referred to Discipline. Most of the cases for which additional action was required again can be related to the previously noted requirements of Regulation 216/10, namely a review of the project before it starts and a report after it is completed. In most of these complaints it was not a question of the survey being wrong, but rather a misunderstanding about what was to be provided or a failure to review the project with the client when it was completed.

Professional Misconduct

Regulation 1026 contains twenty-one definitions of what constitutes professional misconduct. Some of these are very specific while others are more general in nature. Public complaints alleging misconduct rarely fall into any of the statutory definitions in the Regulation and are often related to a behaviour such as rudeness or failure to respond to a request that the complainant feels is unprofessional. Complaints of misconduct submitted by other members however do usually fall into one of the statutory definitions, and all six of the complaints in this category that were referred to discipline or Council were made by other members.

Most people see surveying as an exact science, and believe that our sophisticated measuring devices provide us with the exact location of their boundaries. The idea of assessing evidence and arriving only at an “opinion” of the location of their property is not included in their concept of what a cadastral surveyor does, so when your survey plan tells them they don’t have the 50 by 120 foot lot that their deed shows and that they have been paying taxes on they are often puzzled and sometimes rude and indignant. Spend a few minutes to explain your survey. It may save you from getting a complaint, or save me from having to try to explain it to your client for you.

Contractual

Misunderstandings about the scope and cost of a project have become a major cause of complaints. Most of the complaints claiming misconduct or overcharging can be related to verbal agreements and the lack of a proper written contract. Public complainants often equate their perception of being overcharged with professional misconduct on the part of the member, particularly if they believe that they were given an estimate of what the job would cost, or they have compared it with other quotes.

The initial review of the project required by Regulation

216/10 should include the signing of a written contract or Work Order that clearly specifies the expectations of both parties. Over the years I have heard many members say that they take small jobs over the phone and it’s not worth the effort to get a contract signed. This is faulty logic. Think about what it could cost you to respond to a complaint, or the potential cost of being dragged into a lawsuit because your client claims that you didn’t perform the work requested. How will you defend yourself if everything was verbal? A description of the surveying services to be provided is essential and if the scope of work changes or the final cost will exceed the initial written estimate further written authorization should be requested.

The courts have held that for there to be a valid contract it is necessary for the parties to understand what the basic terms will be. Both parties need to know, or be reasonably expected to know what work is to be done and how much it will cost.

It was interesting that in researching for this article I ran across the AOLS Business Practice Manual that was issued in 1975, some 40 years ago, and which included a sample contract form. In 1994 the Association held a one-day workshop entitled “The Business of Professional Surveying”, which included a presentation on Business Law and emphasized the use of formal written contracts when possible.

Risk management guides, sample contracts and work orders can be found on many websites.

Right of Entry

Public complaints about surveyors or their employees trespassing on private property remain one of the more common complaints, with five such complaints in 2014. Awareness of our rights and responsibilities under Section 6(1) of the *Surveys Act* and training field staff to understand these will avoid most right of entry complaints. AOLS Bulletin 2005-1 gives a good summary of this topic and reinforces that training staff to make reasonable attempts to contact owners or residents is essential. Door hangers explaining that you have accessed a property are available from the Association and in some cases may even lead to additional business. Field staff should be provided with proper identification, including business cards of the supervising OLS, which they should be prepared to provide upon request.

Performance Standards-Regulation 216/10

Many members do not seem to be aware of some of the provisions of Ontario Regulation 216/10, the revised *Performance Standards for the Practice of Professional Land Surveying*. Complying with the provisions of this Regulation may in itself go a long way toward avoiding a potential complaint, particularly in the categories of incorrect survey or overcharging. In particular, members should be aware of Section 3, which requires that “A professional member who undertakes a project for a client shall review the proposed project with the client to describe how the project shall be undertaken so that it complies with all applicable Acts, regulations under them and practice stan-

dards.” Note that this initial review with the client is mandatory, not optional.


Section 4 applies to the end of the project and states that “Upon completing a project, a professional member shall provide a project report to the client.” Section 4(2) provides details of what must be included in this report.

Members should also be aware of the definition of a “project” in 216/10 and in particular note that a project is not limited to a cadastral survey. In other words professional members, including both licensed and Certificate of Registration members are bound by the requirements of this regulation, and non-cadastral surveys performed by a professional member must also comply.

Customer Service and Public Protection

The public tends to hold the members of all self-governing professions to higher standards of care and conduct, and rightly so. The privilege of self-governance comes with the responsibility to serve the public interest, and that is in fact the principal object of our Association. In addition to their knowledge and skills, professionals are expected to maintain a higher level of integrity and trustworthiness. While only a few years ago we seldom questioned anything that our doctor or lawyer told us, such pronouncements are no longer always accepted at face value and members of all professions are being questioned and challenged. Why should surveyors be any different?

I believe that most Complaints Committee members would agree with me that the majority of complaints result from poor communications between the surveyor and client. Mark Spraggett, our Complaints Committee Lay Councillor took this thought a step further at a recent meeting, referring to it as “customer service”. This is a term that we most often associate with the retail industry but I do think that it applies to our services as professionals as well. To me it’s more than just communication; it’s how you interact with your client to meet their expectations and how you react to negative situations. I have never been a believer in the customer is always right philosophy and if I have learned anything in the last 14 years it’s that there is always another side to the story. But, this doesn’t mean that the client doesn’t deserve to know what you did and why you did it. I have often spent half an hour or more on the phone with a surveyor’s client giving them a short course in cadastral surveying and my patience has been tried on many occasions. Most clients don’t care, they just want their survey, but some do, and they deserve your respect and your time.

Although the Complaints Committee is an important and necessary part of our public protection mandate, many official complaints could be avoided by exercising a higher degree of “customer service” and employing business practices that align with the requirements of our governing legislation. 



Insurance
Financial Services
Investments

Surveyors First

The CG&B Group have developed an exclusive office insurance program that has been designed specifically for Surveyors. *Surveyors First* works in conjunction with your existing professional liability policy.

Contact Us:

Take advantage of *Surveyors First* and get the insurance coverage you need at competitive rates.

Mark Sampson , BBA, FCIP
Vice President | 905-948-2631
mark.sampson@cgbgroup.com

Key Features:

- Surveyor Specific Coverage
- Competitively Priced
- Professional Claims Handling
- Knowledge, Expertise, & Ease of Doing Business



an [intact] company



Association of Ontario
Land Surveyors
Office Package Program



EDUCATIONAL FOUNDATION

Lifetime Members at March 31, 2015 (Individual)

BOB MORROW (Honorary)	RICHARD H. CREWE	GORDON W. HARWOOD	W. HARLAND MOFFATT	FRED SCHAEFFER
ANNA AKSAN	ERIC CRONIER	ED HERWEYER	J.W.L. MONAGHAN	ANDY SHELPH
DONALD ANDERSON	DANIEL A. CYBULSKI	JAMES HILL	PATRICK A. MONAGHAN	H.A. KENDALL SHIPMAN
DREW ANNABLE	TOM CZERWINSKI	HAROLD S. HOWDEN	JOHN D. MONTEITH	DOUG SIMMONDS
GEORGE D. ANNIS	JAMES D. DEARDEN	ROY C. KIRKPATRICK	PETER MORETON	JOHN SMEETON
DOUG ARON	ARTHUR DEATH	CINDY KLIAMAN	BOB MOUNTJOY	EDWIN S. (TED) SMITH
BRUCE BAKER	RON DENIS	ANNE MARIE KLINKENBERG	JIM NICHOLSON	RALPH A. SMITH
J.D. BARNES	TERRY DIETZ	WALLY KOWALENKO	DONALD W. OGILVIE	TAD STASZAK
JOHN BARBER	DAN DOLLIVER	LENNOX T. LANE	FREDERICK J.S. PEARCE	JAMES STATHAM
GRANT BENNETT	DON ENDELMAN	RAYMOND T. LANE	E.W. (RED) PETZOLD	RON STEWART
WILLIAM E. BENNETT	WILLIAM M. FENTON	ANITA LEMMETTY	N. LORRAINE PETZOLD	NORM SUTHERLAND
GRAHAM BOWDEN	CARL F. FLEISCHMANN	OSCAR J. MARSHALL	JOHN G. PIERCE	MARK TULLOCH
GEORGE W. BRACKEN	ERNEST GACSER	BLAIN MARTIN	HELMUT PILLER	MIKE TULLOCH
WILLIAM A. BREWER	DONALD H. GALBRAITH	RAYMOND J. MATTHEWS	ROBERT POMEROY	E. HENRY UDERSTADT
HARRY BROUWERS	BOB GARDEN	LARRY MAUGHAN	YIP K. PUN	DAN R. VOLLEBEKK
TOM BUNKER	JAIME GELBLOOM	MIKE MAUGHAN	VALDEK RAIEND	BRIAN WEBSTER
KENT CAMPBELL	CHARLES W. GIBSON	KENNETH H. MCCONNELL	PAUL A. RIDDELL	GORDON WOOD
WILLIAM H. CARD	GORDON GRACIE	JAMES A. MCCULLOCH	RONALD W. ROBERTSON	AL WOROBEK
J.B. CHAMBERS	HOWARD M. GRAHAM	SCOTT MCKAY	TALSON E. RODY	ROBERT H. WRIGHT
PAUL CHURCH	JOHN GRAY	RONALD G. MCKIBBON	HENRY ROESER	GEORGE T. YATES
DAVID CHURCHMUCH	ROBERT C. GUNN	LAWRENCE A. MILLER	GRENVILLE T. ROGERS	JACK YOUNG
A.J. CLARKE	ROBERT HARRIS	PAUL A. MILLER	CARL J. ROTH	GEORGE J. ZUBEK
W. BRENT COLLETT	JOHN M. HARVEY	MANOUCHEHR MIRZAKHANLOU	ERICH RUEB	

Individual Sponsoring Members

ANDRÉ BARRETTE	ANDREW BOUNSALL
BRUCE BROUWERS	RON EMO
PAUL FRANCIS	NANCY GROZELLE
BILL HARPER	TRAVIS HARTWICK
DAVID WOODLAND	GEORGE WORTMAN
	DAVID WYLIE

Corporate Sponsoring Members

D. CULBERT LTD.
ADAM KASPRZAK SURVEYING LIMITED
KAWARTHA-HALIBURTON REGIONAL GROUP
MTE ONTARIO LAND SURVEYORS LTD.
NORTH WESTERN REGIONAL GROUP
TARASICK McMILLAN KUBICKI LIMITED
TRIMBLE CANADA LTD.

Sustaining Corporate Members

A.J. CLARKE & ASSOCIATES LTD.
ANNIS O'SULLIVAN VOLLEBEKK LTD.
ARCHIBALD, GRAY & MACKAY LTD.

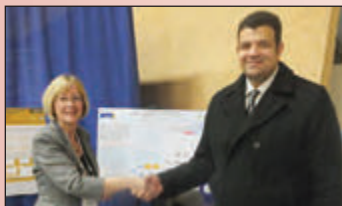
CALLON DIETZ INCORPORATED
GEORGIAN BAY REGIONAL GROUP
R. AVIS SURVEYING INC.
THE CG & B GROUP
EASTERN REGIONAL GROUP
GALBRAITH, EPLETT, WOROBEK SURVEYORS
HAMILTON & DISTRICT REGIONAL GROUP
J.D. BARNES LIMITED
KRCMAR SURVEYORS LTD.
LEICA GEOSYSTEMS LTD.
LLOYD & PURCELL LTD.
STEWART McKECHNIE SURVEYING LTD.
MMM GEOMATICS ONTARIO LIMITED
MONTEITH & SUTHERLAND LTD.
NORTH EASTERN REGIONAL GROUP
SOKKIA CORPORATION
SOUTH CENTRAL REGIONAL GROUP
SOUTH WESTERN REGIONAL GROUP
STANTEC GEOMATICS
TERANET INC.

Members as of March 31, 2015 (Individual and Corporate)

BILL BUCK
DINSMORE & ENGLAND LTD.
BRENT ENGLAND
HOLSTEAD & REDMOND LIMITED
KEVIN KUJALA
DAVID LAMONT
LAND SURVEYORS COPYRIGHT ENFORCEMENT GROUP
ROBERT MCCONNELL
DAVID SEARLES
JAMES SWINNERTON
A.T. McLAREN LIMITED
RON M. JASON SURVEYING LTD.
PAUL TORRANCE
KIRKUP & URE SURVEYING LTD.
LESLIE M. HIGGINSON SURVEYING LTD.

EDUCATIONAL FOUNDATION NEWS

Report from the Annual General Meeting



Maureen Mountjoy congratulates first place Geomatics Poster Session winner Mahmoud Abd Rabbou, Ph.D. candidate Ryerson University.

The 8th Annual Graduate Student Geomatics Poster Session attracted 14 entries from Ryerson University and York University. The poster competition, which is sponsored by the Educational Foundation, gives the surveying community an opportunity to see the many research projects that the graduate students are working on and reward them for their hard work. Prizes were awarded from 1st place to 5th place. The winning posters can be found on page 18. Thanks to our judges, Boney Cherian, Reuben Mc Rae and Wally Kowalenko.

The Board of Directors would like to thank all of the

Exhibitors who provided a prize for the Welcoming Party Exhibitor Draw which was a great success. Thanks to our ticket sellers, Lena Kassabian, Penny Anderson, Julia Savitch and Mary Raithby, and our Master of Ceremonies David Raithby, the Foundation raised \$4,430. Special thanks go to Peter Hettstedt and Leica Geosystems Ltd. who presented the Foundation with a cheque for \$600 which was raised through their total station initiative.

Lassonde School of Engineering Awards at York University

On March 25th, Deputy Registrar Maureen Mountjoy was invited to speak and present one of the Foundation's Geomatics Engineering Entrance Awards to Christian Iozzo at the very first Lassonde Awards ceremony. Five of the ten York students who received Foundation awards in 2013/2014 were present at the event. Thanks to everyone who supports the Foundation; your donations have made a difference for these students.

The Educational Foundation would like to recognize with thanks donations made in the memory of Ken Shipman, Ethel (Red) Petzold, Don Endleman and Larry Maughan.

MAGNET Enterprise

Field and Office. Connected.



The software solution that streamlines the workflow for surveyors, contractors, engineers and mapping professionals.

MAGNET Enterprise is a web browser-based environment that simplifies managing field and office data in the cloud. Track assets and communicate with everyone involved on your projects. Login from any browser for live updates. Save time and collaborate during a project.

- Web Browser Access
- Live Data Exchange
- Map View of Field Data
- Data Secure Backup
- Chat and Communicate with Others



LONDON • TORONTO • OTTAWA
MONTREAL • QUEBEC CITY
1-866-695-2737 • www.geoshack.com

ASK US ABOUT



Land Records Research in the State of Vermont

By Harris G. Abbott, VT L.S. 59

The State of Vermont is located in the northeastern region of the United States known as “New England”. It is bordered by the Canadian province of Quebec to the north, Lake Champlain and the state of New York to the west, and the states of Massachusetts to the south and New Hampshire to the east. Vermont has a 2013 population of 626, 630 spread over an area of 963 sq. miles (24,923 sq. km.), eight cities, 237 towns, four gores and five unincorporated towns. Unincorporated towns are those granted charters by the state that the Vermont legislature later revoked due to lack of residents. While still technically towns, they have no local government; their affairs are managed by a state-appointed supervisor. Each of the cities and towns is responsible for the recording and upkeep of the documents relating to land transactions.

In the mid 1700’s, the first towns in what was to become the State of Vermont were issued charters by Governor Benning Wentworth of the province of New Hampshire, an agent of the king of England. These towns usually contained six square miles of land and were divided into 100 acre or 200 acre lots referenced as first, second or third division lots. Each of the lots created has a geometric pattern within the town. After Vermont became a state in 1791, it started issuing town charters for the remaining land within the state. The geometric pattern of the lots within the state-chartered towns is of a more hodgepodge shape. When doing surveys on large tracts of land, the surveyor needs to trace the titles back to the key deed for the original conveyance within the town.

Individuals wishing to use the land records have direct access to all of the public documents in the vault for each individual town. Fees for use of the records are set by statute and at \$2.00 per hour and \$1.00 for each copy made, no matter how large the document. Prior to ca. 1945, all of the land records were transcribed by hand into bound land records volumes. After that date, the documents were transcribed using typewriters and later photocopied into the loose-leaf land record books. The microfilming of older records was primarily done by the Mormons. Recently, larger cities and some towns have gained the capability of looking at the more recent land records online in their offices. Larger municipalities keep regular business hours. However, the small towns have limited hours during the work week. Some are open in the evening as well. If one wants a copy of a deed, the page is removed from the loose-leaf volumes and copied. The deeds in the bound volumes are taken directly to the copier. Plats of surveys are placed



in plastic hanging sleeves in the vault. Copies of the plats have to be made in pieces, as the city and town clerks’ offices do not have the ability to copy anything larger than 11" by 17" on their machines.

Land surveying firms and single proprietor businesses, as well as attorneys in smaller firms, usually do their own land research or in the case of attorneys, have their paralegals do it. Marketable title searches by attorneys usually go back 40 years, whereas, the land surveyor goes back on the subject property as well as all abutting properties to the key deeds for prior transactions. If one is doing a retracement survey in a recently platted subdivision, the process is not too time consuming. However, doing land record research on properties in the older portions of the cities or towns and on larger tracts of land requires going back to make sure that there are no overlapping problems with the property being surveyed.

Deeds back to ca. 1870 generally refer to the abutters of the land being researched. Before that date, one starts to see compass and tape surveys using magnetic bearings, with no correction for magnetic declination given for the area of the survey description. Distances can be expressed in feet, chains (66 ft. per chain), links (100 links per chain or 0.66

ft. per link), rods (16.5 ft.), or some combination thereof. The area of land conveyed may be expressed in acres or in square rods.

Many times on complicated record research, good descriptions of the property cannot be found in the land records. One has an indication in reading the earlier deeds that a survey of the property may exist. In that case, one needs to check the county probate court records and a variety of other places. Many times, the settling of an estate, with large land holdings, required a survey as part of the estate inventory, prior to the distribution of land to the heirs. It is always interesting to request the documents pertaining to a 75 or 125-year old estate from the court. The court staff does not like looking through dusty old records in the basement of the court house.

With the development of modern surveying equipment, the time spent in the field to gather the necessary physical evidence required to complete a boundary survey has been shortened. In Vermont, surveyors are finding that 50 to 60 percent of the cost to complete a boundary survey may be spent in doing the necessary record research for the subject as well as all of the adjacent properties involved and the evaluation of the physical evidence found in the field and the preparation of a plat showing the results of the survey. Survey plats, if one is prepared, are not required to be recorded in the land records by the surveyor. It is up to the

landowner to record the survey. Often, the boundary survey shows more acreage than what the current owner is being taxed on. On the other hand, if the acreage is less, the land owner is more likely to bring the plat of survey to the attention of the taxing authorities.

The land records in the State of Vermont are only as well maintained as municipal governments are willing to support the process. The larger municipalities have budgets raised from taxes, plus salaried staff. Some staff members are political appointees. In the smaller towns, the clerk is elected and the office may be in his/her home.

Funding sources for record maintenance vary. In some cases, the city/town clerk's office and staff are funded by property taxes and fees collected. In the smaller towns, fees are the primary source of funding, with a smaller percentage from taxes.

While one cannot be denied access to the records, many of the clerks in the smaller towns are very possessive as to how the records are handled. One needs to pay strict attention to this, especially when handling the records from the older bound books. If one deviates from the required procedure, the town clerk may be reluctant to assist when questions arise, or to explain where older documents are stored. As the saying goes "If you irk the clerk, you will not get any help".



WE'VE GOT THE SOLUTION

GEODESY

- MAGNETIC MARKERS
- ~ for soil
- ~ for rock or concrete
- ~ GPS marker

LEGAL SURVEY

- MARKERS
- ~ aluminium
- ~ plastic
- ~ steel
- ~ boundary
- ~ terminus type
- ~ CLS-77
- ~ CLS-69

SERVICES

- ~ installation on the site for geodesic markers
- ~ design of special markers on request
- ~ markers to fit federal and provincial standards
- ~ shipping all around the world

PROTECTIVE COVERS

- ~ aluminium
- ~ mix
- ~ lifts

POST

- ~ witness post
- ~ raised characters

STATIONS

- ~ PK nails
- ~ identified washers
- ~ MAG nails

"ASK FOR OUR BROCHURE"

MORASSE

J. P. MORASSE INC. 1321, Marie-Victorin, St-Nicolas, Quebec, Canada G7A 4G4
 Tel.: (418) 831-3811 ~ 1 800 463-6866 • Fax: (418) 831-7827 ~ 1 800 463-8138
 WEB SITE: www.morasse.com • E-mail: morasse@morasse.com

The AOLS Professional Liability Program: Features, Benefits, and Risk Management Advice

By Mark Sampson

I had the pleasure of attending the AOLS AGM this past February at Deerhurst Resort in Huntsville, Ontario.

At that meeting, I co-presented a seminar on the roles of the insurance advisory committee, the features and benefits of the Association's Insurance Program, and common errors made by Ontario Land Surveyors. The co-presenters were: Dan Dzaldov, B.Sc., O.L.S., O.L.I.P., and Joseph Young, O.L.S.

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

Current Members of the Insurance Advisory Committee

- Executive Director – Blain Martin
- Insurance Broker – Mark Sampson
- Insurance Adjusters – John Breese, Steve Snider
- O.L.S. members - Dan Dzaldov (Chair), Rudy Mak, Martin Nesbit, Dasha Page, Joseph Young

Role of the Insurance Advisory Committee

- No Legislative Authority – only deals with issues regarding the AOLS Professional Liability Program
- Review claims presented by the Insurance Adjuster
- Give technical advice to the Adjuster on the potential negligence of the Surveyor
- Suggest ways to mitigate the loss/error
- Review the Insurance Program rates and loss performance
- Review pricing structure to members
- Special Issues – good or bad

Features and Benefits of the Professional Liability Program

There are many benefits to being insured through the Association of Ontario Land Surveyors Professional Liability Insurance Program. These include:

- Broad Insurance Coverage
- Expert Claims Handling
- Excellent Customer Service and Professional Advice
- Competitive and Stable Pricing
- Free Retirement Insurance Coverage for members who have been insured with the Program for a minimum of 5 consecutive years
- Profit Sharing Endorsement

One of the unique features in the insurance program is a feature called a "Profit Sharing Endorsement". This endorsement rewards our members for good loss history in any one year. We were extremely pleased to inform the



President Dasha Page (shown left) thanks the members of the Insurance Advisory Committee, from left to right, Joseph Young, Dan Dzaldov and Mark Sampson for their presentation.

members that in the 2009-2010 policy term, the profit sharing endorsement was triggered and a premium refund was issued to the members.

Details

- The total premium return is \$172,534 based on the loss performance in the 2009-2010 term.
- The Insurance Committee decided to retain \$20,000 to invest in further loss control seminars for the members.
- To be eligible, the firm has to currently be insured with the AOLS Insurance Program.
- The total refund by firm was proportionally split by the total % of premium paid by each firm in the 2009-2010 term.

I had the distinct pleasure of personally handing out the profit sharing cheques to each firm that is currently insured with the program. This enabled me to meet each member and thank them for being a part of the Association's Insurance Program and contributing to its success.

As mentioned above, the Insurance Advisory Committee decided to retain \$20,000 of the premium refund and invest it in future loss control seminars. These seminars will strive to further educate the members on ways to avoid errors and thereby reduce the number of claims and hopefully trigger this endorsement again in future years.

Common Errors

At the Q1 2015 Insurance Advisory Committee meeting, there were 16 new claims presented by the Adjuster. Of the 16 reported "incidents", 1 was a topographic-related error, 3 were legal issues and 12 involved potential construction

cont'd on page 42

THE POWER[®]

to see through walls.



**YOUR PRODUCTIVITY.
TECHNOLOGY.**



**HYBRID
POSITIONING**

Make obstructions disappear. That's the power of Hybrid Positioning technology. Complete the most demanding measurement jobs faster, frustration free. Topcon GNSS and robotic solutions connected with MAGNET. That's hybrid power.

www.topconpositioning.com/HYBRID

errors. The trend seems to be that 40% of the errors occur in the field, while 60% of the errors are as a result of a lack of proper office checks or incorrect calculations. Dan Dzaldov reminded the attendees that most of the field and office errors could be caught by office checking, be it the next day for field work or by a second person taking a look at the office calculations.

Here is a summary of some of the common errors that we see at each Insurance Advisory Committee meeting:

Layout / Elevation Errors

- Setting of benchmarks
- Incorrect cut information – calculation errors
- Topographic surveys – elevation errors
- Relying on benchmarks or elevation information provided by other parties or set on movable objects

Setback Errors - Residential and Commercial

- Locating boundaries
- Mathematical calculations
- Failing to check house plans or changes in the model or reversal of elevation
- Failure to check for minor variances or subdivision agreement variations (bylaws, unique topography)

Commercial Layout Errors

- Gridline errors
- Foundation issues
- Piles and/or caisson errors
- These errors are caused by plans being out of date, using the wrong plan, or the use of different formats when reproducing plans (digital pdf, AutoCAD).

The Cost of making an Error or Omission

There is a direct cost to making a professional error. There is a minimum \$5,000 deductible that is payable to the insurance company (Intact Insurance). In addition, your premium will be surcharged by 12% of the value of the claim. The surcharge is payable over 3 years.

Claim Example: total claim paid = \$105,000. The firm would pay \$5,000 deductible to Intact Insurance. The claim surcharge would be $(\$105,000 - \$5,000) \times 12\% = \$12,000$. The premium would therefore be surcharged by $\$12,000/3 = \$4,000$ per year for 3 years. This formula applies to all surveyors who are a part of the AOLS Insurance Program. Those that have claims, pay a higher insurance premium.

Please also remember that there are additional “hidden costs” of having a claim. There is damage to your reputation, a loss of productivity (defending the allegation/claim), and a loss of profitability (unpaid remedial work, loss of fees).

Surveyors never intend to make a mistake. Errors often occur because of poor communication with the office, architects, engineers, or contractors. Please take your time and do the proper research, office checks, and calculations. Fewer mistakes will have a positive impact on the loss performance of the insurance program and result in a lower premium and a higher potential of triggering the profit sharing endorsement again in the future.

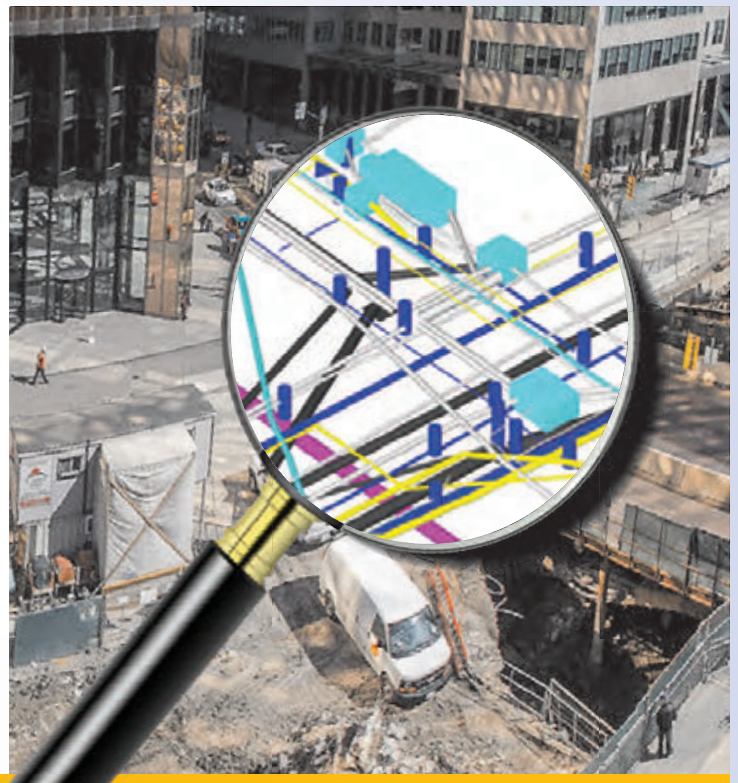


Mark Sampson, BBA, FCIP is the Senior Vice President of The CG&B Group – part of Arthur J. Gallagher Canada Limited.



FOCUSED
ON YOUR UTILITY SOLUTIONS

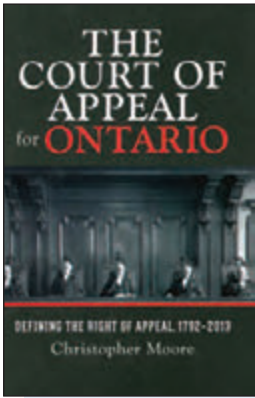
- Utility Mapping
- Ground Penetrating Radar
- Vacuum Excavation



T2 Utility Engineers
T: 1-855-222-T2UE | E: info@t2ue.com | www.t2ue.com
Find us on:   

your source for
subsurface utility engineering
services

BOOK REVIEWS



Published by the University of Toronto Press
ISBN 978-1-4426-5014-5

The Court of Appeal for Ontario Defining the Right of Appeal, 1792 – 2013

By Christopher Moore

Before 1850 the Court of Appeal for Ontario was the Governor's Executive Council. In 1850 the Court of Error and Appeal for Canada West met for the first time, the first appeal court for what is now Ontario that was both independent of the Executive Council and staffed only by professional judges. Christopher Moore's study of the modern court's history begins with these early courts, and provides an account of more than 200 years of the court's institutional history. It charts the various and at times

complex reorganizations, and identifies landmark events, such as the creation of the modern court in 1876 and the opening up of criminal appeals in the late nineteenth century. This is also part a biographical history, identifying dominant figures, especially Chief Justices, in the court's development. Along the way the book looks at the court's workload, its internal administration, relations with the bar, and connections to the politics of the province.

Information taken from the publisher.

Toronto Biography of a City

By Allan Levine

In the last sixty years, Toronto has transformed from a provincial town to significant urban heavyweight. Few cities have experienced such sustained growth, and the packed streets of North America's fourth-largest city are a far cry from the origins of the city as "Little York," when it was comprised of the lieutenant-governor's muddy tent – which he shared with his wife and many children – and some barracks. Between then and now, fervent Orangemen have imposed strict morals on the growing provincial town, and an influx of immigrants changed the face of the city.

With the same eye for character, anecdote and circumstance that made Peter Ackroyd's *London* and Colin Jones's *Paris* so successful, Levine's

captivating prose integrates the sights, sounds and feel of Toronto with a broad historical perspective, linking the city's present with its past through themes such as politics, transportation, public health, ethnic diversity and sports. *Toronto* invites readers to discover the city's lively spirit over four centuries and to wander through the city's many unique neighbourhoods, where they can encounter the striking and peculiar characters who have inhabited them: the powerful and powerless, the entrepreneurs and the entertainers, and the moral and the corrupt, all of whom have contributed to Toronto's collective identity.

Information taken from inside the front cover.

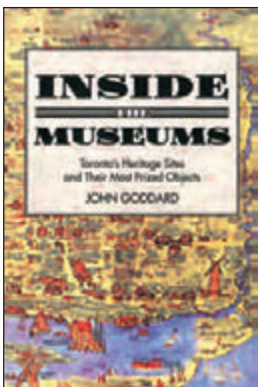


Published by Douglas & McIntyre
ISBN 978-1-77100-022-2

Inside the Museums

Toronto's Heritage Sites and Their Most Prized Objects

By John Goddard



Published by Dundurn
ISBN 978-1-459-72375-7

A portrait of William Lyon Mackenzie stares from a mural at Queen subway station, his face as round and orange as a wheel of cheese. He served as Toronto's first mayor, led the Upper Canada Rebellion of 1837, and was grandfather to William Lyon Mackenzie King, Canada's tenth prime minister, whose own orange-pink visage graces the Canadian fifty-dollar bill. Three blocks from the station, Mackenzie died in the upstairs bedroom of a house now open as a heritage museum, part of a network of such homes and sites from early Toronto.

Inside the Museums tells the stories of ten of the city's heritage properties. One of these properties,

Gibson House stands minutes away by foot from North York Centre subway station, toward the north end of the Yonge Line. In 1851 land surveyor David Gibson built his red-brick Georgian home, now the Gibson House Museum. He ran his two farms, in York Township and Lockport. He bought and sold properties throughout the colony, including a sawmill in Parry Sound, and travelled widely to survey lands for settlers as Inspector of Crown Land Agencies and Superintendent of Colonization Roads.

Information taken from the book.

The Last Word

Sergeant-at-Arms “Indiana Jones”

Professor of Archaeology, Dr. Henry Walton “Indiana” Jones, Jr., often referred to as “Indy”, was the character that Sergeant-at-Arms Kevin Kujala portrayed at the AGM. This fictional adventurer and treasure hunter was created by filmmaker George Lucas in an effort to replicate the action heroes of the film serials of the 1930s. Indy, who was played by actor Harrison Ford, first appeared in the 1981 film *Raiders of the Lost Ark*.

Kevin chose Indiana Jones for a couple of reasons: “I thought it would be a fun character and from the feedback from members, it

was well received. Throughout all of the movies he is seen using maps and notes to find his way. In one of the movies he is shown using a transit to lay out the location of a buried vault. Many of his actions are not dissimilar to the historical role surveyors have played in collecting information to retrace boundaries. In fitting with the theme of *Building our Geospatial Future* it is also important to remember how much things have changed in the past century and the profound impact that geospatial technology has had on other professions and sciences, such as archaeology.”



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:

	1 time	4 times
1st Cover	Not Sold	Not Sold
2nd and 3rd Cover	Not Sold	\$715
4th Cover	Not Sold	\$825
Full page 4 Colour	\$705	\$660
1/2 page B&W	\$280	\$245
1/2 page 4 Colour	\$500	\$465
1/4 page B&W	\$190	\$165
1/4 page 4 Colour	\$410	\$385

Inserts (supplied): Page rate plus 25%.

Mechanical Requirements:

Typed page: 48 picas wide by 63 picas deep
Bleed size: 8.75 wide by 11.25 deep
Non-bleed image area of a single page should be 7.5 x 10
D.P.S.: 17.25 wide x 11.25 deep with bleed
D.P.S.: 16 wide by 10 deep without bleed

Digital File Requirements:

Supplied files should be “Press Quality” PDFs with trim and bleed marks included and with all fonts applied in the ad embedded.

Note: The “Marks Offset” should be set to the same value as bleed (for example .125”) to avoid marks protruding into bleed area and thereby reducing bleed. Four Colour images should be in CMYK mode with a resolution of 300ppi.

Colour profile included in the file should be GRaCoL_2006_Coated with Relative Colorimetric Intent.

Circulation (This Printing)

Ont. Land Surveyors & Associates	1203
Other Professional Affiliations	283
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, 2015**

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

**NO BASE STATION.
NO CELLULAR.
NO PROBLEM.**

CenterPoint RTX Keeps You Connected

Survey using satellite-delivered Trimble® CenterPoint™ RTX™ corrections in areas where terrestrial based corrections are not available. Trimble CenterPoint RTX delivers near RTK level precision anywhere in the world without the use of a local base station or Trimble VRS™ network.

www.trimble.com/survey/TrimbleR10



**TRIMBLE
R10 GNSS**





MicroSurvey CAD 2015

Unlock Your Full Potential

- Built on IntelliCAD® 8
- 64-bit and 32-bit versions
- Improved performance
- DWG 2013 support (AutoCAD® 2013, 2014, 2015)
- Layer states and filters
- Quick-select
- Adaptive grid
- New 3D orbit commands
- Dynamic licensing
- AutoMAP plotted descriptions
- AutoMAP substitution codes
- Google Earth™ KML export
- Leica codelists & ghost points
- Line/curve/tie table selections
- COGO bearing rotation display
- Draw cluster error vectors
- More .xyz point cloud formats

MicroSurvey CAD 2015 is now available, and you owe it to yourself to try it!

Unlock the full potential of your workstation with the 64-bit version of MicroSurvey CAD. Harness the power and capabilities of the integrated IntelliCAD 8 engine, and experience faster drafting and calculation operations while working with larger drawings, more points, and an overall more powerful MicroSurvey CAD than ever before.

Download a free demo from our website: www.microsurvey.com

FREE  **DEMO**

© MicroSurvey is registered in the U.S. Patent and Trademark Office by MicroSurvey Software Inc. MicroSurvey is part of Hexagon.

Google Earth is a trademark of Google Inc. AutoCAD is a registered trademark of Autodesk, Inc., in the USA and other countries.

 PART OF
HEXAGON

