

Ontario Professional Surveyor



on the cover ...

**Sergeant-at-Arms,
Julia Meldrum Smith**
(Queen Juliana of the
Netherlands) presided
over the 120th AGM
in Ottawa, ON



also in this issue ...

120th AGM Photos

The Ontario Cadastre – An Update
on Requirements, Commitments
and Opportunities

The Ontario Digital Cadastre
Corporation – The Road Forward
The AOLS Professional Liability
Program

When Did Surveyors Stop Surveying?

plus our regular features:

Educational Foundation

News from 1043

Book Reviews

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ON THE COVER ...

Sergeant-at-Arms, Julia Meldrum Smith chose to portray Queen Juliana, who was Queen regnant of the Kingdom of the Netherlands between 1948 and 1980. For more information on Queen Juliana see 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 Paul Benedict, O.L.S., O.L.I.P.



Well the dreaded moment has arrived; writing my first President's page. It's been a little over two weeks since the AGM in Ottawa as I sit down to type this out. It's not that I mind writing. I don't necessarily like to do things last minute. So let me explain why I am doing what I preach to my daughters not to do with their homework – leave things to the last minute.

I run a surveying and engineering firm out of Woodstock with my father Ralph, and David Raithby. Immediately before the AGM in Ottawa I had the opportunity to spend 4 days attending Minnesota's AGM in Minneapolis. One day at home to do some laundry, then off to Ottawa for the week.

As most of us know, the world does not stop while we are away. I think most offices are like this and ours in no exception. It's almost a game actually. The rules are quite simple. If someone is not at their desk let's see how many files we can pile on it. The winner, or loser depending on which side you're on, is the one with the least amount of desk top showing, the highest stack of files that isn't falling over and lastly let's see how much of their monitor is covered with telephone messages and Post-it notes. Upon my return it was all too evident that I was the undisputed winner.

So I have spent the last two weeks, which have just flown by, not only handling the daily stuff but digging out. The next thing you know the gentle and then the not so gentle reminders start coming that my President's page is due. So here I sit at 10:00 pm, doing "my homework" at the last minute.

In my opinion, this year's AGM in Ottawa was a resounding success. Results from the Survey Monkey that were sent out from the AOLS office confirm that many of you share my opinion. The focus and talk of the AGM was the Ontario Digital Cadastre project. Those in attendance heard presentations from a number of speakers on the success of two "100-day projects" with Union Gas and MPAC. The hard part was wrapping our heads around the simple concept that these two organizations, along with many others, are willing to pay for data that we already have sitting on our computers or in our filing cabinets. All we have to do is hit the send button.

Those in attendance heard that because of the success of the 100-day projects and because other organizations needed non-disclosure agreements signed before we begin their 100-day projects the AOLS formed a new corporation. The Ontario Digital Cadastre Corporation (ODCC) is currently wholly owned by the AOLS. In order to move forward quickly, a small interim board has been formed until the full board can be selected and appointed.

Most members jumped right to the part that was lacking from the presentations: how much is this going to cost for us to partic-

ipate, how much are they going to make from this endeavor and what is the ownership structure? Things have been moving so quickly that the task force frankly doesn't have the answers to these excellent questions. We should. It's not that we were hiding anything; there just hasn't been time and resources to develop answers. ODCC and the task force have now turned their attention to answering those questions.

The ODCC may have developed an approach that will not require the members to put up any capital. They will just want you to provide digital plans on a go forward basis, via email or a web-based portal. File translation software has been developed that will read in your file type, layering structure and projection and will convert it to the clients preferred file type, layers and projections. You don't have to change anything you currently do.

One of the major concerns raised from the floor was share structure and ownership. Right now the thought is that all members will have the potential to have a share in the ODCC. Voting rights, royalty streams and dividends will all need to be thrashed out.

The 100-day projects were just to prove that the concept was feasible and not to provide all the answers. The idea behind the 100-day project was to answer the questions: "Will the client receive benefit or a reduction in costs?" and "Will the surveyor not see a significant change to their current work flows and practices?" The next steps will see wider based pilot projects that will be longer in duration to determine wide scale buy-in from our members on a regional basis, how much the client will save and how much the costs are for the surveyor so we can start real negotiations for pricing. Now don't expect to get rich and retire off the sale of a single plan but do expect a stream of income or royalties where there has been nothing before.

One major point that was also brought forth from the floor was the issue of copyright or intellectual property rights. Rest assured copyright and IP are front and centre. They will be protected.

One of the many "next steps" for ODCC will be a meeting of the certificate of authorization holders. How and when will be dependent on how long it takes us to develop some of the answers. There is still a lot of work to be done but we are moving fast; too fast for some but not fast enough for others.

Those at the AGM heard that the world has changed. The world has gone digital with the Internet, GPS, Google Earth and smart phones. People want digital data that they can view and download. They want an "APP" for that. In part, surveyors have become less relevant in today's society because we are still stuck in a paper world. I often hear members complain about what we have "lost". We lost planning, we lost drainage, we lost GIS and we lost our Surveyor's Real Property Reports. Do you want to be complaining 5 or 10 years from now that we lost the digital cadastre? The ODCC is the opportunity to claim our relevance and our future. The train is now boarding. Will you be on board or will you be left waving on the platform?



The Ontario Cadastre – An Update on Requirements, Commitments and Opportunities

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

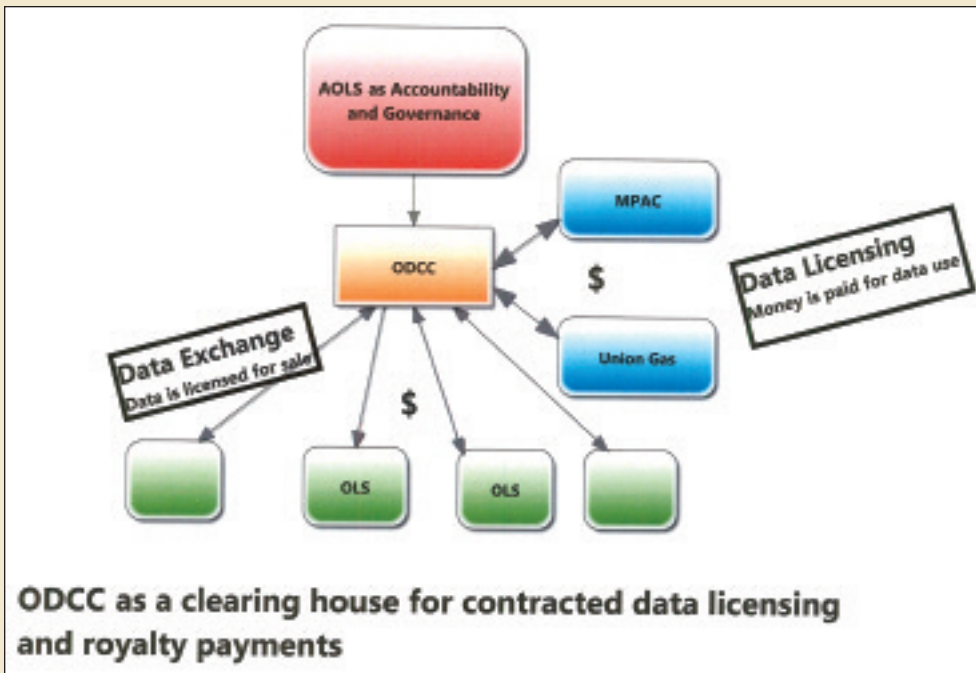
The seminar immediately before the Annual General Meeting (AGM) in Ottawa in February, 2012, reported to the membership on progress that had been made regarding the Digital Cadastre Task Force. This small group of volunteers had been meeting weekly and continued to make progress in the development of opportunities and an overall concept for the formulation of a cadastre that was appropriate for Ontario's situation. The challenge that such a presentation faced was reflected in the questions which followed the presentation. The information contained in the series of slides used for the presentation was complex and packed with a message that was again compelling. Generally speaking, a review of this project to date, combined with what had been communicated in the last three years, served as a backdrop.

The cold facts of a demographic profile of the profession, a declining demand for traditional survey products, and a market that was turning to other solutions for the information that surveyors had been traditionally hired to collect and present were all reviewed. The irony did not escape most members in attendance. As a declining demand for traditional survey products became evident, the market was seen to be turning to affordable insurance as a way of managing the risk of not getting up-to-date survey plans. However, the search for evidence on the ground became more daunting. In turn, the cost of a survey product increased, since the search for evidence of the survey fabric on the ground had become more difficult and time consuming. The self-perpetuating cycle was complete with the realization that a higher price point would ultimately force the market to look to other alternatives altogether. The end result was a rather bleak prospect for the survey fabric that was not being maintained; the cost of any product that might traditionally have been available based on a survey fabric that was reliable would no longer be viable. With the benefit of hindsight at a later day, the lack of monumentation, regularly maintained and verified on the ground, and a neglect in other activities that would normally be associated with the "maintenance of the survey fabric" would come to be seen as the ultimate collapse of the survey fabric altogether.

Title insurance had for the past decade been identified or pointed to as the "culprit" in having taken away surveyors' business. Although this might have been an understandable

response from the survey profession, the reality was perhaps different. Title insurance does not compete with a survey product; title insurance responds to the risk of not having an up to date survey and therefore is an economically effective tool in managing risk. Ultimately, an insurance policy and a survey plan are profoundly different products, and to point to title insurance as the single answer for surveyors no longer being able to prosper in an economic sense was recognized as flawed thinking. What members readily acknowledged was the fact that the world had changed. With title insurance being a fact of life in Ontario conveyancing, the shift in the basic foundation of how surveyors viewed their usefulness and responded to a demand for a product in the marketplace also had to shift.

Although some preliminary discussions had taken place with Teranet Inc., the fact of outstanding litigation between Teranet Inc. and many members of the Association prevented this collaboration from moving ahead. Instead, the Task Force Group refocused its efforts into the development of internal capacity within the AOLS to advance the objectives of a digital cadastre that would integrate information already available to land surveyors, with additional information on a go forward basis that could easily be collected and distributed by member firms. As a business foundation for advancing such an approach, the Task Force embarked on a number of "100 Day Projects" which were designed to test the viability of other survey products and services that were seen to have potential value. A 100 Day Project is a reference to the timeline within which a business process would be closely examined, with improvements designed and tested to enhance the process. Half way through, a preliminary assessment would be made as to whether or not to continue the project. If there was a strong indication of benefit to the overall business process from continuing the Project, then it would be allowed to proceed to completion; results would then be evaluated for purposes of being able to provide a new model for products and services that could be offered by land surveyors and their firms. To be clear, a 100 Day Project is not the Ontario version of a cadastre. A 100 Day Project focuses on a potential business opportunity that would leverage information that could be best aggregated and distributed through a cadastre, but the cadastre itself would still need to take shape over the



land to real space and time on the ground (as opposed to a virtual representation) but also the information residing in the system can be dealt with and retrieved electronically. Accordingly, a paper record, survey plan, or other document that might exist in its original historic form can be made “digital” through a scanning process and that in turn facilitates electronic retrieval.

There are of course many considerations that come into play beyond just the immediate intellectual property, copyright, privacy, and business concerns. The overriding public interest in being able to assist in the development of an Ontario Digital Cadastre that leverages surveyors’ knowledge as well as information

following months in a fashion that had both economic justification, as well as a strong public interest component. The update on the Ontario Digital Cadastre at the Annual Meeting was followed with a number of presentations that elaborated on the relative success of several 100 Day Projects.

At this point a reader may well wonder what is meant by “Ontario Digital Cadastre”. The concept of a cadastre is of course relatively simple but, the complexity comes from its application to many layers of information, as well as the integration and connectedness between the layers of information. A common point for all of the layers involves land but, when connectedness to the ground is removed, it becomes a virtual substitute for the survey fabric that is tied to survey monumentation, evidence on the ground, and the kind of maintenance that surveyors had traditionally attended to when providing survey products in the past. A definition of a cadastre can be found in Wikipedia:

“A cadastre commonly includes details of the ownership, the tenure, the precise location (some include GPS coordinates), the dimensions (and area), the cultivations if rural, and the value of individual parcels of land. Cadastres are used by many nations around the world some in conjunction with other records, such as a title register.”¹

As can be appreciated, this definition does not do justice to the complexity that is possible. For that matter, even Ontario’s first *Registry Act* which established in the 1700s a repository for documents that purported to deal with interests in land could be viewed as the first establishment of a cadastre in Ontario. The Municipal Property Assessment Corporation (MPAC) has also developed a land valuation and attribute cadastre that provides information about land for assessment purposes. What makes a cadastre “digital” is not only its ability to link the layers of information about

and data already in their possession is important as a central aspect of the subsequent design of the cadastre itself. In fact, a “design” is necessary and, has been intentionally deferred in order to allow for as many input opportunities as possible before proceeding with a “build”. This approach will minimize misinformation, unsustainability, or lack of participation and commitment from surveyors for further contribution.

The presentation at the AGM in Ottawa culminated in a discussion at the Open Forum on Friday that revisited the preliminary business vehicle for moving forward. Just before the AGM took place, Council had authorized the incorporation of a company known as Ontario Digital Cadastre Corporation (ODCC). This company now exists with AOLS as its only shareholder. AOLS controls the appointment of members to the Board of Directors and ODCC is charged with a responsibility of implementing 100 Day Projects in order to encourage and facilitate initial buy in on the part of members. Essentially, ODCC will start out as a clearing house for the collection of digital information from survey firms willing to participate, which in turn allows for the aggregation across the province of survey data that is formulated and made available as a single gateway for purchasers of that information. Both MPAC and Union Gas have expressed strong interest in entering into contractual relations so as to license the data for their own use and business processes on a go forward basis. This will generate retained revenue for ODCC to proceed with further aspects of the “build” of the cadastre in Ontario that will ensure land surveyors’ involvement in information collection and management, and also the future of the profession itself.

To say that these are interesting times would be an understatement. The opportunities that are evident in the ODCC model, as well as how opportunities were presented to the

membership at the AGM underscore the exciting directions that are possible for the profession. Success will of course depend not only on broad participation, but also on contributions that are possible from members who have joined as part of AOLS's expanded profession. It will also provide a business case and rationale for integrated surveys that might never have existed to the same extent before. Surveyors will be able to look at the future and embrace opportunities that might only have been dreamed of ten years ago.



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¹ <http://en.wikipedia.org/wiki/Cadastre>

The Ontario Digital Cadastre Corporation – The Road Forward

By Mike Power, O.L.S., O.L.I.P.

While many would never have guessed that it would have taken this long, there are others who didn't believe it would ever happen at all...the creation of a for-profit, wholly owned subsidiary of the Association of Ontario Land Surveyors established for the purposes of creating and marketing a collaborative collection of data sets that will ultimately result in a surveyor maintained digital cadastre for the Province of Ontario. And it has the necessary ingredients to keep everyone happy; new found revenue for the surveyors from customers that haven't been served, whose interest in data and plans from Rainy River is just as great as it is in downtown Toronto, a profound benefit to the public from even just the few early commercial clients we've engaged, a legacy to the youth in our profession who have embraced the utility of collaborating on digital data ahead of most of us, and an opportunity to expand the model across the country. While this would normally be the time you'd poke the naysayers in the eye with a pointed stick, I contend that they are to be thanked as ardently as the dyed in the wool supporters, for without their position as the devil's advocates, we may never have been prodded and challenged to reach the conclusion that the Ontario Digital Cadastre Corporation (ODCC) was needed at all.

So now what? How can a shell of a company, with no staff, funding or even its own phone number get us to the finish line? I'm glad you asked, because the Road Forward is even more exciting than the one we've been on for the past two years. It is one that will allow us the opportunity to prove ourselves to client communities that questioned our commitment and to surveyors who couldn't see the forest for the trees. First and foremost, of course, the task at hand is to address the data needs of those commercial clients whose confidence in the membership moving down the digital cadastre path was steadfast from the beginning!

Those who attended the Annual General Meeting (AGM) in Ottawa watched a compilation of video vignettes of surveyors and commercial clients alike, discussing the progress and success of the now legendary 100-Day Projects. The follow-up presentations made by Antoni Wisniowski, the President and CAO of the Municipal Property Assessment Corporation (MPAC) and Frank Seguin, the Manager of Mapping and GIS at Union Gas, gave the audience the opportunity to listen to prospective new clients discuss how they could benefit from a deeper partnership with the Association and how such a relationship would yield financial benefits to surveyors.

MPAC, much to everyone's surprise, found instant value in

Municipality	Plan Number	Area	Volume	Date	Status	Notes	Comments
...
...
...
...

accessing a simple excel table of property dimensions of new lots and Antoni openly shared with those in attendance how it drove benefits and efficiencies to MPAC's land parcel operation. He stated "We want MPAC staff focused on valuation of land, not on transcribing data from plans." He went on to say "surveyors have the data we need. It's clearly in the surveyor's interest, it's clearly in MPAC's interest and most importantly it's in the public's interest." On the 20 excel submissions made during the 100-Day Project, MPAC found inaccuracies in their data that resulted in changes in assessment to a number of properties and a net increase of almost \$60,000 in annual property taxes...each year...forever! And that from a pilot project to prove feasibility. And so what did sharing those excel sheets with MPAC ultimately yield; timely and accurate assessments of property to new homeowners, new found tax revenues to municipalities perhaps driving a new community centre program or longer pool hours and the first dollar of new revenue to participating surveyors.

And best yet, this isn't an all or nothing proposition. MPAC recognizes that it will take time to see full adoption of delivery of the 'Property Dimension Report' to ODCC and then to themselves and they're prepared to be patient...for a while. Because the Property Dimension Report is only the first set of data in which they have an interest. Fortunately for us, a shopping list is being developed as you read this, for if the Property Dimension Report can correct their data and avoid the errors associated with area calculations, draft plans could be used to flag the change of status in a vacant parcel of land, grading plans could disclose builder models and square footage, Surveyor's Real Property Reports (SRPRs) could reveal easements affecting a property's use and the building footprint to help determine changes made by comparing it to the

aerial image. And without looking too far downstream, could there be a day where surveyors assigned the Assessment Roll Numbers or even updated the assessment parcel fabric to the benefit of MPAC and municipalities alike? Perhaps best said by Antoni Wisniowski at the conclusion of his presentation, “Our business is assessment; yours is surveying. Why don’t we do what we do best and leave you to do what you do best? You have the data we need.” Expect to hear from the ODCC on how your firm can participate with the MPAC opportunity going forward.

If the MPAC project was an exercise in simplicity, an excel table delivered as an email attachment, the Union Gas project swung to the opposite extreme. By the time the 100th day had elapsed, six survey firms had participated, almost 30 ‘draft’ plans had been uploaded to an FTP site and integrated into Union Gas’ GeoMedia GIS system from Hamilton, Burlington, Milton, Sudbury and Cornwall. Six firms, multiple versions of two CAD systems, differing layering conventions, line weights and symbology, different datums and projections, some plans georeferenced and some not, all transformed seamlessly to meet the CAD and GIS standards set by Union’s environment.

The software, which took less than an hour to reconfigure per survey firm, did not require the adoption of a single CAD standard, did not require a common set of drafting conventions and did not require any firm to make any change to any of their plans. A simple disclosure of the internal conventions that were used to create the plan allowed the software to be configured accordingly and facilitate importing the draft plans to a common environment. From there, following some automated error checking, the plans were transformed and dropped into position on the Union Gas land base.

Of course draft plans, at some point before the final approval state, find their way to Union Gas’s Parcel

Mapping group for integration at no extra cost to them, or any other utility. But there is something to be said for an earlier notification, a seamless maintenance environment and one which could tighten up their land base over time. And best yet, one of the thirty plans tested in the project had yet to make it through to their group, providing an early warning and an opportunity to commence planning infrastructure and personnel.

According to Frank Seguin, Manager of Union Gas’s mapping environment, “there are great short and long term benefits to Union Gas, eliminating the complexity of receiving submissions from multiple sources and in multiple formats, earlier awareness for planning and improving planning and responsiveness to customers.”

And what if a reliable supply of draft plans could be assured; is it possible that utility companies would focus on their engineering responsibilities and disband their own land base group in favour of a surveyor maintained environment?

While these are the two most advanced initiatives falling out of the 100-Day Projects, others are underway with the probability that they’ll attain similar levels of success.

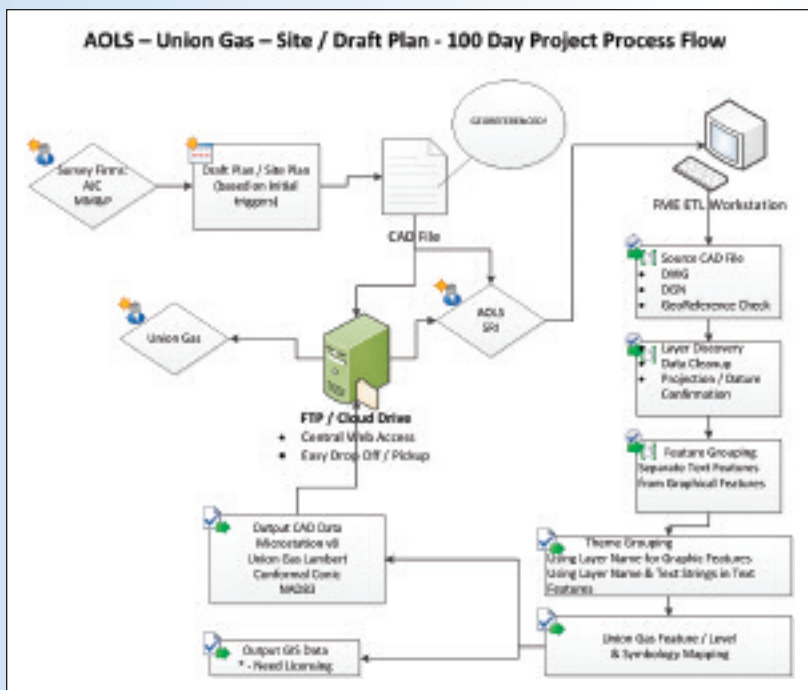
And so the next steps;

- Reach a consensus with the users on the price of the initial feed of data
- Establish a license agreement between the ODCC and interested Survey Firms
- Establish a license agreement between the ODCC and MPAC expanding to Union Gas
- Facilitate the delivery of the data and provide a single point for support
- Remit royalties to those who participate

And before you start polishing your resume to become the first employee of the ODCC, the objective is to avoid spending your membership dues on people, or brick and mortar just yet. Let’s start the revenue flow, satisfy the needs

of several key stakeholders and early adopters and establish the complete business case for the entire cadastral program. For as a good friend of mine will tell you, nothing turns a critic into a convert faster than money. And what’s in front of us today is a multi-year commitment to a report many of you create as a by-product to your work, and one for which there is truly a provincial requirement. What a great way to draw the latent adopters among us out from the shadows.

Mike Power, O.L.S., O.L.I.P. is a Geographic Information Manager. He is the Vice President, Business Development at iLOOKABOUT Corp. He is responsible for managing the development of new business lines and sectors, strengthening the company’s partnerships with channel providers of geo-spatial products and assist clients with visual data-base solutions. He can be reached by email at Mike.Power@iLOOKabout.com.



Geomatics Recruitment & Liaison Committee (GRLC)

By Nigel Day, O.L.S., O.L.I.P.

"Ask not what the AOLS can do for you! Ask what you can do to help yourselves, the public and the AOLS through the GRLC!"

We need your help to succeed! We have committed ourselves to finding a solution! We are seeking ways to develop, to train and to attract new staff members for your firms at all levels and responsibilities in Geomatics and to provide outreach and to market surveying and Geomatics to the general public.

Our Background:

The original University and Colleges Liaison Committee has been re-born under an expanded mandate. This new mandate responds to the fact that we do not have an adequate feeder group of trained or educated technicians and professionals.

What are our committed goals and objectives?

- To encourage and assist primary, secondary and post-secondary students, internationally educated persons, and those in similar professions to select the Geomatics career path and to encourage Geomatics graduates to become members of our Association.
- To promote the term "Geomatics" and all aspects of a Geomatics career to the public at large through meetings, research and outreach.
- To recruit persons for all Geomatics staff positions by liaising with high schools, colleges and universities.
- To attract internationally educated persons to the profession.
- To communicate openly with the AOLS membership and seek their support to recruit and to market.
- To proactively expand our knowledge of positive, result-based outreach initiatives that other domestic and international surveyors' associations have used successfully.

We are keeping our purpose and our solutions for the betterment of the Association foremost in our minds.

Committee Structure

The Committee draws its membership from AOLS members and staff, educators and their staff, consultants, Geomatics students, articling students and others closely tied to the Geomatics profession. We currently have 20 members who fully represent this broad base of backgrounds. We are constantly striving to discover new avenues, to review what has worked for other surveying associations and to debate new ideas. However, only those committee members who are members of our association can be tasked with active work, thus we need additional help. This is the year to work on new initiatives!

We are the group trying to initiate a resurgence of interest

in surveying and Geomatics within the public at large! We are also seeking contact with students at all school levels! We are making a concerted effort to reach the high school level in 2012!

Our meetings are vibrant and everyone is expected to contribute. Our agenda is typically filled with action items and initiative reviews and we try to invite at least one guest to each meeting with something new to share. Past invited guests have included: members of Laval University's faculty; teaching staff from UNB; Bruce Pettit (Fleming College); Robert (Bob) Fencott (Loyalist College); and Iain Greensmith of Esri Canada (who is also now a committee member).

We are also looking at other surveying associations' websites for additional information and insight including those in Alberta and Saskatchewan plus websites from the U.S., Australia and New Zealand. Help researching websites in other countries would be greatly appreciated.



Current Issues and items the GRLC is working on

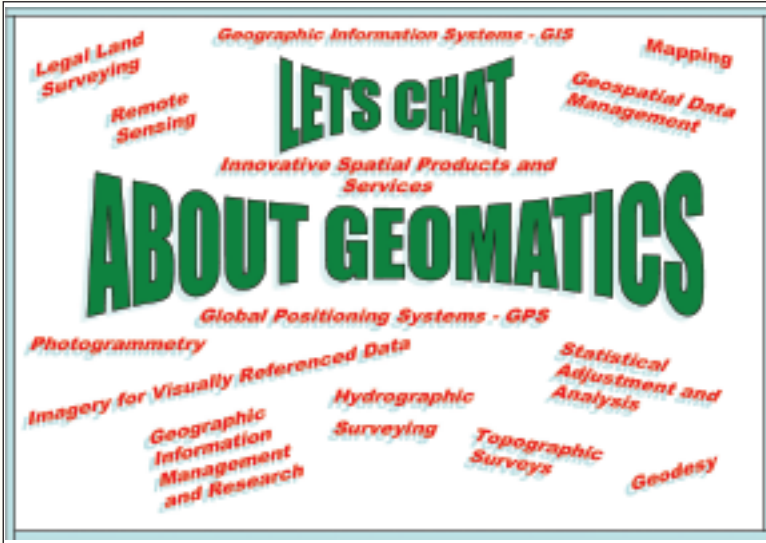
The Term 'GEOMATICS'

The question of whether or not our profession has a marketing hurdle with respect to the term 'Geomatics' is a topic which comes up often within our own Association. The public's lack of understanding of what the term 'Geomatics' means and what 'Geomatics' holds under its broad umbrella is a possible stumbling block to achieving a high degree of outreach success. Teachers and students have confirmed this problem to our committee. As a result, we are actively working to make the term part of the public's vocabulary. Until that time, we are presently reviewing whether or not to continue with the term 'Surveying' in our marketing information.

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Members Outreach 'Tool Kits'

Members of GRLC are presently creating ready to use 'TOOL KITS' for members in the hope that they will present, interact and perform outreach with students and specifically high school students. These tools will include PowerPoints with samples of photos, plan data, interesting projects or project sites that are representative of Geomatics. We will make these tools available on the Members side of the new website once fully developed.



Draft Sample Slide from a Tool Kit PowerPoint.

A member might speak about one or more of these components at an outreach session.

Marketing

We are working with the Public Awareness Committee's (PAC's) support in order to effectively market. We are working closely with them and are developing some information of our own. We are developing, 'possibly' in parallel with the *PSC Salary Study* results, a set of brochures that identify real people in real positions in real firms tied to real salary ranges. The linking of job positions to salary ranges is still being discussed but the mining industry did it with great success. We hope to have quite a number of staff representatives of most positions in surveying or Geomatics firms write brief descriptions of job requirements and why they love their job.

What is OAGEE?

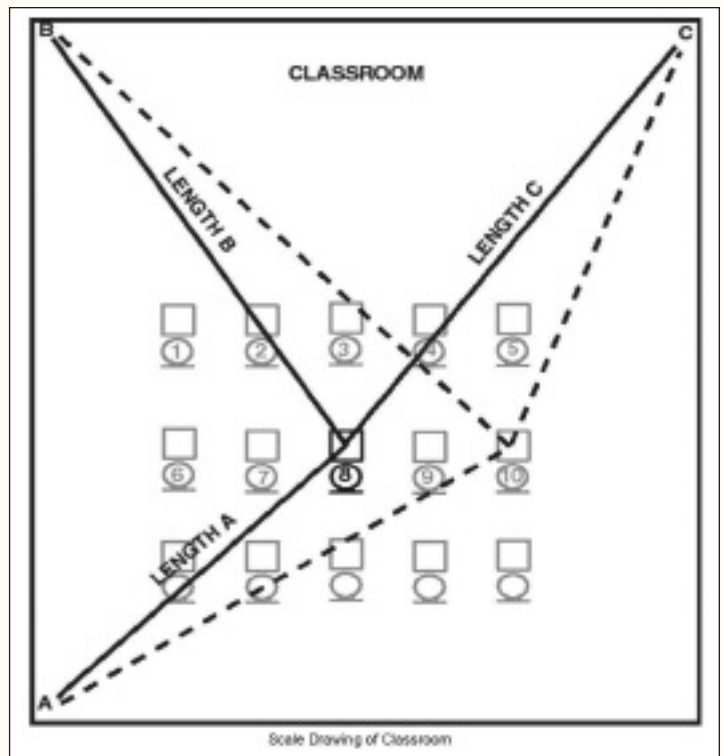
OAGEE is a teachers' group representing the Ontario Association for Geographic and Environmental Education. For the GRLC, liaison with them has proven to be invaluable and of terrific value in our efforts to spread the word about what we do and our professional home, and has the potential to give us the ear of all teachers across Ontario. Several of us, including Michael Matthews (Chair of the PAC) have attended OAGEE Teachers' events and we have published an article in their quarterly magazine which has distribution across Ontario. We hope to publish further articles related to surveying and Geomatics.

Influencing Curriculum in High Schools over the next Decade

We are presently engaged in providing input for the Ontario Geography Curriculum at the High School level for the upcoming 5 years. There has been input from some AOLS members that we also need greater contact with the science and math teachers - and I concur. We had to start somewhere and 'Geomatics' is in the geography curriculum already. Expanding into other areas could and should happen in the future.

Lesson Plans

We purchased an outreach package called 'Surveyor in a Box' from Saskatchewan to help get us started. There are some useful ideas here which we will customize but we also need to generate new hands on and 'Digital' Lesson plans for use in Ontario high schools. Our customizations will and should be based on aspects and samples of real work. If you have an interesting project and can provide notes, plans, photos or stories, please compile a package and send it to me. I suspect most firms have been involved in some interesting project that might capture the imagination of young students. Examples of lesson plans in the 'Surveyor in a Box' include Build a Railroad, CSI Surveyor, GPS Tabletop, Where Are You?, Map Your Classroom, and Lost Monument.



Map Your Classroom

The students measure the vectors and place them in a table. They are then required to scale down the measurements by a scale factor and re-create the classroom on a new page.

cont'd on page 14

Direct Outreach into Schools

We intend to compile maps, air photos, old plans and interesting items that could be shared with Geography departments, school counsellors or others. This work is just commencing. Presently, Geography is the main introductory home for Geomatics in the high schools. The challenge is that many geography teachers are intimidated by much of the new technology surrounding Geomatics (such as GIS Software, data structures and GPS data collection.)

What can the Regional Groups do to help?

We intend to engage Regional Group Chairs and members to attend events with portions of the pre-packaged 'TOOL KITS' or they may substitute information reflective of their specific company's work projects. Personal stories of surveying and Geomatics with some hands-on demonstrations of equipment appear to be very effective with high school students.

The Website

We are working to develop a section in the soon-to-be functioning, new Association website which has clear and useful marketing and recruitment information including 'Tool Kits' and 'Lesson Plans'.

Finding seed money to help develop lesson plans and resources for schools:

There are areas within government organizations where money for materials development for schools can be found. Proposals need to be developed and potential contacts explored in order to try and secure development funding.

As you can see, we are working on a number of initiatives and we need your help! Thus, I will summarize how you could help us with our needs:

1. Volunteer as a committee member or as someone who could simply help with one aspect of an initiative such as a lesson plan, Tool Kit, data mining and researching websites or other marketing creations.

2. Attend schools and community events in order to liaise, provide outreach and market to specific groups.

3. Explore the possibilities of finding dollars from government initiatives and funding to further develop both the 'Surveyor in a Box' and 'Lesson Plans' as well as other marketing promotions for students and for the public.

4. Develop information for recruitment based upon job descriptions and personal accounts with possible links to salary ranges from the study.

5. Help with developing and editing information for the new Website. 

Any time, ideas, article or lesson plan creation or review, or direct outreach efforts will be greatly appreciated! We thank you for your consideration to help us in advance!

Nigel Day is a Project Surveyor with the Ministry of Transportation in Kingston. He is presently the Chair of the Geomatics Recruitment and Liaison Committee (GRLC). This article is based on his presentation in the session "Attracting Young People to the Profession" at the AGM. Please contact him at Nigel.day@ontario.ca with ideas, suggestions or with your willingness to lend a hand or be part of the Committee.

Pathways to Competency-based Assessment and Recruitment

By Bruce Millar



The Association of Ontario Land Surveyors (AOLS) has managed an exciting and important project over the past four years. “*The Pathways to Fairness and Equity*” Project will end March 31st, 2012. An extension has been applied for but, as of this date, no approval has been received.

At the AOLS Annual General Meeting a presentation was made regarding recruitment. Nigel Day, Chair of the Geomatics Recruitment and Liaison Committee (GRLC) offered a perspective on directions and approaches that are being taken and considered at the Committee level. These efforts are important and urgent, because the AOLS membership reflects the demography of society. Baby boomers are leaving in ever increasing numbers and the addition of new members is not keeping up with current attrition.

There are only a few sources of new surveyors. The traditional high school graduate who chooses to enter Canadian university programs in Geomatics continues to be an important element. The GRLC is taking steps to increase awareness and participation with this group. Nigel outlined efforts in this area in his lively speech to the assembled group.

In addition to young Canadian university Geomatics

Program graduates, there are some other sources of potential new surveyors. These sources include adults migrating from other professional disciplines to the Surveying profession; or adults at different levels of the Surveying profession (i.e., technologists and technicians) who wish to “up-skill” and secure an OLS designation. Finally, there are Internationally Educated People (IEPs) who are already recognized surveyors in other countries, who are aspiring to become OLSs.

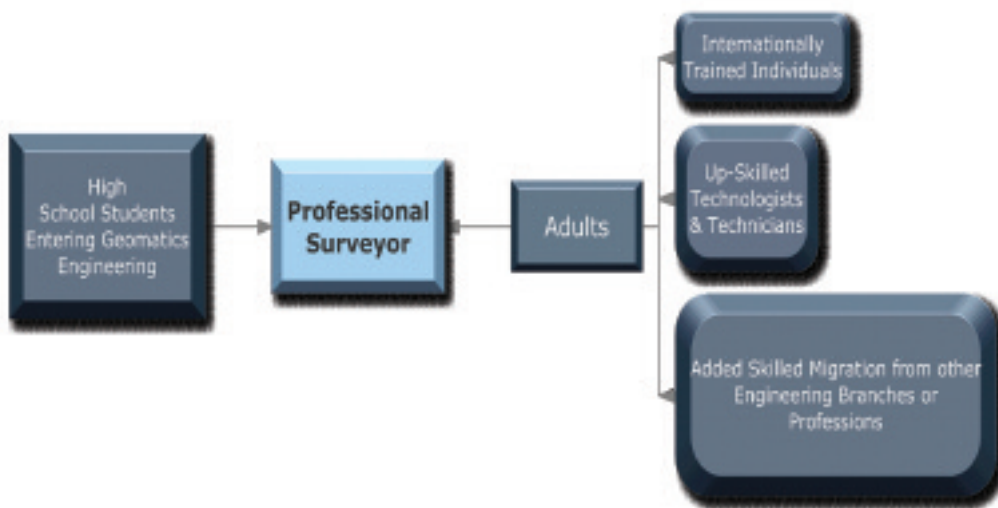
This article addresses the Pathways Project’s usefulness in the area of recruiting adults of all profiles to the Surveying Profession.

The first element that needs to be understood is the problem with only using credential-based assessment. Credentials are the main products of post-secondary institutions around the world. There are in excess of 19,000 universities and colleges worldwide. The variety of course content, emphasis, rigour and instructional skill is a huge issue. Even in Canada, different university programs have differences and trying to compare programs and the creden-

tials given to Learners who successfully graduate from the programs is enormously difficult. Furthermore, with a few exceptions (nursing in Ontario), there is no synchronization or harmonization between college level programs and university level programs.

Adding a Competency-Based Assessment (CBA) process to the assessment platform of the AOLS has produced significant benefits. First and foremost is the development of a “competency framework” or “Continuum”, which defines all of the skills/competencies that an OLS may be required to use in the course of his/her practice. It

Sources of New Surveyors



should be noted that “incompetence” is listed as one of only two elements that can cause an OLS to lose his/her licence (the other being ethical misconduct). This implies that a solid list of competencies is a required item for all OLSs.

Secondly, those adults wishing to enter into the profession through immigration, migration from other professions or “up-skilling” from technical levels can self-assess where their strengths and “gaps” are. They are then in a position to decide whether they should start the long and rigorous licensure process.

Finally, CBA as developed by the AOLS has a formidable array of support services. The tools and resources developed during the Pathways Project ensure that the way forward for all adult candidates is supported, rigorous and fair.

Adult learners have very different needs than regular university students. Many have families to support, children and spouses to deal with and are employed full time. All of the elements of the Pathways Project have been built on Adult Learner Friendly Principles. These principles minimize the problems associated with attending regular university programs. The AOLS now offers, through its own resources, six courses. These courses are either e-correspondence or “Blended”. Blended delivery allows learners the choice to be physically present or to participate remotely using the Internet and appropriate software.

In addition to the listings of all competencies, each competency has resources listed to assist with self-study. Because of the CBA and associated support and delivery systems, adult learners are more likely to attempt the migration, up-skilling or adjustment to an Ontario environment.

The Project team is optimistic that the competency framework will continue to be expanded, honed and refined in the coming years. They are working to add Geographic Information Management competencies; to determine how the use of CBA relates to the Internal Agreement on Trade; and to provide advanced standing into university programs for college graduates, working technologists and technicians. To that end, York University, in partnership with the AOLS, will continue to work on making the York University program consistent with the approach and elements of the Pathways project, over the next three years.

The Pathways Project can and should assist with recruitment and the elements developed could help significantly with Continuous Professional Development efforts.



Bruce Millar has been the Project manager for the Pathways to Fairness and Equity Project for the past four years. He has been involved in Adult Learning and Recognizing Prior Learning (RPL) for more than 30 years. As President of Kente Bay Holdings, he served as CEO of seven companies, including serving as the founding President of First Nations Technical Institute. Bruce can be reached at bruce millar@sympatico.ca

Convocation Address

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

Thank you for allowing me to speak here today. I'm very honoured and gratified to be asked to address the graduating class. Nothing builds character more than a good dose of public humiliation.

As we welcome the new surveyors, I reflect back on the evening when I received my commission. The Registrar offered to set aside tickets for my family. I don't think he realized at the time that I am the 6th of seven siblings and my family assembled, could easily fill the front half of this room.

I remember being very self conscious, and nervous, certain I was going to make some huge mistake. I recall the relief that washed over me as the hours of study, hard work and late nights were finally over. I had left the world of theory and could practice real surveying in the real world. I didn't realize at the time that my learning journey was really just getting started.

The most common question I'm asked is how I like my new job? Even though it's not new anymore, I still find it to be an incredibly challenging job. Brian has big shoes to fill, even when he's not wearing his sumo suit. In any given day I can swing from strategic planning to reviewing technical documents. I can be handed questions on subject matter I know nothing about at 10:00 am in the morning and be expected to prepare defendable, credible options by 4:00 pm that afternoon. We're responsible for descriptions over a land mass that covers 87% of the province. We do this with 15 staff and a very small budget. Many days I feel like the split personality of Sally Field in the popular movie Sybil.

I have noticed a couple of trends emerging in my 4 years at MNR. The demand for our services is increasing at a dramatic rate and my ability to attract employees into my workplace is decreasing. You may be finding the same. Well if you are, you're not alone. Nor are we different than most countries in the developed world. In a paper entitled *Surveying: a Profession facing a Global Crisis?* delivered at the European Congress of Surveyors in Strasbourg, the authors wrote:

Surveyors are facing crucial supply and demand problems. Based upon advertisements in professional

magazines and anecdotal evidence, there is now an unprecedented and unfulfilled demand for surveyors in North America, Australia, New Zealand and also in some European Union countries.

I believe we are experiencing the first of that supply problem. Not only are there fewer of us, but we are asked to know more and provide higher value. Projects are more complex and time lines are real.

So what does this mean for the next generation of surveyors? We are entering a time when more people will be out of the workforce than in it. Have you thought about the impacts of the mass exodus of baby boomers from the workplace and its impact on your area of specialty or on your company? This can be a stress point, but it can also be a huge opportunity. I don't mind telling you, I think about this quite a bit. Not with worry or trepidation, but with planning. How can I respond to the pressures that I know are coming and

how can I best spend my time to prepare for that challenge?

With your permission and indulgence, I'll attempt to offer our new members some insights and advice. I don't claim to have all the answers, nor will I suggest that this is even good advice. Izaak, can I borrow that disclaimer?

I think part of the answer lies in working smarter. So just as you had to filter to choose your career in Surveying, I believe you also have to filter to determine how your individual skills sets can produce the highest and best value for the public. What type of work do you want to specialize in? What kinds of people skills

should you develop to be most effective in your business? What types of skills should you hire to create a winning team?

Some of you may want to be on the leading edge of technology; to develop new products and markets. For others it may be managing large projects and collaborating with teams of experts. And yet others may want to negotiate large contracts or market your company.

Find out what you're good at and put it to work. I wish I had discovered this at the beginning of my career. It would have saved me many years of navel gazing. Some excellent resources to determine your unique skills are Myers-Briggs, Herman's Brain Dominance Indicator, DISC, but the best in



my experience is the work of Markus Buckingham with StrengthsFinder. Buckingham's premise is that we all have unique skills and abilities that are hard wired at an early age and that if we can identify what those strengths are, and put them to work, we accomplish high quality work with less effort and we're actually energized by it. On the contrary if we work in our areas of weakness, it requires more effort, we feel out of step and we are drained at the end of the day. You may perform very well in your weak areas, but it drains you. His premise is backed by science and statistics. I have used this for 8 years and have personally seen the resulting benefits in two separate work places where my staff indulged my request. For a manager of people there is no greater reward than seeing your staff excel beyond your highest expectations. So think about it. What was your best day at work? What were you doing? How can you duplicate it?

Once you determine what you are hard wired for, continuous skill development is critical. I don't want to dwell on this too much since you heard this morning about the changes we hope to implement with mandatory professional development. I encourage folks to not solely rely on the training opportunities offered by the Association. Professional Surveyors Canada offers a great suite of training through WebEx sessions that deliver training to you at your desk over the Internet. I attended one very good WebEx and felt that alone paid for my annual membership. But your own training requirements and those of your staff should be personalized to meet your own specific needs.

It is only through continuous learning that we will be sophisticated enough to continue to deliver services of value. Dr. William Patrick Prendergast from the Department of Spatial Information Science in Dublin wrote in a paper entitled *The Future of the Surveying Profession*:

The character of the surveying market is going to change, so surveyors need new skills to compete. Education and Continuing Professional Development are seen as critical for the future. There is an increasing demand for higher qualified professionals in all the surveying sectors.

If you don't like that one how about this as a bumper sticker:

*If you think education is expensive, try ignorance.
Andy McIntyre & Derek Bok*

So we've talked about focusing your efforts to those things that capitalize on your strengths and we've talked about continuous learning. What about communication? How do you think we're doing in this area? Are we communicating effectively with our colleagues? Are we communicating effectively with the public?

The majority of complaints received by the Association seem to indicate we might have some work to do in this area. We heard yesterday from Izaak that our client base is reluctant to use our service. We heard from Antoni that we have inefficiency gaps that went undiscovered for decades. We heard from Mike that we have clients out there that we aren't

even aware of.

It seems we're not alone in this. It's a trait that is common to surveyors. Again from the European Congress on Surveying, the following quote;

If surveyors are to lead multidisciplinary teams of professionals, they must be skilled in communication and people management. It is relevant to note that the Disciplinary Committee of the NZ Institute of Surveyors has observed over many years that poor communication between the surveyor and the client is the root issue behind most of the formal complaints lodged with it.

I have a neighbour who is an OPP officer. Speaking to him one day, he told me about being called to disputes between neighbours. When the occupants produce their surveys of their respective property, the plans don't match. He asked me, "Shouldn't they line up? If you guys can't figure it out how are we supposed to?" I mumbled out some excuse that the historic information isn't always clear, that different emphasis can be placed on different pieces of information. My answer left a bad taste in my mouth. Not only did I do a poor job communicating, I wondered if the two surveyors responsible for the plans had ever talked before they completed their work.

How do you think it makes us look to the public when we have overlapping plans? I have to admit, it makes me squirm. I think the public want to be able to rely on our boundary placements; they want assurances of quality, and they expect that we've done everything possible to solve the confusion. Anything less seems like we are letting them down. Will we always agree? Absolutely not! But we should always make an effort to agree by communicating with each other to reveal the most credible evidence and applying impartial judgment to come to our conclusions. Without it we create disharmony between neighbours.

Communication, communication, communication. Words are powerful things, and a small change can have a dramatic effect. If you disagree, I encourage you to picture this (it's a YouTube clip I saw once):

A blind man sits on the edge of a busy street beside a sign. On the sign is written "I'm blind - please help". People walk on by; the occasional person tosses a coin. A young ad exec walks by, stops, and turns back. She writes something on the sign of the blind man and walks on. Coins fall in a continuous stream for the rest of the day. The ad lady returns at the end of the workday and pauses to see if her minor adjustment had any impact. With a choked up voice, the blind man asked "What did you do?" On the sign was written "It's a beautiful day and I can't see it."

How do you describe what you do? Is there a better way to be clear? Do you have a 30 second elevator speech? If you don't, think about developing one, practise it and refine it until you get the desired effect.

Albert Einstein is quoted as saying: "If you can't explain it to a six year old, you don't understand it yourself."

As a final thought I wish to focus on our ability to adapt. We've had a long history of providing technical services. In the 20 years I've been practising we've moved through EDM's, Total Stations, GPS, LIDAR, CAD and GIS programs, now un-manned aircraft and precision scanning equipment. But anyone with an aptitude for it can learn how to use the latest technology. They will try and some will succeed.

So I believe we must ensure we offer reliable services as well. We have the knowledge and judgment to apply the right technology that is best suited for the circumstances, we can manipulate data to offer a quicker solution, we can build in redundancies to ensure information is rendered properly. When we combine this knowledge with an advanced understanding of land law, local municipal requirements, environment requirements, market trends in any industry, we offer value added services. In short we work collaboratively with other professionals to fill in the gaps to ensure

projects are completed successfully. Our advice is grounded in fact, and experience. It's reliable and trusted and we don't duck when problems occur. We often take these skills for granted, without realizing how rare and important they are.

The release of the baby boom generation from the workplace is going to be challenging, but most definitely exciting. This will be a time of incredible opportunity for our new members. For those who have the ability to adjust, who can accept their current state as a new reality and move forward with a plan; for those who apply their unique skills and abilities efficiently to their craft; for those who maintain their professional skill and knowledge by continuous learning and those who consistently offer ethical, value added services that meet the unique demands of their clients, we have an incredible opportunity to finally reveal the best of ourselves to a public that truly needs our services.



Sites to See

Dig Safe

www.digsafe.ca

April is Dig Safe Month in Ontario.

This month is dedicated to raising awareness of safe digging practices across the province to improve safety and reduce damages to underground plant.

120th Annual General Meeting



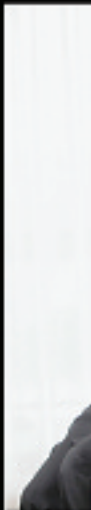
Luc St-Pierre, a.-g., who is the Directeur Général et Secrétaire of the Ordre des arpenteurs-géomètres du Québec, was the keynote speaker. He spoke about the Quebec Cadastral Reform Project, which was launched in 1992.



Susan MacGregor, Surveyor General of Ontario, delivered the charge to the new surveyors at the Convocation Luncheon. Her "insights and advice" to the new members can be found in a copy of her speech on page 18.



Incoming President Paul Benedict (right) presented the Past President's gavel to David Brubacher.



Member Behind Michael Adam S



Eric Ansell



Nigel Day



Bruce Millar



Dan Cormier



David H

Some of the Presenters at the AGM

“The Spatial Profession – A Life Without Limits”

The 120th Annual General Meeting was called to order as the Sergeant-at-Arms, Julia Meldrum Smith carried in the Standard Measure, which historically was used to control the accuracy of surveys in Upper Canada.



Izaak de Rijcke



Mike Power

Presenters of the
“Ontario Digital
Cadastre”



Antoni Wisniowski



Laverne Hanley



Frank Seguin



Surveyors Commissioned in the Last Year
From left to right: Simeon Mitrev, Christopher Bunker,
Stewart McKechnie, and Amy Li. Seated in front:
David Green. (Missing from the photo David Green)



Lee Anne Lane (right) presented the AOLS medallion to
Christine Benedict.



Bill Horwood



Bill Snell

Registrar Bill Buck
(right) looked on
during the
Convocation
Luncheon as
Ontario Land
Surveyor, Stewart
McKechnie
(centre) presented
an antique sextant
to his nephew
Michael
McKechnie who
had just received
his commission.



Event Sponsor



The CG&B Group Inc./Novex Insurance Co. represented by Mark Sampson

5 Platinum Sponsors



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



Cansel represented by Bruce Davies, second from left and Stephen Porter, third from left



Leica Geosystems represented by (left to right) Jean-Sébastien Cormier, Amar Kalsi, former Leica employee Steve Tremblay and Don Edgar



Sokkia Canada represented by (left to right) Devon Krymuza, Dilip Lal, Rajive Sharma and Mike McMillan



Teranet Inc. represented by Richard Norris (right) chatting to Antoni Wisniowski (MPAC)

Welcoming Party



Educational Foundation Director Shawn Hodgson (centre) helps Julia Savitch (seated left) and Lena Kassabian sell fundraiser tickets.



Dan Robinson spins the drum for the Bingo fundraiser.



Members of the Archives and Historical Committee: Doug Culbert (centre) chats to his wife Vicky and Gord Good.

Snapshots



The speaker at the President's Luncheon was Jowi Taylor (left) who built a guitar using pieces that are significant to Canada's culture and history. His book about Voyageur, the Six String Nation guitar can be found in the Book Reviews on page 42. Richard Murray (centre) and David Horwood (right) were both invited to perform with the guitar.



Sergeant-at-Arms Julia Meldrum Smith poses with Drew Annable who was one of the AGM organizers.



Guests from the New York State Association of Professional Surveyors (left to right) President Steve Boddecker, and Malcolm Shaw and his wife Janice head out with Wayne Brubacher and his wife Sylvia to the Lone Star Ranch (photo right) for an evening of entertainment.



Veterans' Dinner



Front left: Gord Good, Des Rasch, Ardon Blackburn, Maureen Mountjoy, Brent England • Back left: Ken Ketchum, Bryan Tamblin, Doug Culbert, Leslie Higginson



Front left: Paul Riddell, Bernie Bezaire, Jim Hill
Back left: Tim Hartley, Ron Jason, Ron Stewart



Front left: Murray LeGris, Bill Buck, Bob Jordan, David Norgrove, Ed Herweyer, Ed Grenkie • Back left: Bob Clipsham, Doug Hunt, Grant Bennett, Rob Stirling, Dan Cormier, Rick Miller



Front left: Mike O'Sullivan, David Horwood, Richard Murray, Jack Monteith, Ross Clarke, Talson Rody • Back left: Charles Fairhall, Rob Harris, John W. Hiley, John R. Hiley, Wayne Brubacher, Harland Moffatt



Front left: Blain Martin, Jack Young, Larry Maughan, David Searles, Doug Simmonds • Back left: Russ Jones, Al Worobec, Wally Kowalenko, Drew Annable



Front left: Paul Church, Eric Ansell, Bob Fligg, David Woodland, Gary Auer, Paul Torrance • Back left: Herman Wimmelbacher, Duncan Ashworth, Peter Moreton, Doug Culham, Mark Watson, Russ Hogan



Hockey at the AGM!

The "winter that never was" didn't discourage the diehards at the annual hockey game at the AGM. Thanks to all who attended and to Pat Hills from Cansel for organizing again this year. Look for an outdoor game in Toronto next year!

The AOLS Professional Liability Program

By Mark Sampson, BBA, FCIP

Negotiations have already begun for the 2012 Professional Liability Insurance Program. By the time this article has been published, you will have already received the insurance renewal package. Please complete it and return the package ASAP.

I had the pleasure of attending the AOLS AGM in Ottawa this past February. I also had the opportunity to give a presentation on the Professional Liability Insurance Program. For those members who did not have a chance to attend, here is a summary of my discussion.

Background:

The AOLS Professional Liability Program was established in 1985 for the members of the Association to obtain errors and omissions liability insurance. The program allows members to obtain very broad insurance coverage at competitive rates. It has been with the same insurer (Novex Group Insurance), the same adjuster (Maltman's), and the same broker (CG&B) for over 25 years.

Over these many years, the program has been very consistent from both a pricing and performance standpoint. However, in the past 3 years there has been an increase in both the frequency and severity of claims.

The number of claims that are reported each year has increased due to a few factors:

- 1) Survey firms are doing a great job reporting all "incidents" that might give rise to a claim.
 - This is very important because your policy is written on a claims-made basis.
 - It is **IMPERATIVE**, that you report any known claims and/or notice of any facts or circumstances that are likely to give rise to a claim, as soon as you become aware of them.
 - Late reporting of a claim could jeopardize your right to indemnity under the policy.
- 2) It might be a sign of the changing business environment because it seems that when an error occurs, everyone is looking to transfer blame to someone else.

The severity of claims has increased over the past few years because of the rising value of land and increased construction costs. In a nutshell, the cost to correct the mistakes is also increasing.

Key Features and Benefits of the AOLS Professional Liability Insurance Program:

I would like to take this opportunity to summarize some of the many benefits of participating in the Professional Liability Insurance program.

1) Broad Coverage

- We have negotiated an extremely broad insurance wording. It is a manuscript policy that was created specifically for land surveyors. Many of the features of the policy are not available in today's standard insurance marketplace.
- Some coverage features include: broad named insured language, deductible not applicable to adjusting or settlement expenses, reduced deductible for claims under \$10,000, coverage continuity for retirement, termination or sale of business.

2) Discovery Coverage for Retirement, Termination, or Sale of Business

- Firms that have been insured by the Program for at least 5 consecutive years are eligible to receive \$500,000 per claim discovery coverage at **no additional cost!**
- This is an important feature of the insurance coverage because when you retire or sell your firm, you could still be liable for work that you performed prior to retirement or sale of your business.
- This is not available in the standard marketplace.
- Higher discovery limits that may be required are available for additional cost. Please contact me to discuss your individual requirements.

3) Experience, Expertise, Continuity, and Claims Handling

- The insurance partners (CG&B, Maltman's, and Intact Insurance), have been representing the AOLS for over 25 years. We know your business, the issues you face, and the type/nature of your claims.
- Over the years, many of you have had first hand experience dealing with Maltman's and specifically with John Breese. Claims are acted upon quickly, professionally, and are often mitigated by John because of his experience and industry knowledge.
- CG&B works diligently year after year to obtain competitive terms on the program. We also respond promptly to all enquiries we receive from the members.

The Hidden Costs of Claims:

Every year, I give a presentation to the Articling Students on professional liability insurance at the AOLS Professional Lecture Course. Part of my presentation is on the hidden costs of claims. Here is an excerpt from my lecture that will serve as a helpful reminder to all OLSs on the hidden costs of claims:

1) Why Losses occur:

- Losses occur because of an error or omission.
- Errors or omissions occur because of a mistake.
- Mistakes occur because the proper process/procedures were not followed or important steps were skipped.

2) Do not take shortcuts!

- Always follow the proper procedures that you have studied/learned!
- Pay particular attention to construction-related work as that is the source of the majority of errors.

3) Hidden Costs:

- Negative Reputation: to the OLS, the firm, and your clients.
- Reduced Productivity: defending an allegation/claim.
- Reduced Profitability: loss of fees, unpaid remedial work, payment of the deductible, and increased premium (claim surcharge).

Frequently Asked Questions:

I often field a number of similar questions from the members regarding the insurance program. Here is a list of the most frequently asked questions; and my answers:

1) How is my premium calculated?


- The premium is based on many factors such as the size of the firm, the type and amount of revenue, the limit of insurance, and the frequency and severity of claims.

2) Am I getting a discount for being claims free?

- Yes!
- Firms that have made a claim under the policy as a result of an error or omission are charged a higher premium. If you are claims free, no surcharge is applied.
- A claim surcharge is applied to the premium that is equal to 12% of the overall claim amount (less the deductible). To minimize the impact in any one year, the surcharge is applied over 3 years for claims that are <\$100,000; and over 6 years for claims that are >\$100,000.
- Firms must pay back any outstanding claim surcharges to the AOLS prior to receiving a Discovery Period insurance certificate.

3) What liability limit should I carry?

- This is a difficult question to answer as every situation is different.
- You are required to carry a minimum of \$500,000 in Professional Liability coverage but the majority of the firms are carrying at least a \$1 million limit.
- The cost to increase this limit to \$1 million is relatively minimal = \$350 per OLS.

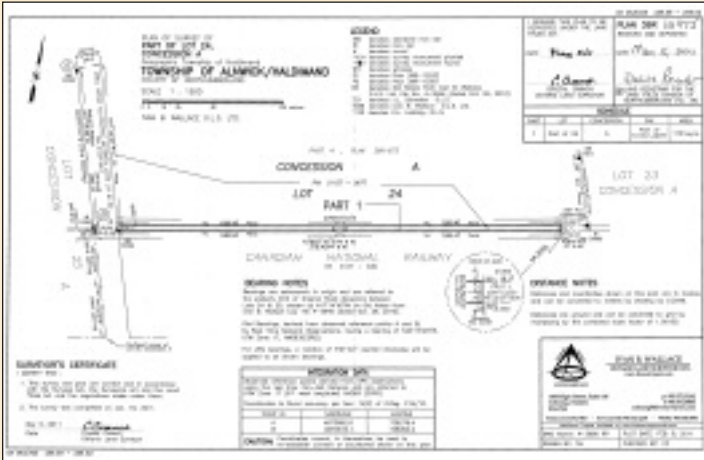
If you have any other questions about the Professional Liability Insurance Program, please contact me directly by email at Mark.Sampson@cgbgroup.com. 

Mark Sampson, BBA, FCIP is the Senior Vice President of The CG&B Group Inc.

When Did Surveyors Stop Surveying?

By Crystal Cranch, O.L.S., O.L.I.P.

THIS IS NOT A SURVEY



This is a survey plan. And a mighty fine survey plan it is. Mighty fine.

So then, what is a survey? What does it mean to survey?

Surveyors survey.

Or at least they should! Read on.

Technology is a great thing. Who is going to argue with that? Technology has changed the way we survey. Who can argue with that? Technology has made us better surveyors. Hmm. I am not convinced. Back before the days of robotic total stations, data collectors and GPS receivers, the completion of field work was very different. Before technology allowed us to make use of the rewards of the digital age, we used parallel offsets and cumbersome calculators. We instinctively used the SIN, COS and TAN buttons on these calculators, and we understood that angles were merely another form of measuring distances. (Think about the x and y-axis). Before we had access to instant global positioning, we used a much lower form of math to a much better outcome. Let me explain.

Today's trained staff understands the basic theory of the high level mathematical analysis that allows us to use satellites to determine precisely where we are on a global scale. We send our field crews out to sites with the latest and greatest in surveying equipment. They can punch buttons and save digital data at a rate that is mind-boggling. But does all this fancy and expensive equipment create better surveys? I am going to argue that the opposite is true.

Today's highly trained staff can use coordinate geometry to assess almost any mathematical solution in boundary retracement. I use math every day. I remember when I first learned how to use COGO, and how I played with the numbers until

I could re-create the same mathematical solution that was created in the original survey. I remember the excitement I felt when I could show that if this one bar was 5cm west and 8cm north, then everything was plan and measure. I had great confidence in my solutions and was excited to be such a friggin' genius. Bring it on! I am the man! I mean, I am the woman! I quickly recognized the benefits of these amazing software packages that would enable us to blow our own minds out with mathematical analysis that would leave our Grade 12 math teachers in a state of awe. Eat your heart out Mr. Brown. This is an A++ solution.

For years I walked around with a mathematical claim of greatness that elevated my status as a surveyor. I was young(er) and more naive. Time and grace has led me to a position in life where I am more apt to admit my earlier flaws. I believed that this combination of technology in the field and software in the office made me a much better surveyor. I felt sorry for those surveyors who had to actually pull out their plumb bobs and run parallel offsets. I was so glad to see those dark ages fall behind us. I believed that technology allowed me the pleasure of living in an enlightened and advanced state. Now I have to admit that time has altered my perception - cleared my vision.

You see, in the dark ages when we ran parallel offsets, we actually did surveys when we were in the field. Today, we collect data. The problem with the blind collection of data is that it takes away the need to think. We are no longer completing surveys when we are in the field, we are just collecting data.


To make matters worse, as time went on, and data collection became more and more the norm; we gave up doing any assessment while in the field. Soon, we were gathering data that was not always the data we needed. Sometimes we gathered too much data. Often we gathered the wrong data. As time went on, there was less and less thought on the part of the field staff about what they were doing - which should have been to "survey". Questions like, "Since that bar looks to be disturbed, what other evidence do I need to pick up to ensure the corner can be properly retraced?" became obsolete. The new question is, "Do I have enough battery power to get through the day?" Heaven forbid if we run out of batteries.

In the dark ages, we could not easily assess high level mathematical solutions. Calculations were a part of the job description, but it meant lengthy and cumbersome formulas and analysis. Back in the dark ages we did not take the time to "play" with the numbers to see if there was a better math-

emational fit. **Rather than spending time assessing mathematical solutions, we spent our time assessing evidence.** I vividly recall when this epiphany hit me. I had spent a lot of time and effort with my COGO friend to find a perfect solution. It resulted in me calling three survey bars out by 3 or 4cm. I was proud of the fact that I had achieved mathematical perfection. But then it hit me. I had seen these bars in the field, and every one of them looked to be in their original position. The survey mantra “original bars in their original locations” came crashing into my world. For months I had nightmares that involved me sitting on a wooden stool while the “good” surveyors pranced around me chanting “Original bars - original location.....”. There were the voices of Lambden, de Rijcke and Stewart chanting an endless and off key chorus. Please, I begged, make it stop. I vowed to better myself. I would not become the laughing-stock of the profession. There are already enough people vying for this honour. (Here is where I am supposed to add ‘lol’ for those reading this without a sense of humour.)

And so I completed an internal audit of my own surveying practices. Not only was I “math’ing” these projects to death, I was looking at field notes that were not “surveys”. The notes showed “stuff” and point numbers, but they did not show any evidence of evidence assessment. They did not indicate a survey was being done. They were just a page of numbers corresponding to a whack of data. Did I have the

right data? Was I missing data? Did the field staff know that their role was to locate enough evidence to retrace the original boundary? Did I know that it was my role to retrace the original boundary?

I now recognize that math can be one of the many tools that I can use to help me survey, but math must take its rightful place behind the assessment of evidence. Math can be used to help re-establish a boundary corner when no other evidence exists. But what happens when we calculate where the old fence corner was - then we tell our field staff to go set a bar there - then they set the bar two feet away from where the old fence post still stands without telling us about it - THAT IS NOT SURVEYING. Technology can be a cool tool used to allow us to survey in the digital age, but using technology without understanding what you are using it for is not helpful. What happens when we use a RTK receiver to locate that bar on the block corner, but not even think to locate that really old fence next door to the property we are surveying - THAT IS NOT SURVEYING. When did surveyors stop surveying? 

Crystal Cranch is the surveyor of record of Ivan B. Wallace Ontario Land Surveyor Ltd. in Cobourg. She has created a blog on the Internet titled *Surveyor Says What???* It can be found at www.surveorsayswhat.wordpress.com. She can also be reached by email at crystal@ibwsurveyors.com.

SIXTH Annual AOLS Graduate Student Geomatics Poster Session Award Winners

FIRST PLACE: Annie Chow, MAsc. and Neda Poursaeid, Ph.D. candidate in the Department of Civil Engineering, Geomatics Option, Ryerson University, supervised by Dr. Songnian Li.

Urban Solar Energy Modeling & Demonstration Technology
Annie Chow, Neda Poursaeid, Dr. Songnian Li

INTRODUCTION
Solar energy potential in complex urban environments depends on available irradiance, geographical location, local environment, technology efficiency and social/economic factors. Many stakeholders across building owners, do not understand solar technologies nor do they understand key issues such as building and roof orientation, shading, and other potential obstacles. These knowledge gaps may lead to missed opportunity or failed installations that could be otherwise avoided with better public awareness.

RESEARCH OBJECTIVE & STUDY AREA
The objective of this research is to develop an integrated urban solar energy modeling and demonstration technology for our existing project. The technology should also be:
 • easily installed and production of solar energy package of selected geographic location
 • user-friendly and easy to understand and use by stakeholders and the surrounding area.

METHODOLOGY
 • Aerial imagery and GIS data
 • 3D modeling and simulation
 • Data collection and analysis
 • Validation and comparison

RESULTS
The study was performed on the selected geographic area which included identifying consumption data used provided by the utility company. The figure below provides a graphical manner of the solar PV installation, clearly illustrating the number of houses generated potential and installed panel. Other graphs show a breakdown of the solar PV installation through the use of 1000 to 2000, which correlates with the number of solar PV panels installed.

Property	Area (m ²)	Area (m ²)	Area (m ²)
Property 1	1000	1000	1000
Property 2	2000	2000	2000
Property 3	3000	3000	3000
Property 4	4000	4000	4000
Property 5	5000	5000	5000
Property 6	6000	6000	6000

CONCLUSIONS & FUTURE WORK
The results of the developed software were positive, and the solar potential of the study area was estimated with high accuracy. The solar potential was estimated using the data obtained from the installed panels for existing solar panels installed with major accuracy of 10% for the study of area. Currently, an interactive web interface is under development to provide the user's custom understanding of the benefits of solar energy.

ACKNOWLEDGMENTS
This project is funded by an Engage Grant (EPG-04-02-03) from the National Science and Engineering Research Council of Canada (NSERC). The authors also acknowledge the support of the project lead who actively involved in the project.

Urban Solar Energy Modeling & Demonstration Technology

ABSTRACT

Solar energy potential in complex urban environments depends on available irradiance, geographical location, local environment, technology efficiency and social/economic factors. Many in the utility sector, including customers, do not understand solar technologies nor do they understand key issues such as building and roof orientation, shading, and other potential obstacles. These knowledge gaps may lead to missed opportunity or failed installations that could be otherwise avoided with better public awareness. Email: annie.chow@ryerson.ca and npoursae@ryerson.ca.

SECOND PLACE: Mahmoud F. Abd El-Rahman, Ph.D. Candidate in the Department of Civil Engineering, Ryerson University, supervised by Dr. Ahmed El-Rabbany.

Evaluation of Various Ionospheric Correction Models for Single-Frequency PPP
Mahmoud F. Abd El-Rahman and Ahmed El-Rabbany

ABSTRACT
High-end dual-frequency GPS receivers are typically used for precise point positioning (PPP). Unfortunately, these systems are expensive and may not provide a cost-effective solution in many instances. The use of low-cost single-frequency GPS receivers, on the other hand, is limited by the effect of ionospheric delay. This poster examines three different ionospheric correction models for precise point positioning with single-frequency receivers. The first of these is the Klobuchar model together with CODE-produced ionospheric coefficients. The other two models are the IGS final global ionospheric maps (GIMs) and the NOAA ionospheric correction model. The results are compared with those obtained with dual-frequency data. Email: mahmoud.abdelrahman@ryerson.ca.

RESULTS
The results of the study show that the Klobuchar model provides the most accurate results, followed by the IGS GIMs and the NOAA model. The results are compared with those obtained with dual-frequency data.

Evaluation of Various Ionospheric Correction Models for Single-Frequency PPP

ABSTRACT

High-end dual-frequency GPS receivers are typically used for precise point positioning (PPP). Unfortunately, these systems are expensive and may not provide a cost-effective solution in many instances. The use of low-cost single-frequency GPS receivers, on the other hand, is limited by the effect of ionospheric delay. This poster examines three different ionospheric correction models for precise point positioning with single-frequency receivers. The first of these is the Klobuchar model together with CODE-produced ionospheric coefficients. The other two models are the IGS final global ionospheric maps (GIMs) and the NOAA ionospheric correction model. The results are compared with those obtained with dual-frequency data. Email: mahmoud.abdelrahman@ryerson.ca.

THIRD PLACE (tie): Akram Afifi, Ph.D. candidate in the Department of Civil Engineering, Geomatics Option, Ryerson University, supervised by Dr. Ahmed El-Rabbany.

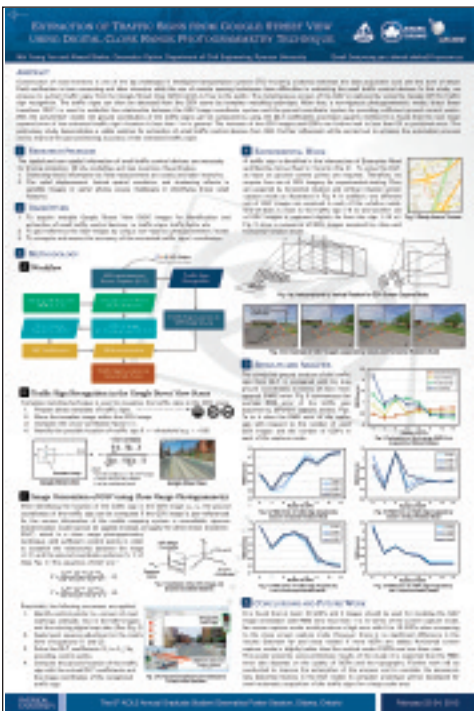
Single Frequency Precise Point Positioning Using GPS and Galileo Systems
Akram Afifi, Ph.D. candidate in the Department of Civil Engineering, Ryerson University, supervised by Dr. Ahmed El-Rabbany.

ABSTRACT
This poster presents the initial results of a research project aimed at improving the accuracy of single-frequency precise point positioning (PPP) using GPS and Galileo systems. The study compares the performance of different ionospheric correction models and evaluates the impact of Galileo signals on the accuracy of the system. The results show that the use of Galileo signals significantly improves the accuracy of single-frequency PPP, especially in urban environments where signal multipath is a major issue. The study also highlights the importance of accurate ionospheric correction models for achieving high-precision results with single-frequency receivers.

Single Frequency Precise Point Positioning Using GPS and Galileo Systems: Some Initial Results

ABSTRACT

Traditionally, precise point positioning (PPP) has been carried out using ionosphere-free linear combinations of carrier-phase and pseudorange GPS measurements. Unfortunately, however, the convergence of the GPS PPP solution has been relatively slow. As a result, GPS PPP is presently limited to static applications. To improve the solution convergence and availability, this research takes advantage of the recently launched experimental Galileo satellites, namely Giove A and Giove B. We combine the L1 and E1 observations of GPS and Galileo systems, respectively, to improve the dual-system PPP solution. This poster shows some initial results of the GPS/Galileo PPP integration. Email: akram.afifi@ryerson.ca.



THIRD PLACE (tie): Wai Yeung Yan, Ph.D. Candidate in the Department of Civil Engineering, Geomatics Option, Ryerson University, supervised by Dr. Ahmed Shaker.

Extraction of Traffic Signs from Google Street View Using Digital Close Range Photogrammetry Technique

ABSTRACT

Construction of road inventory is one of the big challenges in intelligent transportation system (ITS) involving a balance between the data acquisition cost and the level of detail. Field verification is time consuming and labor intensive while the use of remote sensing techniques have difficulties in extracting the small traffic control devices. In this study, we propose to extract traffic signs from the Google Street View (GSV) which is free to the public. The instantaneous screen of the GSV is captured by using the Google API for traffic sign recognition. The traffic signs can then be detected from the GSV scene by template-matching technique. After that, a non-rigorous photogrammetric model, direct linear transform (DLT), is used to establish the relationship between the GSV image coordinate system and the ground coordinate system by providing sufficient ground control points (GCPs). With the solved DLT model, the ground coordinates of the traffic signs can be computed by using the DLT coefficients and least squares method. It is found that the root mean squared error of the extracted traffic sign's location is less than 1 m in general. The increase of the GSV images and GCPs can further lead to less than 0.5 m positional error. The preliminary study demonstrates a viable solution for extraction of small

traffic control devices from GSV. Further refinement will be carried out to enhance the automation process and to improve the geo-positioning accuracy of the extracted traffic signs. Email: waiyeung.yan@ryerson.ca.

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

Mobile Stereo-Mapping System for Unmanned Vehicles

ABSTRACT

This proposed work implements a Mobile Stereo Mapping System (MSMS) designed for remote operation onboard unmanned vehicles for navigation and rapid collection of 3D spatial data through direct georeferencing. The system offers a low cost mapping solution, rapid deployments, high data resolutions, and low risk to operators. Two low-cost consumer digital cameras are calibrated and time-synchronized with an integrated GPS/IMU navigation system to provide directly georeferenced stereo imagery. Mapping coordinates are determined using photogrammetric solutions modified for direct georeferencing. The MSMS is designed to achieve mapping accuracies in the range of 1/100 (RMS) with respect to the given control framework. This poster presents results from a proof of concept test that verifies that the MSMS obtains the required mapping accuracy. Email: julienli@yorku.ca.



Sites to See

Statistics Canada

<http://m.statcan.gc.ca/index-eng.html>

Statistics Canada is the federal agency responsible for producing statistics. Free data on a number of topics, such as Census and geography, is available on its website.

Integrated Surveys – Northern Ontario Perspective

By Bob Halliday, O.L.S., O.L.I.P., C.L.S.

The following article was developed from a presentation at the Geomatics Picnic in September 2011

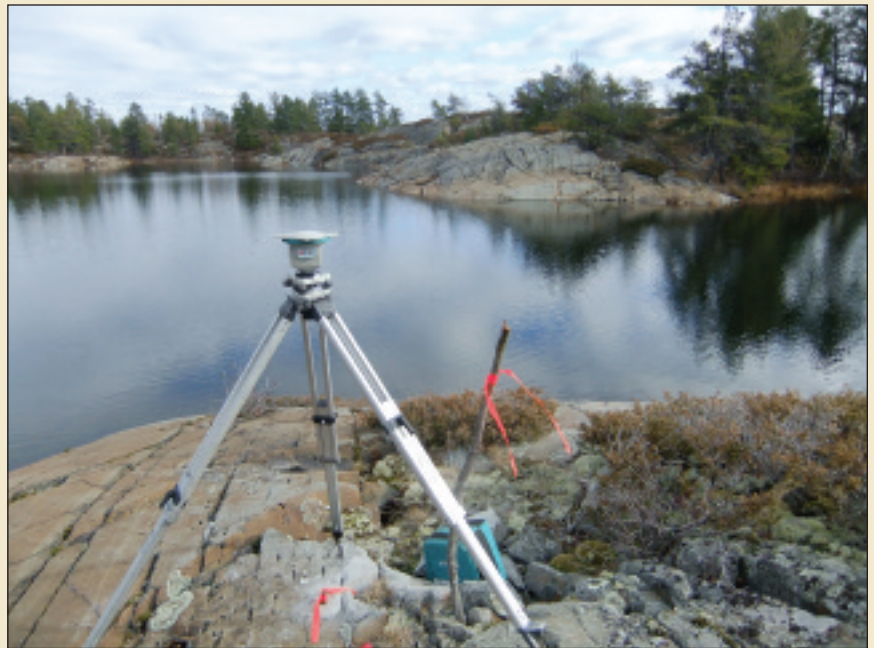
Blain Martin asked me to talk about how we achieve integrated surveys in Northern Ontario and to help illustrate the varied methods that surveyors are using across this vast province to meet the new regulatory requirements. Since I don't practise in the built-up areas of Southern Ontario, and I haven't done any work south of Parry Sound for 32 years, I don't have a full picture of how surveyors in these regions operate under normal circumstances. From talking to surveyors in the south, I gather that network RTK is in regular use, with UTM co-ordinates readily available through one of the service providers. I also understand that canyons exist in the bigger cities where no GPS signal is available due to the number of tall buildings which block out reliable GPS signals. Except for the Sudbury – Parry Sound – Huntsville area, the network GPS option isn't available in the north. Outside of this area, there isn't sufficient demand and cell coverage is spotty and in many places non-existent. On the other hand, the physical obstructions to satellite signals are mostly trees for us, and they can be dealt with using chainsaws. Bringing in co-ordinates from existing control is often a problem, as well, because in many areas much of the control is old or has been destroyed.

When I opened my business in 2004, one of my planned expenses was the purchase of three single frequency GPS receivers. Within six months I purchased two more, because I found I couldn't be competitive without them, despite the up-front cost. When retracing existing survey fabric for bush lots, we often need to make connections to survey bars we know are in place, but might be five to eight km apart, and using GPS is the only practical way to do so.

In Espanola where my office is located, there was an Ontario Base Mapping (OBM) project done in the early 1980's. Of the 10 or so benchmarks, 2 that are in building walls and 1 in a vertical rock face beside the highway are all that remain. Very few of the horizontal control points (HCPs) remain, and those that still exist are in poor locations for use by GPS.

Along the Highway 6 corridor between Espanola and Little Current (approximately 50km), most of the control is still in place. Unfortunately, it seems that the control was

established in two different traverses, (there are two different years associated with these HCP's). Although I'm sure both went through some sort of least squares adjustment, I don't think the data from both networks was



GPS works well in the wilderness

included in a common adjustment of all points. When stations from the different traverses are occupied at the same time, the relative positions differ by about 10cm, whereas if we observe points from within the same network, we consistently get good results. I don't like the idea of holding inconsistent points fixed and forcing the difference into my work, since the stand-alone results are much better than that.

Six years ago, a government client started issuing contracts on First Nations' lands with the requirement that the plans be fully geo-referenced, and in NAD83-CSRS. I quickly decided that since I wanted to participate in some of this work I would need to be able to comply. I also had the experience of doing some work for this same client the previous year. We wasted a lot of time because nearly all of the control in Blind River had been destroyed by highway reconstruction. We ended up spending a day looking for points that no longer existed.

I made some inquiries about the Precise Point Positioning (PPP) Service which I had heard about at the AOLS AGM. I found out what I needed and bought a dual frequency

receiver from Sokkia. With a three hour observation session we normally get statistical values of 5 to 10cm absolute accuracy at the 95% confidence level. Our normal procedure when we are starting a survey in an area where we haven't already got a network is to include one dual frequency observation in a session which also includes a few single frequency receivers, to establish a local network. On another day a second dual frequency session is usually observed, strictly as verification. We could weight the PPP results differently in a least squares adjustment, but I don't think we really prove much that way, and an explanation of what we did would just be confusing ten years from now. Once we have the network in place we reference our RTK system (base and rovers) to the values we have determined for the network.

In the report (see Figure 1) the PPP results show that the duration of the observation session was 2 hours 42 minutes. The height of instrument is also shown (Antenna Reference Point to marker) for verification of the input data. On the bottom half of the report, the geographic and UTM co-ordinates are given, along with ellipsoidal and orthometric heights. Make sure you understand the difference between the ellipsoidal and orthometric heights and use the correct value – in my area there is a difference of about 37m. I have confirmed the vertical reliability several times by observing a PPP session on a published benchmark and have often agreed with the published value within .01m

A report is generated as part of the GPS processing, which show the shape of the network, the processing results for the individual vectors and various reports from the least squares adjustment. All are important: the vector processing page indicates that all vectors worked satisfactorily. If some of them are described as 'float' then there is a problem with some of the data and you will need to vary some of the processing parameters, or possibly even eliminate one or more vectors. In a worst case situation you might need to completely reject one station (there might have been trees or a building partially obstructing this station). The most important part of the

least squares report is where there is a statement reading 'standard deviations appear to be too pessimistic', meaning that the results are much better than the expected default standard deviation. Further in the report is a listing of the final adjusted latitudes and longitudes as well as UTM coordinates, scale factor and convergence from the meridian. This report gives you everything you need to prove the accuracy level of the survey work you have done to provide an integrated survey.

Last fall we received a contract to resurvey part of the northerly boundary of the Whitefish River Indian Reserve. The boundary is about 5km long with good access near the SW end but then only by water or by foot everywhere else. The project required us to provide a fully geo-referenced digital plan showing all existing bars, replace any that were disturbed or missing and increase density so that there was

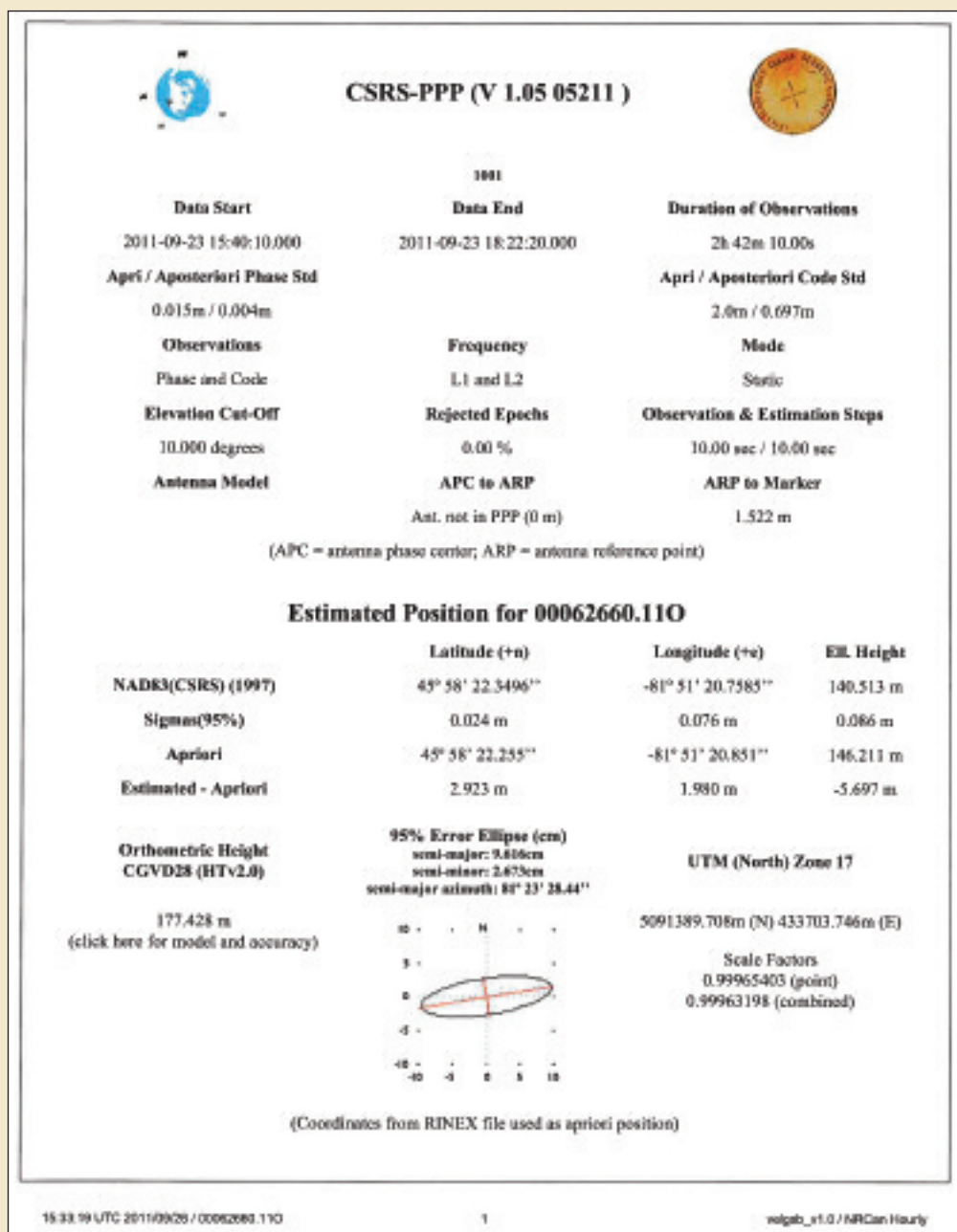


Figure 1.

cont'd on page 30

never more than 300m between the survey monuments. The 5km of line also needed to be cut out and blazed.

Since most of the area is difficult to access, and since I was going to establish the initial control network by myself, I started with a long narrow network somewhat parallel with the highway, and with two new monuments far enough away from the highway that we could leave our RTK base unit set up for the day without fear of someone tampering with it or stealing it. The old plans were co-ordinated before going to the field and once one point was found the calculated points could be shifted to be consistent with their measured values. Our standard field procedure is to set the base in a random location where it has clear sky and is fairly safe, and then to 'localize' to one of the control points. We then stake that point out again, just to be sure everything is



Bob Halliday (left) taking an RTK measurement with crew member Murray Dawson



A survey monument (rock post) along the southerly Reserve boundary

properly saved. Then we stake out a second point in the network, again to make sure the whole system is working properly.

The 600m west of the highway was flagged by RTK then cut out and the fifteen or so existing bars tied in on the first day, not bad production for a start-up day. The same procedure was followed for several days, until we got to the NE corner of the project. That monument is in a low area behind a high hill and radio reception was weak. Rather than risk a poor tie we set another control point high on a hill, so the RTK base could be moved into the northerly area to finish these ties. We also observed a second static session that included two points along the north line and two of the original control points. Holding one point fixed during the adjustment resulted in a comparison within 5mm for the second previously surveyed point, and agreement better than 10mm between

Sites to See

Office of the Surveyor General

www.mnr.gov.on.ca/en/Business/OSG/index.html

The Office of the Surveyor General oversees all Crown land surveys and legal descriptions to ensure Ontario's Crown land is effectively managed. The Office provides professional survey advice and services to the Ministry of Natural Resources and members of the public with property adjacent to Crown land.

The Office of the Surveyor General is also responsible for:

- surveying and maintaining the boundaries of Ontario.
- establishing and maintaining an accurate survey fabric for mapping and legal purposes.
- developing and implementing projects related to cadastral surveying and survey information management.
- maintaining a geographical index of nomenclature of topographical features and place names.
- maintaining all Crown Survey Records (including maps, plans and field notes of surveys made on Crown land)
- representing Ontario at inter-provincial forums on surveying and mapping.

The Surveyor General is appointed by the Lieutenant Governor in Council under Section 5 of the Ministry of Natural Resources Act. The Surveyor General is also the minister's representative on the Council of the Association of Ontario Land Surveyors and the Geographic Names Board.

the static values and RTK values. Check ties were made on another day for the found bars. New bars were planted to meet the 300m requirement and tied in as we proceeded one way, then confirmed by re-localizing to a second point after planting was finished for the day and all planted bars re-tied as we made our way out.

As you will see in the photographs, time was critical since we started in early November, and finished at the end of November. There was some snow on the ground and we had to use the boat to break ice in the morning. Efficiency was greatly enhanced using this approach, and I have far greater confidence in the results we are producing. Sceptics tell me that they have often found discrepancies of .04m when re-measuring RTK work using a Total Station, but when relying on long angles and distances for making these comparisons I suspect that the values generated by older technology have their own problems, which just aren't coming to light.



Easterly Reserve Boundary

Bob Halliday is the owner of Halliday Surveying Inc., which is located in Espanola. He can be reached by email at rdhols@hallidaysurveying.com

Calendar of Events

May 6 to 10, 2012

FIG Working Week 2012

Rome, Italy

www.fig.net/fig2012

May 14 to 17, 2012

Global Geospatial Conference 2012

Spatially Enabling Government, Industry and Citizens

Quebec City, Quebec

www.gsdi.org/gsdiconf/gsdi13/index.html

May 15 to 17, 2012

2012 Canadian Hydrographic Conference

The Arctic – Old Challenges, New Approaches

Niagara Falls, Ontario

<http://chc2012.ca>

June 4 to 7, 2012

HEXAGON 2012

Think Forward

Las Vegas, Nevada

www.hexagonconference.com

July 21 to 24, 2012

Survey Summit

Esri/ACSM

San Diego, California

www.surveysummit.com

August 25 to September 1, 2012

XXII ISPRS Congress 2012

Imaging a Sustainable Future

Melbourne, Australia

www.isprs2012.org

NEWS FROM 1043

Changes to the Register

MEMBERS DECEASED

Carl Frederick Fleischmann	1005	Jan. 19, 2012
Patrick J. Sutherland	1055	Feb. 5, 2012
Leonard M. McNeice	695	Mar. 9, 2012
Alan James Simpson	1038	Mar. 17, 2012
Glenn Edward Giddy	1353	Mar. 23, 2012

RETIREMENTS/RESIGNATIONS

James D. Aitken	1500	Dec. 31, 2011
Douglas R. Aron	1498	Dec. 31, 2011
Ralph W. Barry	1239	Dec. 31, 2011
Peter M. Bull	1552	Dec. 31, 2011
Steven J. Card	1566	Dec. 31, 2011
John Duncan	1242	Dec. 31, 2011
Dieter Eberhardt	1439	Dec. 31, 2011
Dirk Koolhaas	1275	Dec. 31, 2011
Bastian J. Stassen	1365	Dec. 31, 2011

COFA'S RELINQUISHED

B.J. Stassen Limited
Brampton, December 31, 2011
Barry Land Surveying
Chatham, December 31, 2011

COFA'S REVISED

Was: Baker & Benedict Surveying Inc.
Is: Benedict Raithby Inc.
Woodstock, January 27, 2012

Surveyors in Transit

Correction: Please note that the address for **P.J. Williams, O.L.S.** was erroneously reported in the Winter 2012 issue. The correct address is 413 First Avenue East, Shelburne, ON, L0N 1S2.

Tania Batchvarova now works for **Holding Jones Vanderveen Inc.** in Vaughan.

Please note that **Melissa "Mel" Recoskie**, due to marriage, has changed her name to **Melissa Truchon**.

Blake van der Veen no longer works for **Ivan B. Wallace Ontario Land Surveyor Ltd.**

Bastian J. Stassen has retired his license and relinquished his Certificate of Authorization. He will retain his notes and records until further notice.

TBT Surveyors Inc. has moved to 660 Unit C, Balmoral Street, Thunder Bay, ON, P7C 5G9. New phone number is 807-624-5180 and new fax number is 807-624-5161.

George McFarlane has retired from **Public Works and Government Services Canada** and will discontinue practicing

cadastral surveying. He will retain his Geographic Information Manager's designation as an Ontario Land Surveyor.

MTE Ontario Land Surveyors Ltd. has moved to 365 Home Street, Stratford, ON, N5A 2A5. All other contact information remains the same.

Izaak de Rijcke has moved his office to 355 Elmira Road North, Unit 122, Guelph, ON, N1K 1S5. All other contact information remains the same.

Darko Poletto has moved his company, **Spatial Knowledge Engineering Inc.** to 75 Lorraine Drive, Toronto, ON, M2N 2E3.

Tom Reed now works for **Holding Jones Vanderveen Inc.** in Vaughan.

The Monument ID for **Verhaegen Stubberfield Hartley Brewer Bezaire Inc.** has been changed from #1502 to #1744.

Robert Murdoch now works for **Golder Associates Ltd.** in Mississauga.

Thomas Gondo now works for **Monir Precision Monitoring Inc.** in Mississauga.

Paul Wilson Surveying (A division of Matthews, Cameron, Heywood – Kerry T. Howe Surveying Ltd.) has been sold. The notes are now with **Greg Bishop Surveying and Consulting Inc.**

David J. Raithby is the new OLS in charge of the revised Certificate of Authorization for **Benedict Raithby Inc.** formerly **Baker & Benedict Surveying Inc.**

Darren Walker is the OLS in charge of the Parry Sound office of **Tulloch Geomatics Inc.**

Articling student **Nath Segaran** has moved to the Markham office of **J.D. Barnes Limited**.

Robert Harris is now the OLS in charge of **Gifford, Harris Surveying Ltd.** in Trenton.

Lise Currie is now a Project Surveyor at the **Ministry of Transportation of Ontario** in Downsview.

Patrick Sun now works for **MGP Information Systems Ltd.** in Markham.

The Ottawa office of **MMM Geomatics Ontario Limited** has moved to 1145 Hunt Club Road, Suite 300, Ottawa, ON, K1V 0Y3. Phone: 613-736-7200. Fax: 613-736-8710.

Richard Murray now owns the notes and records of **Barry Land Surveying**.

MGF Surveying Services has a new consultation office located at 665 Seagull Lake Road, Arnstein, ON, P0H 1A0. Phone: 705-757-3932. **Marc Fournier** is the OLS in charge.

Gabriel Laframboise has moved from the Whitby office of **J.D. Barnes Limited** to **Sexton McKay Ltd. (A Division of J.D. Barnes Ltd.)** in Markham.

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

Adam Stephen	1948	January 13, 2012	Michael McKechnie	1949	February 23, 2012
Amy Li	CR205	February 23, 2012	Tom Jones	1950	March 26, 2012

EDUCATIONAL FOUNDATION

Lifetime Members at March 31, 2012 (Individual)

BOB MORROW (Honorary)	JAMES D. DEARDEN	HAROLD S. HOWDEN	J.W.L. MONAGHAN	FRED SCHAEFFER
DONALD ANDERSON	ARTHUR DEATH	ROY C. KIRKPATRICK	PATRICK A. MONAGHAN	ANDY SHELPH
DREW ANNABLE	RON DENIS	CINDY KLIAMAN	JOHN D. MONTEITH	H.A. KENDALL SHIPMAN
GEORGE D. ANNIS	TERRY DIETZ	ANNE MARIE KLINKENBERG	PETER MORETON	DOUG SIMMONDS
DOUG ARON	DON ENDLEMAN	WALLY KOWALENKO	JIM NICHOLSON	JOHN SMEETON
BRUCE BAKER	WILLIAM M. FENTON	LENNOX T. LANE	DONALD W. OGILVIE	EDWIN S. (TED) SMITH
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EDUCATIONAL FOUNDATION NEWS

Report from the Annual General Meeting

Every year the AGM Organizing Committee and the Board of Directors of the Educational Foundation plan to hold some fundraising events at the Welcoming Party at the AGM. This year James Ferguson developed and organized a Bingo Game and the Exhibitors participated in a raffle. The Board would like to thank James, the AGM Organizing Committee, the Exhibitors, the ticket sellers and all those who participated to make the evening a success.

The 6th Annual Graduate Student Poster Session, which is sponsored by the Educational Foundation, garnered a lot of interest from the members. Twelve entries from Ryerson University and York University were judged by Bruce Pettit, David Stringer

and Mark Tulloch. Thank you judges. The winning posters and abstracts can be found on page 32.

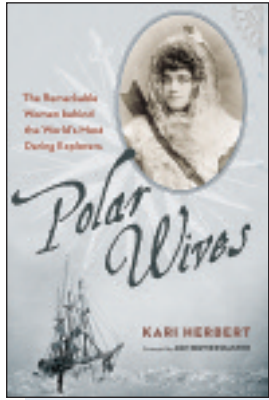
The Foundation would like to thank Nigel Day who was the auctioneer of the Charles Potter Circumferentor at the Open Forum. David Raithby was the highest bidder. He has the honour of displaying the Sighting Compass, which was manufactured circa 1880, in his office for one year. With the assistance of our Parliamentarian and Educational Foundation member Jack Young, the Foundation was able to secure a total of \$13,250 in pledges during the auction and at various functions throughout the AGM. This is another record amount. Thank you Jack and those who made their pledges.



The Secretary of the Educational Foundation, Maureen Mountjoy and David Raithby are pictured with the Charles Potter Circumferentor

The Educational Foundation would like to recognize with thanks a donation made from the members of the North Eastern Regional Group in the memory of William Keatley and a donation made in the memory of Pat Sutherland.

BOOK REVIEWS



Published by Greystone Books
ISBN 978-1-926812-62-5

Polar Wives The Remarkable Women behind the World's Most Daring Explorers

By Kari Herbert – Forward by Jon Bowermaster

Polar Explorers were the superstars of the “heroic age” of exploration, a period spanning in the Victorian and Edwardian eras. In this engaging book, author Kari Herbert explores the unpredictable, often heartbreaking lives of seven remarkable women whose husbands became world-famous for their Arctic and Antarctic expeditions.

Previously consigned to historical footnotes, these women were vibrant, strong-willed individuals in their own right, playing essential roles in supporting, publi-

cizing, defending, and even financing their husbands’ expeditions. Their stories take us not only to the polar wastelands but also through wartorn Macedonia, the lawless outback of Australia, and the plague-riddled ancient cities of the Holy Land.

With extracts from previously unpublished journals and letters, *Polar Wives* will appeal to everyone from travellers and polar enthusiasts to those simply fond of a good story.

Information taken from the publisher.

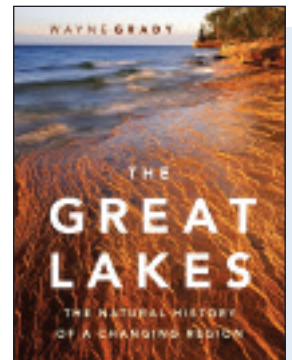
The Great Lakes The Natural History of a Changing Region

By Wayne Grady

The Great Lakes’ drainage basin - the land through which rivers flow as they empty into the lakes - is more than a region; it is almost a nation in itself. Over 764,000 square kilometres (295,000 square miles) in area, including the lakes, it is home to 40 million people and the hub of industry and agriculture in North America. The immense richness of its mineral deposits and natural resources - the vast forests, the tumbling rivers, the lakes teeming with 170 species of fish, the skies alive with 300 species of birds - have attracted and sustained human and wildlife populations for more than 10,000 years. The waterways have served as transportation routes for travel and trade, fishing grounds for the world’s most important inland fishery, resting spots for billions of migrating birds, sources of water for drinking and irrigation, and handy sequesters of poisonous

wastes. Ever since French explorer Samuel de Champlain dipped his hand into Lake Huron and first tasted what he called “La mer douce” - the freshwater sea - the Great Lakes have been admired, feared, exploited, and renewed. The Great Lakes book begins with an account of the geological formation of the lakes - at roughly 10,000 years old, the system is young and still in transition - and an overview of the lakes’ role in relatively recent human history. The lakes basin is defined and explored by its three component forest ecosystems: the Boreal Forest, the Great Lakes/St Lawrence Forest and the Carolinian Forest. Representative plant, bird and animal species associated with each are profiled, along with notable physical, climatic, and environmental features.

Information taken from the publisher.



Published by the David Suzuki Foundation and Greystone Books/D&M Publishers Inc.
ISBN 978-1-55365-804-7

Six String Nation 64 Pieces. 6 Strings. 1 Canada. 1 Guitar

By Jowi Taylor

The Six String Nation guitar, *Voyageur*, is made from sixty-seven pieces of Canadian history: Pierre Trudeau’s canoe paddle is a tone bar, the Grey Nuns convent in Winnipeg—once a classroom to Louis Riel—makes up the back and sides, Paul Henderson’s hockey stick from the 1972 Canada-Russia Summit Series is a detail on the pickguard, the sacred Golden Spruce of Haida Gwaii forms the top face and gold from Maurice Richard’s 1955–56 Stanley Cup ring adorns the ninth fret.

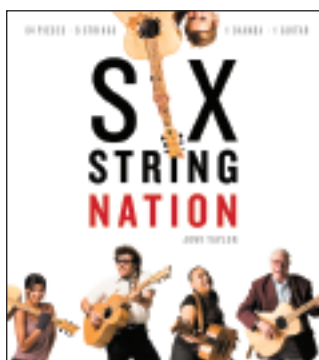
Thanks to a crazed determination to share this guitar and his impassioned vision of Canada with as many Canadians as possible, Jowi Taylor has taken the guitar to festivals, conferences, schools and commu-

nity events, from sea to sea to sea.

Along the way, countless citizens have added their own definitions of what it means to be Canadian, either through music or the very act of engaging with this object that is at once artifact and living instrument. *Six String Nation* allows them to, literally, hold history in their hands—and add a little harmony of their own.

Illustrated with documentary photos and gorgeous portraits of the people that *Voyageur* has encountered, *Six String Nation* chronicles the journey of one special guitar, from conception through construction to the road it still travels across our land.

Information taken from the publisher.



Published by Douglas & McIntyre
ISBN 978-1-55365-393-6

The Last Word

Queen Juliana of the Netherlands

Princess Juliana, daughter of Queen Wilhelmina of the Netherlands was born in The Hague on April 30, 1909. On January 7, 1937 she married a young German Aristocrat, Prince Bernhard of Lippe-Biesterfeld. The couple's first child Princess Beatrix was born in 1938 and their second child Princess Irene in 1939.

During the WWII German occupation of the Netherlands the Prince and Princess decided to leave their country with their two daughters for the United Kingdom. The Princess remained there for a month before taking the children to Ottawa. She resided at Stornoway, which is now the residence of the official leader of the opposition in the suburb of Rockcliffe Park. When her third child Margriet was born, the Governor General of Canada, Alexander Cambridge, Earl of Athlone, granted Royal Assent to a special law declaring Princess Juliana's rooms at the Ottawa Civic Hospital as extraterritorial so that the infant would have exclusively Dutch, not dual nationality.



Princess Juliana's genuine warmth and the gestures of her Canadian hosts created a lasting bond which was reinforced when Canadian soldiers fought and died by the thousands in 1944 and 1945 to liberate the Netherlands. Once home she expressed her gratitude to Canada by sending the city of Ottawa 100,000 tulip bulbs. The following year (1946), Juliana donated another 20,500 bulbs, with the request that a portion of these be planted at the grounds of the Ottawa Civic Hospital where she had given birth to Margriet. At the same time, she promised Ottawa an annual gift of tulips during her lifetime to show her lasting appreciation for Canada's war-time hospitality. Each year Ottawa hosts the Canadian Tulip Festival in celebration of this gift.

Juliana became Queen of the Netherlands with her mother's abdication in 1948 and was succeeded by Queen Beatrix after her own abdication in 1980.

Source: Wikipedia:

http://en.wikipedia.org/wiki/Juliana_of_the_Netherlands.

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

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

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