

M.J. O'Sullivan retired on May 19, 2005 "Making a Difference"

It is perhaps all that we should hope for, at the end of a career, to be able to look back and say: "I think that I have made a difference".

Michael Jefferies O'Sullivan was born in Toronto and after graduating from St. Michael's college, found his way to Ottawa not only to work but also to raise a family. During his time in both the private and public sectors he has faced many of the ups and down faced by most land surveyors associated with land development or the bureaucracy of government.

Mike's professional career has been extraordinary. His career began in the late fifties and has spanned some 46 years. During that period he has seen some of the greatest technological advancements experienced by a profession. At the start of his career 300' chains were used to measure distances, through the Sixties and Seventies came the first of the electronic measuring devices, followed in the eighties by the development of geographic information and global positioning systems. Later, Mike guided Legal Surveys Division of Natural Resources Canada through a review of all federal government programs and more recently this included a reorganization of the Earth Sciences Sector of NRCan from a capacity-driven organization to one that is more in line with the today's government agenda.

Mike talks fondly of those days of his 25 years in the private sector. He moved to Ottawa with Paul Winarski in the late Fifties, and by the mid sixties; he, along with George Annis, had their own firm and by the Seventy and Eighties Annis, O'Sullivan and Goltz and later Annis O'Sullivan Vollebekk was one of the largest survey firms in Ottawa. He continually demonstrated the importance of local knowledge: the region and practice, the history, the development market, the good surveyors and the bad surveyors and as with all things in the private sector the "bottom line". Mike sold his interest in Annis O'Sullivan Vollebekk in 1988 and joined Legal Surveys Division in 1989 as the Assistant to Gerard Raymond the Surveyor General at the time.

Mike's career achievements in the civil service are many. To name just three: he navigated the Division through Program Review and oversaw its reorganization; he was the first to hold the dual role of Surveyor General of Canada Lands and International Boundary Commissioner; and finally he saw the creation of the Association of Canada Lands Surveyors for which he served as a Council member since 1999.

Mike has been active in the affairs of the Association of Canada Lands Surveyors (ACLS). As Surveyor General he sat on the ACLS Council and provided guidance through the formative years of this association. Mike is also now almost a 40-year veteran of the Association of Ontario Land Surveyors.

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President's Message



Thank you for providing me with the opportunity to serve our Association as President for 2005/2006. When I was initially asked to let my name stand for Council, I was a sole practitioner in the Okanagan Valley of B.C. Shortly after being elected to Council my firm was purchased by a larger company. I have recently taken a position as an instructor in the Geomatics Department at the B.C. Institute of Technology, which provides a different perspective on the geomatics sector.

On Council this year we have seen the retirement of some senior members, Past President Carl

Friesen, lay member Dale Scrivens, and Senior Councillor Paul Torrance and Michael O'Sullivan, Surveyor General. Carl brought valuable knowledge of the North that only a northern practitioner can provide and was a valuable representative with the CCLS. Dale has been on the ACLS Council since self-regulation in 1999 and has served diligently, even being an active member of our CPD Committee. Dale was made an ACLS honorary member at our AGM in P.E.I. Paul also has been a real workhorse for you while running his business as a sole practitioner in Elliott Lake, Ontario. Paul made it clear when he came onto Council that he was willing to serve 2 to 3 years. If you are asked to let your name stand for Council please be aware that there are no expectations to serve a 6 year "sentence". Michael has also been on Council since self-regulation, in fact he appeared to testify before Parliament when our Act was read in the house. His retirement party in Ottawa was a great deal of fun and he was made an honorary life member of our Association at our AGM this year. Our longest serving Board of Examiner member, Tim Koepke was also awarded ACLS honorary life membership.

Our new councillors, this year, include Varick Ollerhead of Yellowknife, and George Schlagintweit of Victoria. Varick has a private company and is well known in both private industry and government in the territories and brings the ACLS valuable northern representation. George is manager of quality control with the Canadian Hydrographic Service in Sidney B.C. He brings us much needed representation from the hydrographic community. Our recommended new lay member's name has been submitted to the Minister of Natural Resources and we hope for confirmation shortly. We will be working with the Acting Surveyor General until the post is officially filled.

The strategic plan has helped Council focus on the Association's objectives, several of which are coming to fruition this year such as the consolidation of the Western Canadian Board of Examiners and the ACLS Board of Examiners, the representation of the ACLS on college and University Advisory/Liaison Committees, the marine cadastre initiative, and the certification of hydrographers. Thanks to Bruce Calderbank and his team, we expect to be publishing a new edition of *Offshore Property Rights in Canada* in the near future.

Combining our Annual General Meeting with the Association of Prince Edward Island Land Surveyors was a great success in providing professional development, networking, business meetings, and as a cost savings for all attending associations. The 2006 Annual General Meeting will be held in Kelowna, B.C. in the heart of the Okanagan Valley, home to Canada's finest wines, warmest lakes, best golf courses and sweetest fruit.

Ian M. Lloyd, BCLS, CLS, P. Eng.
President

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Mike has a passion for hunting and fishing. His enthusiasm for fishing is legendary. He does give life to the phrase: if you have to travel take along a rod you never know just when you will have the opportunity to stick a line in the water. It can safely be said that Mike has dropped a line in both oceans, a couple of seas, a bay or two, a great many lakes and innumerable rivers. Marilyn and he have enjoyed many winters day ice fishing from what is a very comfortable fully loaded ice-fishing hut on the Ottawa River.

Mike is also the consummate sailor. He has been a member of the Britannia Yacht Club since the early sixties and has participated in all aspects of this sport. At Britannia, he has been on the Board of Governors, participated in race committees, judged match racing and is considered an authority on the rules. He is the proud owner of a C&C 27 named "Thumper". Each Tuesday and Thursday nights and at every opportunity on the weekends there is another race to be won.

When asked what he was going to do on the first day of his retirement he said that he was going to sleep in. However, on the second day, he was going to putter around on his boat. For a sailor there is nothing more enjoyable than spending a day puttering around on boats.

Among Mike other talents is that he is a musician. He has been the organist of the Holy Cross Catholic Church for the last thirty years. Each Christmas or Easter when asked what he would be doing for the holidays he would say that he would be playing the organ at his church. There have been many business trips where he has hurried back so that he could play for the regular Sunday morning service.

Mike has been married to Marilyn for thirty-five years and they have two children Patricia and David.

Undoubtedly Mike should be able to look back and say that he has made a difference.

Doug Culham CLS, OLS

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Introduction to the Concept of Electronic Signatures

Throughout the years, the surveyor's profession has undergone significant change and surveyors have had to adapt to changing technology. Amongst other things, documents used to be handwritten; now various surveyors' documents and plans are produced using digital technology. Nowadays, we can scarcely imagine exercising our profession without information technology. This technology was more efficient, but until recently, we could not use it to produce official documents because we could not sign the documents. Paper copies were therefore the only official versions of these documents. Today, in order to resolve this problem and give legal status to digital documents, we use electronic signatures (digital signatures). These signatures enable us to reproduce the same environment of trust provided by paper communications.

This text provides a brief introduction to the concept of electronic signatures. There are many sources of information regarding electronic signatures on the Internet. This text is loosely based on a few Websites. In an upcoming issue of *Communique*, we will discuss how surveyors can use electronic signatures on the job, and the applications that electronic signatures have across Canada.

As with handwritten signatures, electronic signatures are used to identify the authors of digital documents, thereby giving them legal status. Electronic signatures provide functionality such as: *authentication, confidentiality, integrity of data and nonrepudiation*.

Authentication is the verification of a person's identity. It guarantees the identity of the person who has signed the document and that of the person receiving it.

Electronic signatures protect the **integrity** of data. This means you can be sure that the message you are reading has not been altered, either voluntarily or involuntarily. Technically speaking, electronic signatures contain a hash. Hashes are the digital fingerprints of signed documents. Any changes made to documents after they have been signed invalidate the hashes. When a message is received, the recipient simply compares the received message's hash with the hash attached to the document. If the message (or the hash) has been altered during transmission, the two hashes will not match.

An electronic signature also provides a nonrepudiation function, which ensures that the sender has indeed sent the message and that the recipient has in fact received it. The sender cannot deny having sent the message and the recipient cannot deny having received it. Nonrepudiation ensures that information cannot be rejected or denied since it bears the person's signature as is the case with handwritten signatures.

How do electronic signatures work?

Electronic signatures are created and checked using digital certificates. To sign information and perform transactions securely, you must have your own unique digital certificate.

Digital certificates are based on key cryptography, a system that utilizes pairs of private and public keys. A key is a unique digital value that is part of an encryption algorithm. The algorithm contains a series of characters utilized to code and decode a document. The private key is only known by its owner and is utilized to create an electronic signature, which is used to sign the document. The user must never disclose this key to anyone. The author's public key is known and utilized by the recipient to verify the electronic signature. It allows the recipient to decrypt the document and verify its integrity. The public key is published and everyone can access it through the certification authority directory.

A pair of keys (public + private) is not actually associated with an identity; they are simply two sets of numbers. The association is made through the digital certificate which associates the public key with an identity (private key). Therefore, the link between the public key and the individual or organization (private key) is certified via a digital certificate issued by a trustworthy third party who has received certification authority (CA).

Combined with encryption, digital certificates provide a more comprehensive security solution, certifying the identities of all the corresponders.

What steps are involved?

First Step: Requesting a Digital Certificate

- Eric needs a digital certificate.

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- He requests a certificate from a registration authority (RA). When the request is made, two keys are generated. A private key stored on Eric's computer and a public key, which is sent to the certification authority (CA). In Quebec, one of the certification authorities is the *Centre de Certification du Québec* (CCQ).
- The registration authority (RA) registers the request and verifies Eric's identity.
- The registration authority (RA) sends its approval to the certification authority (CA) along with the necessary documents.
- The certification authority (CA) generates a digital certificate and published it in its public directory.
- The certification authority (CA) sends the certificate to Eric.
- Eric receives the certificate and can now communicate securely with his friends or business partners.

Second Step, Exchange of Signed / Encrypted Documents

- Eric wants to send a document to Jean-Claude.
- He needs Jean-Claude's public key to encrypt the document.
- He obtains Jean-Claude's public key in the public directory.
- Eric uses Jean-Claude's public key to encrypt the message.
- Eric signs the document with his own private key and sends the document with the attached digital certificate to Jean-Claude.
- Jean-Claude receives the signed and encrypted document from Eric. He decrypts it using his private key (Jean-Claude's private key).
- Jean-Claude can now be sure of the document's integrity and its official status, since it bears Eric's electronic signature.

Conclusion

The basic premises of electronic signatures are as follows:

1- To create electronic signatures we must have a digital certificate.

2- Electronic signatures are based on a key encryption technique, called Asymmetrical Key, which means that two keys are utilized to secure electronic transactions: a private key, known only to the owner of the certificate and a public key, to which all parties have access.

I hope that this text has given you the opportunity to learn a little about the basic concepts of electronic signatures. At first glance, it may seem complicated, but in fact, we hardly even notice the operations taking place in the background. The electronic signature software manages all the details.

In an upcoming media release, we will discuss the applications that electronic signatures have in surveyors' jobs all across Canada.

Eric Groulx, CLS, a-g

GIT Committee Chair

Sources:

<http://www.notarius.com/>

<http://www.signatureelectronique.be/>

<http://www.commentcamarche.net/>

Summary of Council Meetings

Nov. 25, 2004 – Face-to-face, Ottawa, Ontario

- LSD will not be providing marked up copies of plans, so ACLS members will be directed to retain these copies for an amount of time to be determined by the Practice Review Committee.
- Jim Gunn's contract as Practice Review Manager renewed for another two years.
- Council recommended post-mortem face-to-face meeting as soon as possible to discuss recent discipline cases. Council also congratulated Discipline Committee for their handling of the matter.
- Discipline Committee Chairman submitted report to Council.



Dale Scrivens

- A special nominating committee formed to find replacement for outgoing Lay Councillor Dale Scrivens.
- Association will try to get an article published in all surveying association newsletters, as well as Lighthouse and internal CHS newsletter, outlining CLS licensing and

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permitting systems.

- Council intends to partner with CHS in organizing CHC 2006.
- Council supports all recommendations in report on Certification of Hydrographers. George Schlagintweit's report on the position of the CLS Commission within the CHS was also accepted. Letter was sent to the Dominion Hydrographer asking for comments on the reports.
- Discussion between ACLS and representatives from the four western provinces on the new Board of Examiners was very positive. Another meeting is scheduled for December.
- Canada Lands Surveyor commissions offered to Gail Robertson of Edmonton, and A. Wilson Phillips of Winnipeg
- Report on proposed mentoring model presented to Council. Board of Examiners will be asked to revisit model and resubmit recommendations as soon as possible.
- CPD Committee is working on producing DVD's of previous ACLS seminars, and may also take over marketing of CCLS Geoskills seminars. Committee will consider various possibilities and will report back to Council. The scholarship has not been successful so far, and the committee will look into increasing the amount from the present \$500.
- Council approved Terms of Reference for Offshore Issues Committee.

January 31, 2005 - Teleconference

- Council declined offer to move back into joint space with CIG and CCLS
- Discipline Committee is working on a report for Council on recent discipline cases. The appeal period has passed without action.
- Council approves new CLS Regulations Sections 32 and 33 subject to proviso that proposed licence holders sign permit forms.
- ACLS Foundation has been registered with Corporations Canada and is working to get a charity number.
- CPD Committee is looking into hiring someone to market CCLS business seminars and to assist in distance learning work.
- Proposed MOU from CCLS for distance learning was circulated, but ACLS is not ready to sign.
- Approval for granting Honorary Life Membership to Tim Koepke
- Council recommends to government that Steve Horn be appointed as new lay council member.
- Council agrees with the 5% increase in the CCLS levy, making ACLS's fee \$8300.
- Implementation of ACLS staff group insurance program approved by Council.

March 30, 2005 – Teleconference

- Council will obtain a legal opinion on Manitoba Oil Field issue.
- New permit form will be presented to membership at AGM at the same time as amendments.
- Council approves Business Case for new Board of Examiners.
- JC Tétreault will make presentation on new Board of Examiners to AMLS special general meeting.
- ACLS has received request from NALMA to help develop a series of courses for land managers and survey technicians. Council will respond, letting NALMA know the Association is interested, and is putting together a group to develop materials.
- Letter received from the Dominion Hydrographer, expressing concerns about ACLS Certification Model for hydrographers. JC Tétreault will meet with Dominion Hydrographer to discuss.
- CPD Committee awarded \$500 Travel Bursary to Andrew Leyzack.
- In response to Council's request for consultant to help set up and market Business Skills seminars and build a Web portal, it was decided ACLS staff can handle seminar set up and Web site work, but that marketing should be handled by outside firm.
- Canada Lands Surveyor commission offered to James Wilcox of Shawnigan Lake.

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June 21, 2005 – Face-to-Face Meeting, Rodd Brudenell River Resort Hotel, PEI

- ACLS will implement new permit form after new CLS Regulation Section 33 is in place
- ACLS will donate \$12,000 from Practice Review Fund to Association of Canada Lands Surveyors Foundation Inc.
- Canada Lands Surveyor commission offered to Paul Densmore of Calgary, Patrick Marshall of Calgary, Ron Eichel of Swift Current, Martin Larocque of Laval, and Steve Rogers of Edmonton.
- Council decided that if the President is satisfied by the new ACLS/LSD MOU, he has authority to sign on behalf of Council.
- Council recommends marked up plans be kept as part of normal file management policy, for the last five projects at a minimum.
- ACLS Scholarship Foundation looking to increase scholarship amount and reduce paperwork required for applications in an effort to increase number of applicants.
- All parties have approved business case for new Board of Examiners. JC Tétreault will write bylaws.
- Council recommends approval of Year 2004 Auditor's Report by membership at AGM.
- Revenue from monument and plan fees considerably lower than expected. No idea what impact there will be from INAC not funding surveys inside Reserves.
- Finance Committee rejected proposal to increase honoraria for setting and marking exams, leaving the decision with the new Board of Examiners.
- Budget amended to reflect changes in fees and added expense items, to be presented to membership for approval at AGM.
- Council will recommend to membership that Phomin Leslie be hired as 2005 Auditor.
- Council will recommend to membership that 2006 AGM be held in Kelowna BC on June 23, 2006.

June 25, 2005 – Face-to-Face Meeting, Rodd Brudenell River Resort Hotel, PEI

- 2006 AGM will be held in Grand Okanagan Hotel.
- Letter will be sent to CIG offering to let them piggyback on ACLS AGM for seminars.
- For 2007 AGM, ACLS will explore possibility of holding a joint ACLS-OAGQ meeting in Quebec City for OAGQ's 125th anniversary.
- CPD Committee tasked with rewriting terms of reference for Travel Bursary
- JC Tétreault attended meeting with Dominion Hydrographer
- Alleged case of illegal practice reported in Quebec, JC Tétreault will consult with David Jardine as to best course of action.
- Council will hold face-to-face meeting in November in Edmonton.
- Board of Examiners and Standards of Practice Committee will develop a plan to complete new Property Rights book text.
- ACLS will request a digital copy of the old Property Rights book from Surveyor General and ask for the copyright to be transferred to the Association.

Jean-Claude Tétreault
Secretary Treasurer

AGM 2005

The 21st ACLS Annual General Meeting was held June 24 at the Rodd Brudenell River Resort, Cardigan, Prince Edward Island. The meeting was a huge success with approximately 120 members in attendance this year, a bigger turnout than last year. It was the first joint meeting of two surveying associations (ACLS and the Association of Prince Edward Island Land Surveyors).

The membership had the honour of being addressed by the Honourable Patrick Binns, Premier of Prince Edward Island, as well as John Joe Sark, Keptin of the Mi'Kmaq First Nation.

One of the highlights of the conference was the signing of the Mutual Recognition Agreement (MRA) on Labour Mobility by the Association of Prince Edward Island Land Surveyors (APEILS). The MRA came into effect 4 years ago and was signed by all surveying associations except the APEILS.

The following form the new ACLS Council for 2004-2005:

President	Ian Lloyd, Vancouver BC
Vice President	Daniel Fortin, Gatineau QC
Past President	Hal Janes, Edmonton AB
Senior Councillor	Marie Robidoux, Calgary AB
Intermediate Councillor	Varick Ollerhead, Yellowknife NWT
Junior Councillor	George Schlagintweit, Victoria BC
Lay Councillor	Dale Scrivens, Regina SK
Lay Councillor	Susan Christie, Picton ON
Surveyor General	Douglas Culham, Ottawa or Peter Sullivan, Edmonton

The ACLS recognized two members, Tim Koepke and Mike O'Sullivan, for their many important contributions over the years, by presenting them each with Honorary Life Memberships. In addition, the ACLS presented its first Honorary Membership to Dale Scrivens. Dale has been an ACLS Lay Councillor since self-regulation in 1999. He will be truly missed when he leaves his place on Council in September.



We held several seminars in conjunction with the meeting, with the "GPS for Cadastral Surveys" attracting the most participants, followed by the "Digital Cadastral and Registration Systems" seminar. Other seminars included "Offshore Issues", "Loss Control" and "The Canada Lands Survey Systems".

A very full social program included the ACLS-APEILS Golf Tournament, which was a great success. In addition, the AGM offered a cruise down the Brudenell River, horse back riding, and a bus trip around the Cavendish area.

The 2006 AGM will be held in Kelowna, British Columbia, June 23, 2006.

Shauna Murphy
Assistant to the Executive Director
Board of Examiners Administrator

Letter to the Editor

We often hear complaints about the Canadian Institute of Geomatics and what it does for us. Most often these concerns are directed at Geomatica and that it is too scientific for most surveyors. The common response is that it needs to be world class to be recognized – after all it is the image of Canadian surveying and geomatics. Ye, it does represent the image of Canadian geomatics and yes, it is world class! But it is not a magazine for eggheads – it is a magazine for **all** professional surveyors. Why does it enjoy a subscription of 5% of its members from the international fraternity of surveyors – because it is world class.

But is it relevant to Canadian cadastral surveyors? Most definitely! Just in a brief review of the last four issues of Geomatica I find:

- Geomatics and the Law by Alec McEwen –regular articles on current court cases that are of interest specifically to cadastral surveyors.
- Association reports which keep us up to date on the activities of sister associations - particularly provincial survey associations, the ACLS and CCLS.
- A Demographic Study of Land Surveyors in the Maritime Provinces – a concern in every province!
- 25 Years of Geomatics at the University of Calgary
- Official Coordinates, Lawfully Established Monuments and South African Cadastral Surveys by Professor Michael Barry – Cadastral Chair at the U of C.
- Regular features of interest to all surveyors such as Bill Brookes excellent articles entitled Field Notes & Office Memos and Survey Humour, Industry News, Book Reviews, Fifty Years Ago, Presidents Report, The International Scene and the Calendar of Events – general but information that is interesting and relevant to everyone of us!

If there is anyone in this profession that is a technical misfit, I am it, but I still find membership in CIG to be valuable and I enjoy receiving and reading Geomatica – a world class publication – even if I don't read articles with mathematical equations and technical jargon in them. There is enough meat in Geomatica for everyone.

Personally, I feel that as members of the Canadian surveying (geomatics) profession, membership in our national organization is a must. Membership is part of continuing professional development, membership is part of keeping in touch with colleagues and industry developments across the country, membership is being part of the Canadian surveying profession.

The CIG is at a crossroads – there have been a proliferation of new technical organizations springing up recently that compete directly with the CIG and I appreciate that you can't belong to them all but CIG has a long, proud history of bringing the surveying profession together at the national level – we need to support it!

Ken Allred, ALS, CLS

Video Footage of the “Changes in Land Registration and Survey Systems in Canada” Seminar is Now Available

This was taped during the ACLS 2004 AGM in Whitehorse YT.

Subjects include:

- Cadastre 2014: A Vision for a Future Cadastral System
- International Experiences in Property Rights
- Changes in Land Registration and Survey Systems in Canada
- Integration of the Indian Lands Registry
- Options for Land Registration and Survey Systems on Aboriginal Lands
- Yukon First Nation Land Registry Principles
- First Nations Land Management Act Initiative Project

This is available either in DVD or VHS format, and the price is \$75 (plus GST) to cover costs. Contact the ACLS staff.

Executive Director's Notes

The CLS-Entity relationship

Some Canada Lands Surveyors may be under the impression that being somehow linked to an entity (employee, partner, etc.) means that their professional responsibilities are limited. Well, the buck stops here.

The CLS licence holder is ultimately responsible for the work that he or she is performing or supervising. Don't get me wrong, an entity can be involved a liability case or a discipline issue but the individual surveyor is always the key player and has the most to lose.

So beware! As a licence holder within an entity, you must have the authority and resources to perform your professional duty as a Canada Lands Surveyor. You cannot blame the entity if a liability or discipline issue comes up. In the end, it is the actions of the CLS that matter most.

Practice Review and Marked up Plan Copies

In the February issue, I mentioned that for Practice Review purposes, ACLS licence holders would be required to retain the "marked up plan copies" or "checked prints" from LSD for at least seven years.

After much feedback from members, Council decided to change this policy. Council recommends that everyone should retain all marked up plan copies as part of their normal file management policy but it is now required that ACLS licence holders retain the marked up plan copies for at least the last two years. If in the last two years there are not at least five projects, licence holders are required to retain copies of at least the last five projects.

ACLS Scholarship

The Association of Canada Lands Scholarship Foundation Inc. is proud to announce that a \$500 scholarship was awarded to Mr. Maxime Bourgeois, a third year student in the Bachelor of Geomatics Sciences Program at Laval University in Quebec City.

The Foundation is also glad to announce that the auction following the golf tournament in P.E.I. brought in an amount of \$1,077. Thank you to all who contributed to the event.

Donations are welcomed.

New CLSs

Since the February 2005 issue, we are glad to announce that CLS Commissions were awarded to following people:

- James Wilcox, Shawnigan Lake, BC
- Steven Rogers, Edmonton, AB
- Paul Densmore, Calgary, AB
- Ron Eichel, Swift Current, SK
- Martin Larocque, Laval, QC
- Patrick Marshall, Calgary, AB

Congratulations to all.

Public Awareness

Work is progressing well on the Public Awareness Power Point presentation. The Public Awareness Committee got very positive feedback at the ACLS Affairs Workshop in PEI in June. The plan is to build this tool for use by ACLS members to make presentations to promote the surveying profession in schools, or to groups of lawyers, realtors, general public and so on. It's designed to meet any target audience needs. It has slides on the following topics :

- How to get there for students
- Land surveying
- Cadastral Surveying
- Photogrammetry
- Remote sensing
- Hydrography

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- GIS
- Land Management
- Property Rights Systems

The presentation is split in a series of files which are linked by hyperlinks so that members can go through only the slides he or she needs for a particular audience. It should be ready by the end of the year.

A member of the Committee, Claude Bonnel, NSLS, CLS manned the ACLS booth at the College of Geographic Sciences Career Day on April 12, 2005 in Lawrencetown, NS. Thank you Claude.

The Committee will set up a special repository of newspaper and magazine clips on surveying on the ACLS Web site for access by members and the general public. The Committee needs help from the membership. If you have such clips, please forward them to me and keep your eyes open for articles in your local papers.

Aboriginal Land Managers' Certification Program

The Association of Canada Lands Surveyors has been asked to draft the content of part of two courses on land surveying for the National Aboriginal Land Managers Association (NALMA) Land Managers Certification Program. The ACLS issued a request for proposals on August 31st to all members, and retained the services of a consultant to do the work. The course content must be delivered to NALMA by the end of October.

We believe that it is a tremendous opportunity for the ACLS to raise its profile with the Aboriginal Land Managers.

The ACLS is looking for Mentors

As all CLSs know, studying for CLS exams can be very difficult. The Board of Examiners wants to set up a Mentoring Program to help CLS candidates study for common core as well as professional exams.

The method of communication with candidates would be up to the Mentor.

If you are interested, send me an e-mail with the topic(s) you would be interested in mentoring. A list of topics is included in the Candidate Information Booklet in the "Candidate" section of the Web site. This qualifies as a CPD activity.

Jean-Claude Tétreault
Executive Director

All opinions stated in this newsletter (except for official notices) belong solely to the authors, and do not necessarily reflect those of the Association.

Communique is published free of charge by the Association of Canada Lands Surveyors for its membership. All inquiries should be addressed to:

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Hydrographer Joins Order of Canada

As mentioned in the last issue of Communique, Mike Eaton CLS, (right) has been invested as a Member of the Order of Canada.

Recognized for his dedication, his tireless commitment to his work with the CHS and the development of the electronic chart, Mike was the former head of the Navigation Group, CHS, at Bedford Institute.



**International Federation of Surveyors (FIG) Working Week 2005
and Global Spatial Data Infrastructure (GSDI-8)
Cairo, Egypt, 16-21 April, 2005**



Andrew Layzack

To better understand the objectives of FIG Working Week, the structure and role of the International Federation of Surveyors should be identified. The International Federation of Surveyors (FIG) is a UN-recognised, non-government organization (NGO) comprised of ten technical Commissions representing various surveying disciplines and activities. Commission 4 in particular, strives to represent the interests of hydrographic surveyors from every discipline through participation within their respective national surveying and/or national hydrographic associations. Commission 4 through FIG has formal relations with the International Hydrographic Organisation (IHO), the International Cartographic Association (ICA) and as of this year's Working Week, the International Federation of Hydrographic Societies (IFHS).

Internationally, hydrographic interests are represented by three streams:

The International Hydrographic Organisation (IHO), an intergovernmental organisation (IGO), guided by the participation of Hydrographic offices of its member states with activities primarily directed towards nautical charting; FIG Commission 4, whose direction is governed by hydrographers from private sector, government and academia with activities focused on the development of professional standards and good practice guidelines developed for and by the hydrographic community; and lastly The International Federation of Hydrographic Societies, a learned organisation composed of national Hydrographic associations and societies.

Working Week 2005 was a forum for the Commissions to hold working group meetings, workshops and to present the work of their joint activities through technical sessions.

As a member of the delegation the author's duties and responsibilities were as follows:

- Chair of the Canadian Institute of Geomatics', delegation to the FIG General Assembly. In this capacity, I presented a bid for Edmonton to host the 2010 FIG Congress.
- Vice Chair Administration and Communications (Secretary), Commission 4. At this year's General Assembly I was elected to the position of Chair for the term 2006-2010.
- Rapporteur for Hydrography Technical Sessions 33, 35 and 40- Vertical Reference Surface, Hydrography 1 and Commission 4 Activities respectively.
- Speaker on the CLS Commission and its role as a Certification for Canadian Hydrographic Surveyors (please refer to Global Experience below).
- Commission 4 representative on the FIG Standards Network (part of Commission 1), where I presented a report on ISO CD 19130.2, *Geographic information- Sensor data models for imagery and gridded data*, specifically a compliance assessment for hydrographic applications of a proposed Platform Coordinate Reference System.
- Lastly, I assisted in organizing a technical tour at the offices of the Egyptian Navy Hydrographic Service where delegates had the opportunity to meet the Chief Hydrographer and tour the facility at the Port of Alexandria.

Conclusion / Benefits to the ACLS from a Hydrographic perspective:

ACLS values and Good Practice

The main product of FIG is the development of good practice resulting from the collective research and development of participating nations. For example, the issue of vertical reference surfaces (datums) in data management applications is a going concern especially when merging topographic and Hydrographic data sets. FIG working group 4.2 is in the process of preparing two documents: One, a high-level white paper on the merits

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of adopting a seamless vertical reference surface for hydrography and the other, a recommended “how-to” guide to performing datum transformations.

Working Group 4.3 on Ocean Governance and Coast Zone Management are dealing with issues relevant to defining and managing marine spaces eg. Marine Protected Areas (MPA’s) and the development of a Marine Cadastre for the management and administration of legal rights in the offshore. FIG has been very supportive in furthering these issues which have been lead largely by the Canadian academic community. As the subject of Marine Cadastre is within the Terms of Reference for the ACLS Offshore Issues Committee (OIC), there is a potential for the OIC to benefit from and contribute to the work of Commission 4’s, WG 4.3.

Global Experience

In participating with the FIG, the ACLS stand to benefit immensely from the experiences of their colleagues abroad. New technology and new techniques are introduced and exploited. The fact that FIG has formalized cooperative agreements with organisations like ISO, IHO, ICA and the IFHS helps focus efforts in pulling together international experience to focus on issues pertaining to Hydrography in general.

The link for hydrography is obvious because Hydrographic practice is international in scope. Hydrographic standards for data acquisition and nautical cartography are based international standards as are the standards for professional competence and expertise. FIG Commission 4 has a strong link with the IHO and has co-published documents prescribing standards and best practice significant for the surveying community. The IHO has long recommended that member states establish programs to certify individual Hydrographers. Given the work of the ACLS Offshore Issues Committee and its Task Force on the Certification of Hydrographers, this year’s Working Week provided an excellent opportunity for me to exchange information and experiences on the topic as well as promote the aims, objectives and role of the ACLS within the Canadian surveying community. To our benefit, the Australasian Hydrographic Accreditation Panel presented the details of their certification program at this year’s Working Week and subsequently is seeking an endorsement for this program. Through Commission 4, we may have a mechanism for NGOs to network with the IHO in this regard.

Work of the FIG Commissions

The Commissions are the engine of FIG and through participation with FIG, the ACLS can benefit from direct input to and feedback from the activities of the various commissions and their working groups. Essentially we become stakeholders and hold a share in knowledge and expertise developed internationally. In particular, some of Commission 4’s activities are carried out jointly with Commission 1 (Professional Practice), Commission 5 (Positioning and Measurement) and Commission 7 (Cadastre and Land Management). The topics of a common Vertical Reference Surface and Coastal Zone Management/Marine Cadastre are not only on the forefront of international hydrography but are significant to Canadian Hydrography and are being lead by Canadian Institutions. Although the Canadian Institute of Geomatics is the Canadian Member Association of FIG, I believe the ACLS can contribute and benefit from the link to the international community via. FIG for research and the development of good practice with respect to hydrographic and other geomatics issues.

On behalf of Commission 4, I would like to thank the ACLS for their assistance through the professional development fund in supporting my participation in FIG Working Week 2005.

Andrew Leyzack C.L.S.
Chair Elect Commission 4 (Hydrography)

CIG Loses Bid for FIG Congress in 2010

At the FIG Working Week in Cairo, Egypt, Sydney, Australia was chosen as the site for the 2010 FIG Congress. The Congress is tentatively scheduled for April – May 2010.

Edmonton, Canada and Vienna, Austria were also contenders for the 2010 Congress.

Andrew Leyzack of Burlington, Ontario was elected as chair-elect of Commission 4 – Hydrography. Andrew will take over as Chair of Commission 4 after the next congress in Munich in October 2006.

Seventeen delegates from Canada attended the working week in Cairo presenting a total of twenty papers. A paper entitled *After the Tsunami – How the Surveying profession can participate in the Reconstruction*, by Daniel Roberge of Québec City was chosen as paper of the month and published in the FIG e-newsletter. All papers are available on the FIG website: www.fig.net

The next congress is scheduled for Munich, Germany from October 6-13, 2006. Regional conferences are scheduled for September 26-29, 2005 in Havana, Cuba and March 9-12, 2006 in Accra, Ghana. Further information is available on the FIG web page: www.fig.net

G. K. Allred, ALS, CLS

ACLS General Bylaws Amendments

Members in attendance at the June 24th, 2005 Association of Canada Lands Surveyors Annual General Meeting adopted the budget for the year 2006. Since the budget shows increases in some revenue sources and those sources are stipulated in the ACLS General Bylaws, an amendment is required and must be approved by the membership.

The Association had its first deficit year in 2004. Even though Council has exercised a tight control on costs, income is a challenge.

The ACLS has a unique situation. Because of its statutory obligations, the Association has fixed costs that are not linked to financial activities but has more than 20% of its revenue that is derived from survey work done by its licence holders (levy on plans and monuments). The main problem in 2004 was a drop of 39% in survey work related income. This year's revenue should be about the same. The challenge is to predict survey related revenue six months in advance (budgets of the following year are approved at the AGM).

Costs have increased an average of a little over 5% per year. The ACLS offers more and more services such as Practice Review, Practice Manual, CPD Seminars, first discipline cases, advocacy on important professional issues, a national conference, public awareness initiatives, so its normal that costs increase at a ratio higher than inflation. Council compared the ACLS financial situation with other surveying associations operations and found that the ACLS has one of the lowest costs per member ratio in the business.

Only fees affecting ACLS candidates were increased since self-regulation in 1999. So Council feels that an increase of 5% in regular membership dues in 5 years is reasonable (1% per year which is way below inflation). Permit dues are at a very low level if we compare to similar dues in other surveying associations, so a \$25 increase was very well received by members at the AGM. The \$4 increase in monument levy was also well received since it will be carried over to the clients.

The 2006 budget is posted on the ACLS Web site (members only section, under AGM). If you don't have access to Internet, you can ask the ACLS staff to send you a copy (fax or mail). If you have questions about the budget please contact me or another Finance Committee member.

A yes vote will allow the Association to move forward in its many worthwhile initiatives.

Sincerely,

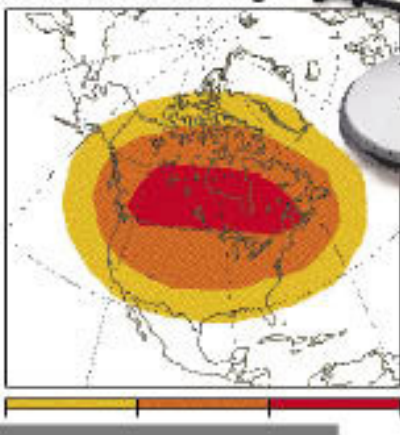
**Ian M. Lloyd, CLS, BCLS, P. Eng.
President**

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Precise Thinking

New Board of Examiners a Reality

A negotiation team of representatives from all four western provinces surveying associations and the Association of Canada Lands Surveyors came up with a business case last February, which then was sent to all five governing bodies to get their approval. The final approval was secured on April 15. The team is now working on drafting the bylaws, deciding on a name, and incorporating the new entity. The target date for the New Board beginning its operations is January 1, 2006.

Once in place, the New Board of Examiners would take over all activities of the Western Canadian Board of Examiners for Land Surveyors, the pre-professional activities of the ACLS Board of Examiners, and the administration of the National Common Core (pre-professional) examinations for land surveyors. The ACLS and provincial association Boards would remain responsible for the setting of professional exams.

Initially, the New Board would be located in Ottawa to facilitate the transition process and later development into its ultimate goal, a true National Board.

Because of its many years of experience in running Common Core Syllabus exams, and since it will be very difficult to function with part time inexperienced staff, the ACLS will provide registrar services, administrative support and the use of its office space for the first year of operation. Another added benefit is that there would not be an interruption of services since the ACLS staff is already doing all Board administrative work.

Jean-Claude Tétreault
Executive Director

Practice Review Update

We began our first cycle of Practice Review last year with a pilot project in the Territories. This year we moved into the Eastern region of the country beginning with the Atlantic Provinces and the offshore. Early in the summer we sent out requests for files to Ontario firms and we are beginning these reviews. By the time the next agm rolls around, we should be into the western region. With the member's input, we have seen many changes in our short history and there are probably more to come.

- When we started, we scanned a variety of plans from each firm. Now, we call in one or more complete files for review. We also return the files at the completion of the review.
- We introduced a feedback questionnaire that goes out with the final report. Members now get to rate us for a change. The ratings go up to 5 and we have been averaging about 4. Not bad, but there is room for improvement.
- Our questionnaires went out too early for many of our reviews. Next time we move into a region we will send them out only when we are ready to do the review.
- The questionnaire needs work. Many of the questions are unnecessary and other questions have to be considered. We also need a special questionnaire for LSD offices.

From our review in the Atlantic Provinces, it is disturbing to find that many members appear to be using LSD for their quality control. We hear the comment that LSD is going to make changes anyway "so we may as well send along our first effort and let them tell us what to change". One possible reason for this is because few members in the Atlantic region do enough work for LSD to get used to the particular requirements of LSD. Another reason is because plans prepared for the Surveyor General have always been somewhat different from plans prepared under provincial jurisdiction. This appears to be changing however; we are seeing more and more similarities between the two every day. We continue to receive excellent cooperation from members and we always welcome opinions and suggestions. Members are also reminded of the Practice Review Committee's role as ombudsman to those members who may have issues with a review or with the process. Feel free to contact any member of this committee with your concerns.

Jim Gunn, NSLS, CLS
Practice Review Manager