

The Changing Tides of Technology

NATIONAL SURVEYORS' CONFERENCE 2014
 May 12-14, 2014 at the Algonquin Resort in picturesque
 St. Andrews by-the-Sea, New Brunswick.

National Surveyors' Conference 2014



The next National Surveyors' Conference will be held May 12-14, 2014 at the Algonquin Resort in picturesque St. Andrews By-the-Sea, New Brunswick.

To reserve your room, please contact the Algonquin Resort at 1-877-231-1731 and remember to mention you are attending the National Surveyors' Conference! Room prices are \$179/night for a traditional room, or \$219/night for an Algonquin View room. This special rate ends April 10, 2014.

Dr. John McLaughlin, Professor and President Emeritus of the University of New Brunswick, will be providing the keynote speech entitled "Professional Renewal in an Era of Deep Change".

Look forward to these exciting seminars!

- The Future of Unmanned Vehicles in Surveying
 - Raid Al-Tahir of the University of New Brunswick
 - Wilson Phillips, CLS, MLS
 - Marie Robidoux, CLS
 - CANSEL
 - Leica
 - Spatial Technologies
- Modernization at the Surveyor General Branch (NRCan)
 - Vision for a modernized CLSS
 - MyCLSS future developments
 - New Manual of Instructions
 - Secure electronic signatures and digital submissions
 - First Nation land tenure reform
 - Other modernization efforts (Northern LTOS, Parcel Fabric Renewal)
- Geodesy Today!
 - CGVD2013 – Post implementation of a new vertical Datum by a speaker to be announced
 - Precise Point Positioning – Reaching Full Potential by a speaker to be announced)
 - Marcelo Santos of UNB on the modernization of GNSS and the new satellite system
 - Peter Dare, "Terrestrial Laser Scanning: the New Technology for Geomatics"
 - Robert William Kingdon, "Precise Geoids for Engineering Applications"

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For those interested in golf, tee times have been reserved for Sunday, May 11 in the afternoon.

David Thompson National Geomatics Awards



Celebrating excellence in the field of geomatics in Canada, the David Thompson National Geomatics Awards was introduced in the winter of 2006-2007. The program was developed in cooperation with Professional Surveyors Canada (then Canadian Council of Land Surveyors).

The next awards will be presented to winners during the upcoming National Surveyors Conference in St. Andrews By-the-Sea, New Brunswick on May 13, 2014 for the following categories:

- Innovation in Geomatics
- Contribution to Society
- Challenging Applications in Cadastral Surveying

Deadline for submissions: **March 31, 2014.**

For more information about the David Thompson Awards, and the application process, please see [here](#).

Summary of Council Meetings

August 27, 2013: Go to Meeting

- Discussion on how funding for PSC might work in the future.
- Council received an update on the modernization of survey instructions.

October 8, 2013: Go to Meeting

- Council received an updated financial report.
- Council received an update on CBEPS and its review of the BCIT program.
- Council discussed Act and Regulation Amendments for changes to the complaints and discipline process.
- Council confirmed that CPD should be on a rolling 3 year cycle.

October 28, 2013: Go to Meeting

- Council heard and discussed a presentation by PSC about the “All-In” model of funding, where the ACLS membership would contribute to PSC.
- Council discussed Act and Regulation Amendments changes for labour mobility.

November 19, 2013: Go to Meeting

- Council discussed Act and Regulation Amendments for changes to the complaints and discipline process and labour mobility.
- Council discussed proposed Guidelines for Regional Groups.

November 28-29, 2013: Face to face

- Council discussed Act and Regulation Amendments for changes to the complaints and discipline process and labour mobility.
- Council received an updated financial report.
- Council decided to ask NRCAN to renew Geoffrey Connolly as a Lay Councillor.
- Council approved the changes made to the David Thompson Awards categories.
- Council discussed bylaw amendments to allow Council to approve the budget for a year.
- Council reviewed the Strategic Planning Report and Project Charters.
- Council approved the proposed Guidelines for Regional Groups.
- Council discussed options for assisting PSC.

January 6, 2014: Go to Meeting

- Council moved to offer a CLS Commission to
 - Crystal Lynn Surette, Grand Prairie, AB
 - Robert E. Holtner, Edmonton, AB
- Council discussed proposed bylaw amendments that would be made to clarify the bylaws.

February 5, 2014: Go to Meeting

- Council discussed electronic signatures for plans through MyCLSS.
- Council discussed bylaw amendments that will be submitted to membership for vote.
- Council approved sending Andrew Leyzack to defend ACLS’s submission for hydrographic certification.
- Council agreed to hold a joint Conference with AOLS in 2017.
- Council discussed potential changes in the Retired membership category.

Executive Director's Notes

New CLSs

Congratulations to the following people who were awarded a CLS Commission since the last issue of Communique:

- Roberta E. Holtner, Sherwood Park, AB
- Crystal Lynn Surette, Grand Prairie, AB and
- Steven William Glass, Calgary, AB

Mandatory Continuing Professional Development (MCPD)

We have just closed the first cycle of the ACLS Mandatory Continuing Professional Development (MCPD) program which ran from January 1st, 2011 to December 31st, 2013.

At the time of writing this article, the ACLS on-line tracking system shows that 12 licensed members did not record the minimum required number of hours for renewal of their licence to practice in 2014.

Sub-section 11.4 (5) of the ACLS General Bylaws stipulates:

...If a licensed member does not meet the minimum MCPD requirements, the Registrar will contact the member to determine if there are extenuating circumstances which may give rise to an exemption. Should there be none and the member does not take reasonable steps to meet the minimum requirements, the member's licence to practice will not be renewed.

Members in default have been notified by e-mail in January and those who did not respond were sent a hard copy letter of notice stipulating that they have until April 14th to respond if they don't want their licence to be revoked.

It was our first cycle and we finally decided on a policy for those members who receive their licence after the beginning of a cycle. It was decided that if a member receives a licence after January 31st in a cycle, his or her three year MCPD cycle will begin on January 1st of the following year. For example, John Smith receives his ACLS licence on March 4th, 2013. John will be required to accumulate 45 hours of valid CPD activities by December 31st, 2016.

It so happens that we have a good variety of distance learning courses available on our GeoEd portal at www.geoed.ca. See article in this issue on GeoEd.

In our conversations with members lacking CPD hours in January we are still seeing members selecting the wrong categories. Many members who attend AGMs or Regional Group meetings entered those activities under the "Participation" category which gives only half of claimed credit hours. These activities should be entered in the "Courses and Seminars" category.

Please do not hesitate to contact [Martha Reeve](#) or [myself](#) if you have problems with the tracking system or a need for clarification on the CPD categories.

The ACLS MCPD tracking system is the envy of most of our sister associations. The AOLS took our system and adapted it to their needs. The surveying association chief administrative officers meet by Go to Meeting twice a year and meet face-to-face once a year. The group is now looking into the possibility of setting up a national CPD tracking system which would allow individuals holding more than one surveying association membership to enter his or her CPD activities only once. The way this seems to be headed, is that the ACLS system would be modified to accommodate the various association CPD requirements and would be implemented on the GeoEd portal. We will keep you posted.

Modernization of the Manual of Instructions

ACLS members had until January 7th, 2014 to provide their feedback on the second draft of the Manual of Instructions which is now entitled "National Standards or the Survey of Canada Lands-Revitalization".

A PDF file containing the second draft is still available on the ACLS Web site at: http://www.acls-aatc.ca/files/National%20Standards_Nov2013.pdf. Even though the deadline is passed, Steven Rogers at SGB will still accept feedback. The final version is expected in March 2014.

Jean-Claude Tétreault, CLS, a.-g., P. Eng., MBA
Executive Director

GeoEd

Something new on GeoEd that we're very excited about is the Expert Witness course!



"Having participated as an expert witness a few times, I know that it can be a very intimidating experience. But this is a way to showcase the role of the surveyor in society. Surveyors should not run away from such opportunities but should be well prepared and this is the way to obtain valuable information to not be caught off guard by savvy lawyers."

Jean-Claude Tétreault, Executive Director, ACLS

As a professional, it is likely you will be asked to give testimony as an expert witness sometime in your career. Are you prepared for experienced and clever lawyers who will use everything at their disposal to discredit your expertise and rattle your composure while on the stand?

The Association of Canada Lands Surveyors collaborated with Four Point learning in the development of a self-paced course covering all aspects of, you, the professional land surveyor, serving as an expert witness. This course is available through the GeoEd website and counts towards CPD credits. Avoid the pitfalls of presenting evidence and be prepared.

Log on to the [GeoEd](#) web and check it out!

More information on the course can be found [here](#).

Please note that you must register on [Four Point Learning](#)'s website to access the course.

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- ~ CLS-69

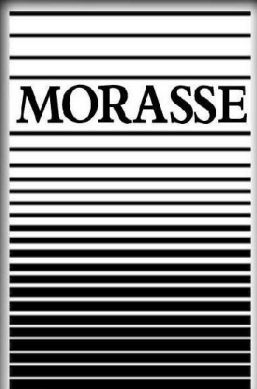
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Tribute to our volunteers

Our volunteers do the bulk of the work for the ACLS and do not get the recognition they deserve.

In this issue, we want to highlight the contribution of both the Aboriginal Liaison and Offshore Issues committees.

Aboriginal Liaison Committee

The Aboriginal Liaison Committee provides a forum for the Association of Canada Lands Surveyors to connect with First Nations communities and organizations. They promote CLSs and their abilities to assist First Nations manage their land related information.

The Aboriginal Liaison Committee is composed of the following members:

- Anne Cole, Chair, Private Practice, ON, Member of Council
- Tania Bigstone, Council liaison, LAB Resource Center, PEI
- Bob Fligg, SGB, ON
- Shauna Goertzen, Private Practice, BC
- Jacques Grondin, SGB, NS
- Joe Iles, Private Practice, YT, Member of Council
- Wilson Phillips, Private Practice, MB
- Marie Robidoux, Oil & Gas Industry (Aboriginal Relations), AB
- Alain Jacob, Public Works Canada, ON
- Leona Irons, Representative from NALMA, ON
- Peter Sullivan, Surveyor General, AB

This committee is working closely with the SGB to facilitate the creation of a strong and reliable property rights infrastructure on First Nations lands. The committee and SGB are collaborating on the Parcel Fabric Renewal initiative which will involve participants from NALMA, LAB Resource Center and other organizations to develop land management models for use by First Nation communities.

Offshore Issues Committee

The purpose of the Offshore Issues Committee is to monitor and inform the ACLS membership on issues affecting the practice of surveying on Offshore Canada Lands through the development of seminars and the promotion of other learning opportunities, and the development of standards of practice.

The Offshore Issues Committee is composed of the following members:

- Derrick Peyton, Chair, NS
- Joe Iles, Council Liaison, YT
- Bruce Calderbank, AB
- Harold Jones, ON
- Tim Janzen, ON
- Kirsten Greenfield, ON
- Tim Lawrence, NL
- Andrew Leyzack, ON
- José M'Bala, ON

The current initiatives that the Offshore Issues Committee is working on are gaining international accreditation of the ACLS Hydrographic Certification Program (see article "ACLS and Hydrographic Certification" in this issue) and advocacy for the implementation of a marine cadastre in Canada.

Thank you to all our hard working volunteers!

Photo Contest Results

ACLS recently held a photo contest on our Facebook page with great results! With 36 entries, the winners were chosen by popular vote. There were many fantastic photos submitted, but we're pleased to present the two winners:



Title: Occupying Control CHS Survey Pangnirtung, Submitted by: Tim Janzen



Title: First Nation survey in the Yukon - start of a 24km boundary, Submitted by: Pat Burnham

We thank all participants who submitted photos and everyone who voted on their favourites!

The ACLS Hydrographic Surveyors Certification Program

After many years of gathering support from learning institutions, government and industry, the ACLS Council approved the Offshore Issues Committee recommendation to present a submission to the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) for accreditation under the international standards, IHO S5 and S8. Many countries have established hydrographer certification schemes and recently Australia's Spatial Sciences and Surveying Institute (SSSI) earned the first accredited hydrographer certification scheme.

Internationally, countries with marine interests have continued to develop accredited training programs for hydrographic surveyors whereas Canada, a nation with one of the most extensive, navigable inland waterways, coastal and offshore areas; a nation that has played a significant role in the International Hydrographic Organization (IHO) and in promoting the United Nations Convention on the Law of the Sea (UNCLOS), has not. Whereas in 1992, IHO Special Publication 47 listed 9 Canadian courses varying from "Academic" to "Estimated" Category A and B of the FIG/IHO standards, the current (November 2013) "Register of FIG/IHO/ICA- Recognized Courses" shows none.

During a panel discussion held at the 2002 Canadian Hydrographic Conference, participants discussed various topics relating to hydrography. In response to one of the questions which identified the absence of accredited hydrographic training in Canada, it was agreed that "the concept of certification is important for the field of hydrography in general, and that if our agencies are to rely more and more on contractors, we need the confidence that the contracted work was being done to recognised standards". ("Toast and Topics", Lighthouse edition 61) The above statement implies that in order to perform a task to recognised standards, the competence of the individuals executing the task should be measured according to a recognised certification criteria. "Certification is career recognition through the evaluation and approval of individuals engaged in a specific occupation or profession". (Urban and Regional Informations Systems Association (URISA) 2001 statement on its proposed GIS certification program). The creation of a Canadian Certification for Hydrographers was thus borne from two ideas:

- 1- that such a program would promote a requirement for hydrographic training centres of excellence to seek accreditation of their programs; and
- 2- that accredited education alone did not make for Category A or B hydrographic surveyors (a belief long held by the IBSC).

Research into the Certification of Canadian Hydrographers began in 2002 and subsequently developed into a joint project between ACLS and the Canadian Hydrographic Association (CHA). The scope of this joint endeavour extended to study and consultation with many professional stakeholders within the international hydrographic community. The joint CHA-ACLS Task Force presented the proposed model to the ACLS Council in November of 2002. To prepare for its strategic planning update of 2004, the ACLS Council conducted a membership survey and one of the questions was the following:

The ACLS SHOULD be in the business of certification of non-land surveying disciplines:

- Strongly disagree: 4.35%
- Disagree: 9.57%
- Not sure: 30.43%
- Agree: 37.39%
- Strongly agree: 18.26%

With this result in hand, Council decided to add the implementation of the Certification Model to its list of strategic initiatives but at a lower priority after projects such as Mandatory CPD, GeoEd, and MyCLSS.

By 2010, the concept of individual recognition with a national certification scheme was formally endorsed by the International Federation of Surveyors (FIG) and the International Hydrographic Organisation (IHO) and in 2011 the IBSC published guidelines for individual recognition. Within the context of the body of research, international consultation and due recognition of published international guidelines¹, we believe the resulting ACLS certification model has what it takes to become a national certification program for all Canadian hydrographers.

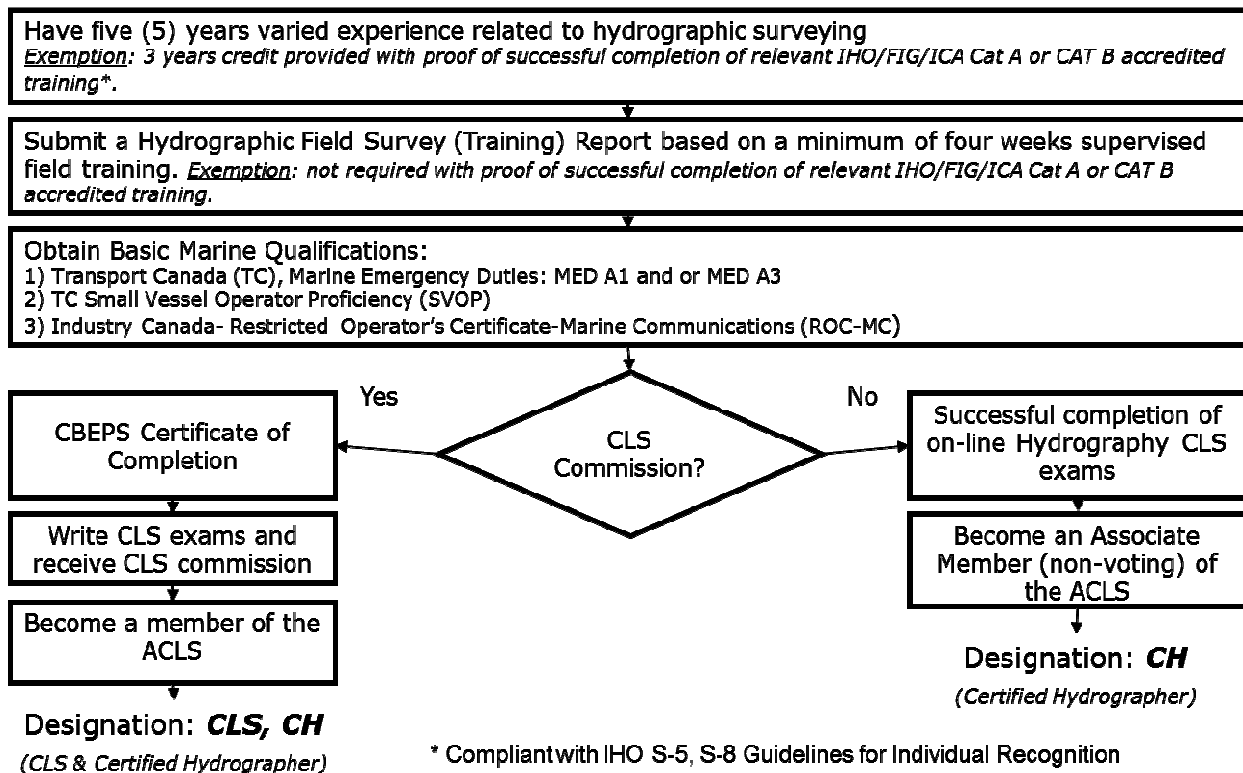
¹ Standards of Competence for Hydrographic Surveyors, S-5, Edition 11.0.1, International Hydrographic Bureau, Monaco, 2011.

HYDROGRAPHIC CERTIFICATION is necessary in order to:

- Provide a formally recognized and structured career path for hydrographic surveyors.
- Establish an expectation of expertise and competency.
- Provide a catalyst to encourage Canadian academia to seek international accreditation of their hydrographic training programs.
- Reduce the risk associated with unqualified and inexperienced persons providing hydrographic services to the public.
- Accommodate the increased level of responsibility bestowed upon hydrographic surveyors.

The ACLS, being a national, bi-lingual, self-regulated, non-governmental, professional organization, which holds jurisdiction over offshore Canada Lands has the capacity to provide an effective administrative and regulatory framework to support a national certification model. For example, the ACLS has a permanent administrative staff and access to the Canadian Board of Examiners for Professional Surveyors to assess academic qualifications. Further, the ACLS already has a candidate screening and accountability process in place that will be used for the model. As well, Certified Hydrographers would be bound by the ACLS Code of Ethics and be subject to Mandatory Continuing Professional Development (CPD) which are essential elements of FIG/IHO/ICA (S-5) international guidelines for individual recognition (certification) programs.

The following is the outline of the proposed model, consisting of two tiers of study and their pre-requisites.



The following organizations have provided letters to support our submission:

- Government
 - Canadian Hydrographic Service of the Department of Fisheries and Oceans Canada
 - Surveyor General Branch of the Department of Natural Resources Canada
- Private Sector
 - Professional Surveyors of Canada
 - Association of Manitoba Land Surveyors
- Educational Institutions
 - Geomatics Engineering Department of the University of Calgary
 - Geodesy and Geomatics Department of the University of New Brunswick
 - Fisheries and Marine Institute of Memorial University of Newfoundland
 - Northern Alberta Institute of Technology

The Offshore Issues Committee believes that the ACLS received sufficient endorsements to apply to the IBSC for accreditation so it made a submission to catch the January, 2014 deadline and Andrew Leyzack, CLS, will prepare to defend the ACLS certification model at the upcoming April IBSC meeting in Tokyo, Japan.

Why all the trouble and expense of seeking the International Accreditation? A national or regional scheme is of lesser value since the majority of Canadian graduates and those in private practice work internationally. Those holding an internationally accredited certification would benefit from individual recognition here at home and overseas.

Andrew Leyzack, CLS
Jean-Claude Tétreault, CLS, a.-g., P. Eng., MBA

Understanding Indigenous Issues and Building Respectful Relationships with First Nations

This online course consists of nine 1 hour video sessions with course work to do at the participants' leisure.

The presenters of this course are Robert Harding, BA, BSW, MSW, PhD, RSW and Gwen Point, BEd, MEd, EdD (cand.) from the University of Fraser Valley.

The course is eligible for 12 CPD hours and is divided into three modules.

- How we know what we know about Indigenous Issues: Media representations, past and present
- Cross cultural issues and building mutual respect with Indigenous peoples and nations: General principles
- Employment, hiring and retention, human resources, and building a supportive environment for Indigenous employees

This course was presented live and recorded for participants to complete at their leisure. This course has been incredibly well received by participants, who have said that what they'd learned from the course will be invaluable to their future interactions with First Nation peoples.

"All non-indigenous Canadians would benefit from this course." – Anonymous participant

"I have worked with First Nation people for many years and believe the essence of their culture and viewpoint vis a vis non indigenous perceptions was very quietly captured and portrayed. Anyone planning work for, or with, First Nations would be wise to take this course and provide it to their employees who may need a better understanding and appreciation towards a mutually respectful working relationship. It will also serve to help stave off the negative prejudices that bombard us that we may not even be aware of." – Anonymous participant

For more information and to register for the full course (\$495 plus applicable taxes), please click [here](#).

Geomatics Engineering Liaison Committee



The recent University of Calgary Geomatics Engineering Liaison Committee meeting happened on January 22, 2014. Jean-Noel Lechasseur represented ACLS.

*Back Row L to R: Al Jamieson, Paul Dixon, Arlin Amundrud, Andrew Hunter, Mike Barry, Jason Holloway
Front Row L to R: Jean-Noel Lechasseur, Nathan Dennison, Valerie Lethbridge, Derek Lichti*