

In Cameroon's Far North Province, members of the Joint Technical Team survey part of the boundary that is defined as the median point of a river near the Nigerian state of Borno

## DEMARCATION OF THE BOUNDARY BETWEEN CAMEROON AND NIGERIA: A NEW MODEL FOR AFRICA

### The Cameroon-Nigeria Mixed Commission

For a number of years, the relations between Cameroon and Nigeria have been strained for reasons relating to their land boundary of 2,000 km that extends from Lake Chad to the Bakassi Peninsula, as well as the maritime boundary in the Gulf of Guinea. Among the questions in play are rights to gas and mineral reserves as well as impact upon local populations. For example, when Lake Chad began to retract due to desertification, natural boundaries changed and the communities along the coast migrated with the movement of the lakeshore to stay adjacent to the water. In the south, tensions between the two countries degenerated into a military confrontation in late 1993 during an occupation of much of the 1000 sq. km. Bakassi peninsula by Nigerian troops. In 1994, Cameroon took the boundary dispute between the two countries to the International Court of Justice (ICJ). On 10 October 2002, the ICJ rendered his decision regarding both the land and maritime boundaries between Cameroon and Nigeria.

The Nigeria – Cameroon Mixed Commission (CNMC) was established as an initiative between Cameroon and Nigeria in the weeks after the judgment, as of 15 November 2002 with the hope of advancing the decision rendered by the court. In this light, a Joint Technical Team (JTT) of experts from Cameroon, Nigeria and the United Nations was created for the purpose of demarcating the boundary. The team was consisted of professional land surveyors, cartographers, lawyers, and political advisers. As part of the JTT, United Nations surveyors played an important role of moderating the team effort that contributed toward a successful working relationship in the pursuit of peace in a region of the world where that had often been in short supply.

### Definition of the Boundary

The court made a clear distinction between delimitation and demarcation of the boundary. In paragraph 84 of the *continued on page 2*

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judgment, it is noted that boundary delimitation consists of “definition”, while demarcation presupposes that delimitation has taken place and is therefore a task of placing boundary markers in the field.

The Cameroon – Nigeria Mixed Commission had a duty to implement the demarcation of the international boundary with respect to the judgment of the ICJ in which the findings were based on delimitations instruments that dated back to the colonial era with much different forms of boundary description. Boundary delimitation was sometimes based on physical features such as rivers, marshes, or lines that separate one watershed from another. Also, there can be a theoretical construct that uses less tangible elements such as description, graphic representation, or previously accepted geographical coordinates.

### **Preliminary Mapping**

For purposes of planning and to provide for initial field reconnaissance of the land boundary, series consisting of 131 map sheets at a scale of 1:50,000 were prepared from SPOT5 satellite imagery. The task of preparing these maps was relegated by the CNMC to the United Nations Cartographic Section based at the United Nations headquarters in New York.

The SPOT5 satellite images were orthorectified using control points taken from previously orthorectified Landsat satellite imagery. The Digital Elevation Model (DEM) was derived from SRTM (Shuttle Radar Topographic Mission) data in public domain with a 90-metre resolution. The accuracy of the maps produced by this method was more than satisfactory for the needs of field reconnaissance. The greatest difficulty in preparing the preliminary mapping was in finding all the imagery that would be required to cover the entire boundary since cloud cover in the southern reaches interfered with data collection there. As of this writing, satellite imagery covering the entire boundary line itself has been acquired, but some imagery is still missing (that is needed to provide coverage of a full 30 kilometres on each side of the boundary, as agreed upon by the parties).

A provisional boundary line is shown on the maps. Principally, it is a product derived from interpretation of the legal instruments in conjunction with the SPOT5 images. The provisional line serves as a guide to the team in the field. The portions of the boundary line that are defined as watersheds are generated automatically from the SRTM Digital Elevation Model. The coordinates of the provisional line are taken by the JTT into the field where they are then used to actually identify the line.

### **Establishment of the Geodetic Network**

The establishment of a first order geodetic network is essential to providing the basis for pillar placement along the boundary as well as other geodetic and cartographic contracts. Africa is characterized by a low density geodetic network even in those places where they exist. This is why Cameroon and Nigeria came to the conclusion that it was necessary to establish their own geodetic network along the boundary. An important factor in that consideration was that the international boundary would be definitively referenced to an internationally recognized system. The WGS84 datum was chosen by the parties for the land boundary work.

The field work required for locating and establishing ten first order geodetic stations and thirty second order stations that would be placed at equal distances on each side of the boundary is being carried out presently. These geodetic stations will be situated at distances of 150 to 200 kilometres apart along both sides of the boundary in stable and accessible terrain.

### **Field Assessment**

The general objective of the JTT field assessment is to gather the information required for the subsequent to placement of boundary markers by contractors in a timely manner consistent with the contract schedules.

The specific objective of the JTT field assessment is to identify the location of each boundary marker in the field. The markers need to be placed with an accuracy agreed upon by the parties (better than one metre) and to

## 2007 NATIONAL SURVEYORS CONFERENCE ADVANCE NOTICE

The following activities will be held at:  
The Loews Le Concorde, Québec, QC  
[www.loewshotels.com/hotels/quebec/](http://www.loewshotels.com/hotels/quebec/)

### PRELIMINARY PROGRAM

CONCURRENT BUSINESS AND TECHNICAL SEMINARS: Tuesday, June 19, and Wednesday, June 20, 2007

- ACLS AFFAIRS WORKSHOP: Thursday, June 21, 2007 (A.M.)
- GOLF TOURNAMENT: Thursday, June 21, 2007 (P.M.)
- ANNUAL GENERAL MEETING: Friday, June 22, 2007
- ANNUAL DINER AND DANCE: Friday, June 22, 2007

The AGM Committee is working on organising activities for accompanying persons.

The dates and times above are subject to some slight modifications. Details on the program, fees and registration will be posted on the ACLS Web site at a later date.

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conform to the geographical coordinates and boundary descriptions specified by means of legal instruments in the ICJ in the judgment. The demarcation must take into consideration the local relief so that when feasible, inter-visibility between pillars may be accommodated.

For identification of the relevant physical characteristics or appropriate coordinates, the Joint Technical Team proceeded along the boundary as close as possible by using the provisional line on the 1:50,000 map. Each team was equipped with a single frequency GPS that utilized real-time satellite correction with precision better than one metre. For each identified pillar site, a card was prepared and signed by both parties. The card indicated the UTM coordinates of each planned boundary marker and included a sketch of the site as well as additional relevant observations regarding access to the site.

When the boundary segment is represented by a river, a marsh, or some other hydrologic feature, the parties have agreed to identify the permanent river banks then accept the boundary to be the median point between the river banks. In instances of intermittent and/or seasonal conditions, permanent markers would be erected.



Members of the Joint Technical Team identify a site for future boundary pillar placement.

A pilot project covering sixty kilometres was completed in May 2005 that allowed the JTT to test technical guidelines and develop working techniques.

Altogether, by the fall of 2005 and into the first part of 2006, a first phase of 400 kilometres was completed on the Lake Chad plains. Even with new technologies and modern means of transportation, field work is conducted under trying conditions owing to distance from urban centres and other realities (such as difficult road conditions and absence of sanitary facilities). Furthermore, progress is also linked directly to weather conditions. Since the dry season is the preferred season for conducting field work, field work is best accomplished from October through June, or otherwise flooding in some areas can make surface transportation exceedingly difficult.

## **Conclusion**

The first steps represent only the beginning of the demarcation process for the boundary between the countries. There is a sequence of events that need to be put into place for demarcation that includes: ground control for final cartography; placement and surveying of boundary markers; and final mapping. Most of these steps in the demarcation process will be entrusted to the private sector at the international level. This will all be done under the supervision and coordination of the JTT under the auspices of the United Nations.

The project presents an innovative approach, as owing to the direct involvement of the parties (financial and logistical) and may serve as a model for peaceful conflict resolution between African states. Also, it is functioning in an atypical manner for the United Nations: not as a peacekeeping operation and without any deployment of planes or helicopters. The project costs are realistic and the security of the team working along the boundary is guaranteed by Cameroon and Nigeria.

The ideas expressed in this article are those of the authors and do not represent the views of the United Nations.

**By: Cheikh Diop, P. Eng., M. Sc.  
Mario Plante, Cartographer  
David Rochette, CLS**

## President's Notes

It's a great honour for me to be elected as the president of the Association of Canada Lands Surveyors. Over the years, this Association has demonstrated a strong leadership in the Canadian Surveyors' Community, an extraordinary professionalism and a great commitment towards all Canadian citizens living on Canada Lands, and has therefore proven to be one of the most important Surveyors Association in Canada, if not in terms of membership number, certainly in terms of accomplishment.

Our Association benefits from the skills and experience of surveyors from all Canadian provinces and territories, which places us in a unique situation compared to other professional surveying associations, but also challenges us to maintain our position as national leaders.

Here are a few examples of the leadership role that we played over the last few years. By attending most of the provincial surveyors' general meetings, we shared our experience of Canadian surveying issues and have addressed some of the important issues shared by the surveying profession all across the country. The publication of the last edition of the Offshore Book is also an important step in our strategy towards the certification of hydrographers, and we are strongly committed to developing and implementing this important project in the best interest of all Canadians. Finally, the creation of the Canadian Board of Examiners for Professional Surveyors, and the agreement with the surveyors' associations of the Western Provinces for the preparation and supervision of the examination process for candidates on common core syllabus is a clear demonstration of the recognition of our leadership by our sister associations across Canada.

During my term as President, thanks to your help and Council's support, I have the firm intention to make progress on all those files.

My priorities for the next year will be namely to promote the Canadian Board of Examiners for Professional Surveyors to the other provincial associations who have not yet signed the agreement making it a truly National entity. I will focus my efforts more specifically towards the provinces of Ontario and Québec, who are the two most important associations in term of membership number. I will also put forward a strategy to actively promote the Association as the natural home for Canadian Hydrographers by actively promoting the Offshore Book and moving forward towards an expanded profession.

Even though the finances are in good shape, and our association seems to be very wealthy, we have encountered two consecutive years of deficit. This situation needs close attention, and the council will continue to monitor the budget very closely. We will more particularly need to look at the way the activities of the practice review are funded.

I would like to invite you all to contact me, should you have any concern or question regarding our association or the profession. I will make all the necessary efforts to address your issues, and to assist you.

I would like to express my gratitude to our colleague Ian Lloyd who presided over the destinies of the Association, last year, with enthusiasm, loyalty, skill and an extraordinary devotion.

Be proud to be a surveyor, be proud to be member of this association, be proud to be Canadian.

**Daniel Fortin, a.-g., CLS**  
**President**

## Aurora College Survey Assistant Training Program 2006



The general consensus related to Oil and Gas activities in the Northwest Territories is that activities are increasing and development is on the edge of an unprecedented boom based on the Mackenzie Gas Project (MGP) moving ahead.

It is expected that once the MGP construction begins, other oil and gas companies will be looking to come on board with plans to tie their own oil and gas finds into the pipeline to get their gas to needed markets. The MGP and other spin-off exploration and development activity will bring significant

opportunities to Northerners in terms of employment and business opportunities. Thus, given the projected magnitude of the MGP and the potential for other major spin-off projects, the need for training in the North in many areas has to be addressed to ensure aboriginals and other northerners are provided with the necessary tools to access employment opportunities.

With the funding support of the Aboriginal Skills and Employment Partnership (ASEP), Aurora College has put together a Survey Assistant Training Program to improve the ability of northern people to access survey assistant positions. The training was delivered by Inukshuk Geomatics Inc. in four communities: Fort Simpson, Norman Wells, Fort McPherson and Inuvik from February to April 2006.

The program consisted of 6 days of safety training to bring the participants up to Oil and Gas industry standards and 10 days of survey training which focused on the specific survey requirements for oil and gas development and pipeline activities.

The program was comprised of a mix of classroom instruction and outdoor practical exercises using survey equipment (levels, total stations and hand held GPS) and maps. The training aimed at covering the following skill sets:

- Survey crew duties and logistics - oil and gas safety procedures
- Introduction to survey equipment – handling, care and usage
- Introduction to map and plan reading – coordinate systems, datum
- Introduction to oil and gas survey procedures

The instruction went well as the participants picked up the material quickly. As a result less time was spent in the classroom and more time was devoted to field work. The field exercises were detailed and used real life scenarios such as reading maps and scaling UTM and geographic coordinates; navigating to set coordinates and finding coordinates for specific features with hand held GPS; running level loops; and surveying a well site with a total station.

Inukshuk Geomatics Inc. is very pleased with the results of the training program. Overall, a total of 56 participants throughout the NWT obtained their certificate of completion.

**Marie Robidoux, CLS**



## National Surveyors' Conference

The second National Surveyors' and 22<sup>nd</sup> ACLS Annual General Meeting were held during the week of June 19 at the world famous Grand Okanagan Lakefront Resort and Conference Centre, Kelowna, BC. The Conference was again a huge success with more than 120 surveyors in attendance.

The following very interesting technical program was presented:

- Writing Winning Geomatics Proposals
- Moving Towards Aboriginal Self-Reliance
- International Land Tenure Projects
- Time Management
- The Applications of High Definition Surveying in the Geomatics Industry
- Diverse Applications of Geomatics Technology

The social program included the following highlights:

- House Boat Cruise and Dinner on Lake Okanagan
- The ACLS Golf Tournament
- Tour of World Renowned Mission Hill Winery

The ACLS presented its new Council, which consists of the following members:

<b>President</b>	Daniel Fortin, Aylmer QC
<b>Vice President</b>	Marie Robidoux, Calgary AB
<b>Past President</b>	Ian Lloyd, Vancouver BC
<b>Senior Councillor</b>	Varick Ollerhead, Yellowknife NWT
<b>Intermediate Councillor</b>	George Schlagintweit, Victoria BC
<b>Junior Councillor</b>	Jeff Fee, Bedford NS
<b>Lay Councillor</b>	Steven Horn, Whitehorse YT
<b>Surveyor General</b>	Peter Sullivan, Edmonton AB

### Business Meeting

Our Business Meeting on June 23<sup>rd</sup> was opened by Robert Louie, LL.B, Chief of the Westbank First Nation and followed by an address from local provincial MP, Rick Thorpe. The ACLS also recognized member David H. Gray for his important contribution to the profession over the years by presenting him with an ACLS Honorary Life Membership.

### ACLS Golf Tournament

This year's annual golf tournament was held at the Sunset Ranch golf club. Congratulations to Chris Chiasson, Martin Harrichhausen, Angela Harrichhausen, and Terry Hudema, the members of the winning foursome!

### Offshore Book

We held a book launch at the Icebreaker on June 20<sup>th</sup> to introduce our new book entitled *Canada's Offshore: Jurisdiction, Right and Management*. Sales of the book thus far have been very encouraging. The book is currently available in English only, however, translation of the book is currently underway and we hope to have a French version available before the end of the year. More book launches are planned for the fall.

For information about the book visit: [www.acls-aatc.ca](http://www.acls-aatc.ca) . Books can also be purchased from Trafford Publishing at: [www.trafford.com](http://www.trafford.com)

### Third National Surveyors' Conference 2007

I am pleased to announce that the Third National Surveyors' Conference will be held in Québec City, Québec. At this year's conference, our new President, Daniel Fortin, made a celebrity appearance as Canada's first surveyor, Samuel de Champlain, inviting members to join us between June 19 and 22, 2007 for another week of valuable seminars and exciting social events, while enjoying all the attractions Québec has to offer. How can a surveyor refuse such an invitation?

**Jean-Claude Tétreault**  
**Executive Director**

## Executive Directors Notes

### New CLS's

Since the March 2006 issue, we are glad to announce that CLS Commissions were awarded to following people:

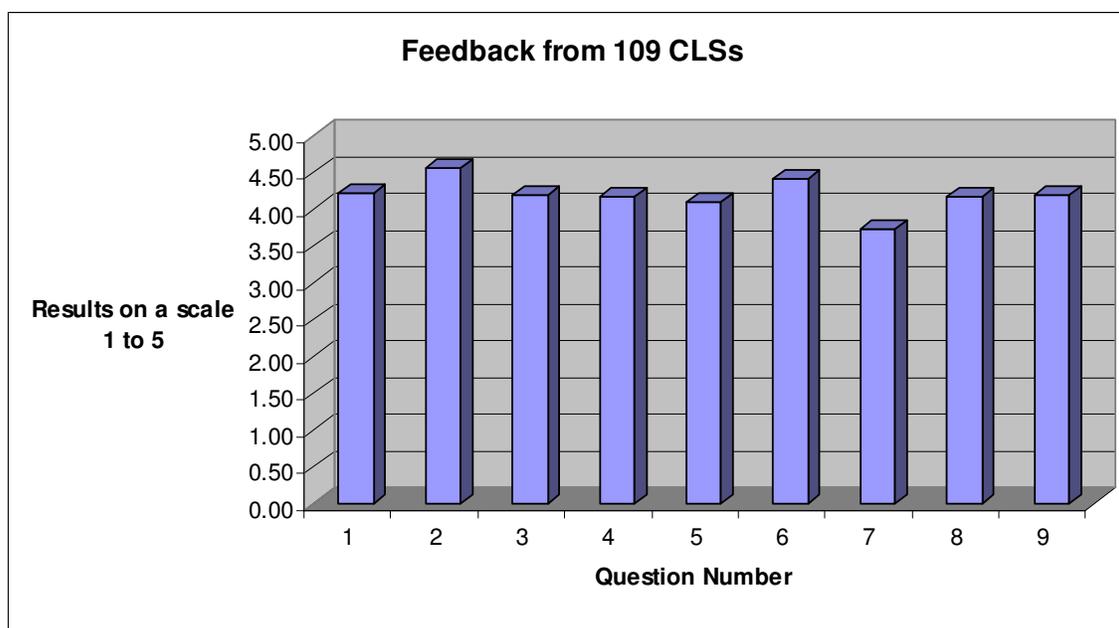
- Jeffrey D. Aitken, Torbay, NL
- Patrick M.J. Boudreau, Edmonton, AB
- Jesse P. S. Carels, Winnipeg, MB
- Marc A. T. Desrochers, Calgary, AB
- William T. Powley, Fort St. John, BC and
- Jacques D'Auteuil, Iqaluit, NU

Congratulations to all.

### Practice Review

We've completed the review of practices in British Columbia and are well on our way in our review of Alberta members. The next province in line is Saskatchewan.

Members have been very cooperative. At the end of each review, members are provided with a feedback questionnaire to help us measure CLSs satisfaction with our process. So far we received 109 feedback forms. The following graph shows the average score for each answer to questions 1 to 9. Members respond by circling a number between 1 (strongly disagree) and 5 (strongly agree).



It seems that its still has been a very positive experience for most.

If you have concerns with the Practice Review Process, please inform the Practice Review Committee, or me. An important function of the Committee is to act as an Ombudsman for ACLS members in respect to practice review.

### Canadian Board of Examiners for Professional Surveyors (CBEPS)

CBEPS is up and running and the Western Canadian Board of Examiners for Land Surveyors (WCBELS) is no more.

CBEPS will hold its first examination session on the week of October 16, 2006. CBEPS is in charge of running all common core syllabus (pre-professional) exams for the entire Western and Atlantic Provinces, and all ACLS

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exams.

For information on CBEPS, please visit the new CBEPS Web site at: [www.cbeps-cceag.ca](http://www.cbeps-cceag.ca) .

### **Offshore Book**

Sales of our new book entitled *Canada's Offshore: Jurisdiction, Right and Management* are encouraging. Book launches were held at the Canadian Hydrographic Conference in early June in Halifax and at the Kelowna National Surveyors Conference. More book launches are planned for the fall. We will keep you posted.

For information about the book visit: [www.acls-aatc.ca](http://www.acls-aatc.ca) . Books can also be purchased from Trafford Publishing at: [www.trafford.com](http://www.trafford.com)

### **Public Awareness PowerPoint Presentation**

The PowerPoint presentation is finally on the ACLS Web site. It's designed to allow flexibility to address different target audiences (from students to realtors, for example). Members had an opportunity to see a first draft of the PowerPoint presentation at the ACLS Affairs Workshop on June 23, 2005 and saw the final version at the 2006 AGM. It was well received.

Last Spring, in an effort to improve the look of the PowerPoint presentation, the Committee launched a photo contest to get a collection of photographs that illustrate the contemporary role of Surveyors in Society. Unfortunately, we only received one entry. We congratulate Rob Stirling who won the prize for the best photograph; a \$75 Canadian Tire purchase card.

A Web viewing version of the presentation is posted on the public side of ACLS Web site to be viewed by all. A downloadable version is available to ACLS members on the secure side of the Web site. Contact Kevin Jones if you need instructions.

### **Insurance Check List**

The Committee was asked, by Council, to develop a checklist of types of insurance policies that ACLS member may need in their practices. This list isn't all-inclusive since each member may have his or her own particular situation and there are so many different sorts of insurance out there. The checklist is posted on the ACLS Web site.

### **CPD Distance Learning Footage**

In addition to the video footage of the "Changes in Land Registration and Survey Systems in Canada" seminar which was made available in DVD and VHS formats in February 2005, the CPD went ahead and produced DVD copies of the seminar entitled "Determination of Natural Boundaries using Remote Sensing", which was also taped at the Whitehorse AGM. Sales are encouraging, so the CPD Committee just finished editing "GPS for Cadastral Surveying", which was taped at the P.E.I. AGM in 2005.

### **New Lay Councillor**

Susan Christie's term as a Council member appointed by the NRCan Minister ended last April. On August 2<sup>nd</sup>, 2006 The Honourable Gary Lunn, NRCan Minister appointed Mr. Zakary James Hargrove, from Clearview, New Brunswick for a three year term as Appointed Council Member.

Mr. Hargrove holds a Bachelor's degree in the Science of Engineering (Electrical) from UNB and runs a construction company in Clearview, New Brunswick.

### **ACLS Scholarship**

The Association of Canada Lands Surveyors Foundation Inc. received a total of 18 excellent applications for scholarships. The Foundation Board of Directors had a very difficult task to come up with the three following winners:

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## **WANTED: Authors to Update the Property Rights Book**

Most CLS spent hours studying a book entitled “Property Rights and Boundary Systems on Canada Lands” for their CLS exams. This comprehensive piece of work was made available in 1990 with the mention “Provisional version”. It is now way out of date. So the ACLS Board of Examiners is working on an updated version. ACLS obtained the copyright on the book.

The book presently has 12 chapters. Chapter 6 will not be updated since the new book entitled “Canada’s Offshore: Jurisdiction, Rights, and Management” is published. A few ACLS members are presently updating chapters 4, 5, 8, 9 and a new chapter on property rights in Nunavut. We are looking for authors to update the following chapters:

1. Property rights systems – 5 pages and one map
  2. Property rights jurisdictions & public Lands – 32 pages and 12 maps & figures
  3. The creation and alienation of Canada Lands – 17 pages and 2 figures
  7. Indian Lands – 39 pages and 16 maps, figures and tables
- A new chapter on the First Nation Land management Initiative
10. Federal Lands & Interests – 12 pages and 15 maps, figures and tables
- Boundary Systems
11. Provincial & Territorial Boundaries – new Territory added
- Appendices A. Legal Surveys Division – 14 pages and 6 tables

A \$500 honorarium will be awarded for each rewritten chapter except for chapter one which consists mainly in revisions where a \$150 honorarium will be provided. If you are interested, contact the ACLS Executive Director.

**Jean-Claude Tétreault**  
**Executive Director**

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- Alexander Snyder of UNB
- Marie-Renée Chauveau-Lavoie of Laval University and
- Dan Beddome of Lethbridge Community College

To obtain an application form and further information on the ACLS Foundation Scholarship Program, visit the ACLS Website at: [www.acls-aatc.ca](http://www.acls-aatc.ca) Deadline for application is May 15 of each year.

The Association of Canada Lands Scholarship Foundation Inc. is registered as a charitable organisation so it can now issue tax receipts. Donations are welcomed.

**Jean-Claude Tétreault**  
**Executive Director**

## **The New Dean is a CLS**

While many spent Canada Day celebrating, for Elizabeth Cannon, it marked the start of her new role as the Dean of the Schulich School of Engineering at the University of Calgary.

Cannon, a CLS commission holder since 1986, has been a faculty member since 1991. She brings a long record of accomplishments to the position, such as being named one of Canada’s Top 40 Under 40, one of U of C’s top 40 Alumni, a Fellow of the Royal Society of Canada and the Canadian Academy of Engineering, and is the former Natural Sciences and Engineering Research Council of Canada (NSERC) Petro-Canada Chair for Women in Science and Engineering. She lends her expertise to many boards, and is also actively involved in GPS research.

The Association congratulates her on this achievement.

## New Regulation Amendments

After more than 3 years of work by the ACLS Bylaws and Legislation Committee with involvement of the ACLS Insurance Committee and a Special Task Force on the Permitting Issue, the new CLS Regulations came into force on September 6, 2006.

The ACLS membership approved new sections 8(4), 14(2), 15(1), and 56.1 in the fall of 2004 and new sections 32 and 33 last fall (2005). The NRCan Minister approved all amendments on July 28<sup>th</sup>, 2006.

The following amendments affect the operations of the Complaints and Discipline committees and the Board of Examiners:

- Subsection 8(4) A quorum of the Complaints Committee consists of three members of the Committee, one of whom is an elected member of the Council.
- Section 14 is renumbered as subsection 14(1) and is amended by adding the following:  
(2) Every person who wishes to be a candidate for a commission as a Canada Lands Surveyor and who is registered as a candidate to become entitled to survey lands in a province shall submit to the Board of Examiners
  - (a) an application for admission as a candidate on the form provided by the Association;
  - (b) a certification from the applicable provincial organization that the person is registered as a candidate to become commissioned or licensed to survey lands in the province; and
  - (c) as soon as the person has obtained a provincial licence or commission, certification from the issuing agency that the licence or commission has been issued.
- The portion of subsection 15(1) before paragraph (a) is replaced by the following:  
15. (1) Every person, other than a person who is entitled to survey lands in a province or is registered as a candidate to become entitled to survey lands in a province, who wishes to be a candidate for a commission as a Canada Lands Surveyor shall submit to the Board of Examiners.
  - (a) an application for admission as a candidate on the form provided by the Association;
  - (b) a summary of all academic education together with an official transcript of marks for any post-secondary education; and
  - (c) a copy of any diploma, degree, certificate or other similar evidence of level of education awarded by a college, university or other educational institution or a certifying body.
- Adding the following after section 56: Reimbursement of costs  
56.1 A direction made under paragraph 31(1)(h) of the Act for the reimbursement of all or any part of the costs associated with a complaint may include all or any of the following:
  - (a) transportation, accommodation and living expenses and any honorarium, payment or professional fees paid to a person retained to participate in the investigation or hearing;
  - (b) transportation, accommodation and living expenses paid to a member of the Complaints Committee who participated in the investigation and to a member of the Discipline Committee involved in the hearing;
  - (c) the costs of any transcripts of proceedings;
  - (d) the costs of reproduction of any documents, including drawings and plans, relating to the proceedings;
  - (e) witness fees;
  - (f) the costs of renting rooms and recording equipment, and of transcription services;
  - (g) fees payable to the counsel acting on behalf of the Association and to the counsel, if any, acting on behalf of the Discipline Committee; and
  - (h) the costs of serving notices or documents.

The following amendments add new requirements to obtain and maintain an ACLS permit:

- A new subsection (e) is added to Section 32:  
(e) proof of the required professional liability insurance coverage or proof of the entity's exemption from it.
- Section 33 is replaced by the following:  
33. The Registrar shall issue a permit to an entity if
  - (a) a principal function of the entity is surveying;

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- (b) the entity has within its management at least one licence holder who ensures that the entity complies with the Association's standards of conduct, knowledge and skill in its surveying activities;
- (c) the entity has professional liability insurance coverage at least equivalent to that required by licensed members under subsection 29(4);
- (d) the name of the entity is not misleading, self-laudatory or inappropriate with regard to protection of the public and the integrity of the profession, and
- (e) the application complies with the requirements of the Act and these Regulations.

A policy to deal with the new permit requirements will be in place in the Fall. The most likely scenario is that permit holders will be asked to provide some added documentation at the upcoming permit renewals for 2007. We will keep you posted.

**Jean-Claude Tétreault**  
**Registrar**

### **Summary of Council Meetings**

#### **Teleconference, February 15, 2006**

- Council decided that the ACLS will fund French translation of the Offshore book from general funds in order to facilitate immediate publication. ACLS will seek cost recovery.
- Council approved the CPD Travel Bursary proposal for two bursaries per year, each with a \$500 maximum.

#### **Teleconference, April 19, 2006**

- Council adopted a new complaints process
- A motion was passed recommending that the 2007 budget be accepted by the membership
- The Nominations Committee report was accepted as presented
- Council approved ACLS funding support for the ASLS Surveyor in a Crate initiative, subject to the final business plan.

#### **Teleconference, June 20, 2006**

- CLS Commissions will be offered to Jeffrey Aitken, Patrick Boudreau, Jesse Carels, Marc Desrochers, William Powley, and Jacques D'Auteuil.
- The ACLS Travel Bursary will be awarded to Peter Murray
- A motion was passed recommending that the Year 2005 Auditors' report be approved by the membership at the 2006 AGM
- Council recommended that Phomin Leslie remain on as the ACLS auditors for the Year 2006
- The Bylaws and Legislation Committee will be directed to amend the General Bylaws to allow that fees be approved by the membership instead of having a list of fees in the Bylaws.

#### **Teleconference, June 20, 2006**

- Council passed a motion to recommend to the membership that the 2008 AGM be held in Victoria, British-Columbia, in conjunction with the CHC 2008 Conference.
- The new Practice Manual, dated June 23<sup>rd</sup>, 2006, was approved as presented.

**Jean-Claude Tétreault**  
**Secretary Treasurer**

## **The NALMA Professional Certification Program**

An objective of the National Aboriginal Lands Managers Association (NALMA) is to increase the professional standards for First Nation Lands Management. NALMA is committed to taking a leadership role to ensure that Lands Managers receive adequate training opportunities required to efficiently and effectively manage their lands. NALMA is in the process of implementing a Professional Certification program that is designed to meet the existing, emerging and future needs of First Nations Lands Managers. The Professional Certification Program has two levels of certification:

### **Level One: The Certificate of Proficiency in Resource Management**

The six courses required for the Certificate of Proficiency will provide students with general concepts and principles applicable to resource management in the various regions of Canada. The courses are designed to teach aspects of legal, economic, managerial and environmental project assessment. The students will develop written and oral communication, numeracy, computer skills, time management and leadership skills through examples and exercises. Land Managers will receive a Certificate from the University of Saskatchewan indicating proficiency in lands management.

### **Level Two: Technical**

This level has three components:

- a) Completion of six one week technical development modules:
  1. History and Legislation
  2. Fundamentals of lands management
  3. Collective/Individual
  4. Leasing A
  5. Leasing B
  6. Permit
- b) Completion of 37 hours work experience in First Nation Lands Management
- c) Completion of a final test paper which addresses the modules

The ACLS is proud to have participated in building this certification program. We provided the course material for a session on Introduction to Surveys and one on Surveys and Legal Descriptions in the Fall of 2005. The ACLS issued a call for proposals from its members and retained a consultant to provide the service. Funding was provided by NALMA and NRCan. We had a very tight schedule for deliverables but we were on time and NALMA staff was delighted with the quality of the work. NALMA's satisfaction was expressed publicly at the last NALMA Conference in Halifax in November 2006. Daniel Fortin, Claude Bonnell, and I were in attendance.

Thanks to Cindy Kliaman, OLS, CLS for delivering the inaugural session on Surveys and Legal Descriptions was presented for the first time to Lands Manager candidates on February 7, 2006. She reported that the course was very well received by the students.

This is an excellent example of cooperation between Canada Lands Surveyors and a key capacity-building agency rooted in the Aboriginal Community. We are looking for more opportunities to build on this success story.

If you would like more information on the Certification Program, visit the NALMA Web site at: [www.nalma.ca](http://www.nalma.ca)

**Jean-Claude Tétreault**  
**Executive Director**

## ACLS AGM Kelowna 2006

Attending the AGM in Kelowna as a new member of the ACLS was a truly inspirational event. As an incentive for new members to attend the convention and become active in ACLS affairs, the Association offered a bursary, which I was honoured to receive. Some of the highlights of the convention through the eyes of this new member are as follows:

1. The Association of Canada Lands Surveyors Foundation Inc. has been created to encourage new students to enter the Surveying Profession. New members will be the life blood of the Association and this Fund will be an excellent vehicle for companies or individuals to return to surveying some of the blessings we have received from the profession. I hope by contributing an amount equal to my bursary, I will have the honour of being one of the first to contribute.

2. It was very profound in the discussion of aboriginal land claims that natives in Canada enjoy these title rights because they were not a militarily conquered people (the 1973 Calder decision). Natives using traditional knowledge of the terrain have successfully provided excellent logistical support to northern surveyors. We will enthusiastically assist and encourage natives with their traditional attachment to the land to consider surveying as a career choice.

3. Canada Lands Surveyors are providing cadastral consulting internationally to the developing world. Diverse applications of airborne technology are being used on oil and gas sites in Alberta. High definition surveying applications are being applied to industrial, structural and architectural sites.

4. It was great to see the younger members enjoying such prosperity and business success in the booming western economy. The size and scale of operations of western surveying companies is phenomenal. The Oilers didn't win the Cup, but the surveying profession certainly is a winner.

5. The Canada Centre for Cadastral Management – formerly known as the Legal Surveys Division has assumed a national and international leadership role in property rights management. The CCCM is using the most recent research and technical developments to move the present cadastre to a fully integrated approach. This vision also includes a separate marine cadastre. The CCCM infrastructure provides an invaluable resource to the development of Canada.

6. Veterans of the eastern registry systems can appreciate the greatness of the CLS system. The CCCM cadastre can reduce weeks of document research on large projects to mere hours. Surveyors practicing their profession on Canada Lands can with a very high degree of confidence know that they are following in the footsteps of the original boundary line surveyor.

In conclusion, the organizers of the Kelowna Convention did a great job, and obviously put a lot of time and thought into every detail of the convention. I will tip my hat to the convention committee and give their efforts a five star rating.

**Peter A. Murray, B.Sc., CLS, NSLS**



### ACLS Merchandise

Those who attended the last AGM were the first to see and purchase the new ACLS merchandise. Yes we now have a series of items that have the ACLS logo on them. You can now order the following items:

- Golf caps (navy blue or beige)
- Ladies golf visors (light blue or white)
- Men's golf shirts (navy blue or tan)
- Ladies' golf shirts (light blue or white)
- Golf balls
- Coffee mugs (red or blue)
- Portfolios (with a solar calculator and small flashlight)

An order form is available on the form section of the ACLS Web site.