The membership of the Alberta Land Surveyors’ Association met on April 24-26, 2008 in Lake Louise, Alberta for its 99th Annual General Meeting. What follows is a summary of the results of the recommendations and new business motions.

**Recommendation #1: Bylaw Amendment — Fees, Dues and Levies**

It is MOVED by Mr. Hudema, seconded by Mr. Marquardt, that Section 52(1) of the Association Bylaws be amended.

*Motion Carried*

52 (1) The following fees, dues and levies shall be paid to the Association:

(a) on application for registration as an Alberta Land Surveyor, surveyor’s corporation or surveyor’s partnership; ................ $50.00 $500.00

(b) for registration with the Association as an Alberta Land Surveyor, surveyor's corporation or surveyor's partnership; ... $200.00 $200.00

(c) for an Alberta Land Surveyor, a sum not exceeding annually. $700.00 $1,200.00

(d) for retired membership, a sum not exceeding annually .......... $100.00 $100.00

(e) for associate membership, a sum not exceeding annually…. $200.00 $200.00

(f) for affiliate membership, a sum not exceeding annually ....... $100.00 $200.00

(g) for a surveyor's corporation or surveyor's partnership, a sum not exceeding annually ................................. $500.00 $1,200.00

(h) for the filing of articles of service........................................ $50.00 $100.00

(i) for the filing of each transfer of articles of service .............. $50.00 $100.00

(j) for late payment of any fees, dues or levies....................... $200.00 $200.00

(k) for reinstatement, in addition to other fees, dues and levies payable, ................................................................. $500.00 $500.00

(l) for pupils, a sum not exceeding annually ....................... $100.00 $200.00

(m) for branch offices, a sum not exceeding annually .......... $1,000.00

or a lesser sum as may be fixed by Council.

It is MOVED by Mr. Hagen, seconded by Mr. George, that Section 52(1)(d) of the Association Bylaws be amended to $100 from $200. Motion Carried

Amendments to remove Section 52(1)(m) of the Association Bylaws, reduce the amount in Section 52(1)(m) to $300, and reduce the amount to $1 were defeated.

Council must now make the bylaws in accordance with Section 17 of the Land Surveyors Act in order for the amendments to come into effect.
Recommendation #2: Wellsite Disposition Plan Amendment
It was MOVED by Mr. Pinkerton, seconded by Mr. Jamieson, that a new Part D, Section 5.11 be created in the Manual of Standard Practice. Motion Carried

5.11 A surveyor performing a wellsite (MSL – maximum 2 hectares) disposition plan amendment shall locate and confirm by measurement sufficient evidence within, on or defining the disposition to allow the determination of the boundaries and shall:
.1 Indicate pre-existing disposition survey evidence as found, restored or re-established and,
.2 Indicate the actual field dates of the amendment field survey in accordance with Part E, Section 4, Schedule B.
.3 Notwithstanding 5.11.2 the amendment field survey shall not span more than 24 months.

Recommendation #3: Remote Sensing for Wellsites on Private Land
It was MOVED by Mr. Pinkerton, seconded by Mr. Haggerty, that Part D, Section 5.9 be revised and that a new Part D, Section 5.10 be created. Motion Carried

5.9 An Alberta Land Surveyor preparing a disposition plan for public lands or wellsites on private land based upon remotely sensed survey data such as LIDAR shall:
.1 Only use remotely sensed data that is accurate at a 95% confidence level to a maximum 0.5m vertically and 2.0m horizontally relative to Alberta Survey Control Markers or other published benchmarks in the area. Verifying this might include obtaining the calibration data and testing the collection method for quality assurance. It might also include comparing the data to a sample of areas surveyed using proven techniques as well as comparison with points that have published horizontal and vertical position.
.2 Visit the subject area to confirm that all relevant topography has been identified and shown prior to plan submission. For example, the land surveyor may find small creeks that were not discernable in the data.
.3 Locate and confirm monuments in accordance with Part D sections 5.1.1 and 5.1.2.
.4 Identify the data collection technique prominently in the plan heading title block. Example: (LIDAR Survey)
.5 Identify positions to be monumented (corners, changes in direction, and beginnings and ends of curves) with a symbol that is represented in the legend as a “remotely sensed position.”
.6 Make a note on the plan identifying when the remotely sensed data was collected.
.7 Certify the plan in accordance with Part E, Section 4, Schedule “B.”
.8 Prepare the plan following the General Requirements for Plans, Part D, Section 1 and if the survey includes public land, the approving authority’s plan requirements.
.9 If the survey includes public land prepare a monumented plan of survey within the time frame specified by the approving authority. The as-built plan shall be prepared in accordance with Part D, sections 5.8 and 5.10 and the approving authority’s plan requirements.
.10 If the survey includes private land prepare a monumented
plan of survey based upon non-remotely sensed techniques within the time frame specified by the approving authority (the ERCB) in accordance with the provisions of sections 5.1.1, 5.2.1, 5.2.2 and 5.6.

**Recommendation 4A: GNSS Measurements for Cadastral Surveys**

*It was MOVED by Mr. Pinkerton, seconded by Mr. Partridge, that the Part C, Section 2 of the Manual of Standard Practice be amended.*

*Motion Carried*

The following section deals with standards for GPS the guidelines for Global Navigation Satellite System (GNSS) measurements and associated computations performed for cadastral boundary definition surveys. GNSS includes the Global Position System (GPS), GLONASS and any future satellite positioning systems. For the purposes of this Manual, all references to GPS will refer to the use of any combination of GNSSs.

When using GPS, there are numerous error sources in static and Real Time Kinematic (RTK) GPS measurements that must be considered by the practitioner. Detecting and mitigating these sources of error during a GPS survey is necessary to produce accurate and verifiable results. Some of the primary error sources in a GPS survey are user error, multipath, satellite geometry, atmospheric delays, and incorrect initializations.

Typical user errors include data entry error and measurement blunders (i.e. incorrect antenna height).

Multipath is site-specific problem typical at locations where there is an obstructed sky view at the GPS receiver. Satellite signals are reflected off nearby surfaces of objects causing inaccuracy in the position.

An insufficient number of visible satellites, or their positions relative to the user, can result in a poor geometrical solution of the position. Atmospheric conditions can cause disruptions and delays in transmission of the signals from the satellites to the receiver.

Initialization refers to the ambiguity resolution of the satellite signal carrier – the determination of the integer number of wavelengths between the GPS receiver and the satellite, a process that is critical to achieving centimeter level results from kinematic surveys. Other GPS error sources can cause an incorrect initialization or integer count, which results in a position error.

Due to the complexity of GPS measurement and data reduction processes, these guidelines focus primarily on assessing the reliability and accuracy of these surveys. As GPS techniques evolve and new methodologies become available, the burden of proof that these guidelines or their intent are complied with rest with the practitioner assuming responsibility for the plan.

2.1 GPS surveys will be assessed as horizontal (2D) and/or vertical (1D) surveys for the purposes of accuracy measure.

2.2 The measure of accuracy for surveys conducted in whole or in part with GPS techniques, shall comply with Section 1.

2.3 Network adjustment shall include only (n-1) position differences or, if trivial position differences are included, the mathematical correlations should be properly accounted for.
2.4 The position of every monument included in a GPS survey either found or placed shall be verified with sufficient redundant observations or comparison with published information (i.e. registered plans, survey control). This applies to both static and kinematic surveys.

.1 Monuments observed by radial observations shall be checked using commonly accepted method(s) for redundancy. Examples include:

- Radial ties from another known station.
- Independent measurements by conventional survey methods.
- Point re-occupation with separate observation parameters and an independent initialization.

2.5 The map projection for a survey shall be suitable and validated.

**Recommendation 4B:**

**GNSS Measurements for Cadastral Surveys**

It was MOVED by Mr. Pinkerton, seconded by Mr. Matthyssen, that Part C, Section 4.4 of the Manual of Standard Practice be amended.

**Motion Carried**

4.4 In addition, for surveys done partially or completely using remote positioning techniques or satellite positioning techniques, the field records shall include the following:

**Recommendation #5:**

**Registering Plans at Both Land Titles and Public Lands**

Recommendation #5 was not voted on at the annual general meeting.

Council had concerns that this recommendation might have been contrary to legislation so the recommendation was sent to the AGM conditional on the Association solicitor providing his legal opinion. While the issue was certainly not a black & white one, there were enough concerns raised in the legal opinion that Council decided not to proceed with a debate and vote at this time.

Instead, Council agreed to provide the legal opinion to the membership.

Council agreed to work in conjunction with the government’s legal people and the Director of Surveys to work through these issues so that this perhaps can go forward in the future.

**Recommendation #6:**

**Digital Submissions to Land Titles and Public Lands**

It was MOVED by Mr. Pinkerton, seconded by George, that a new Part D, Section 1.6 be created in the Manual of Standard Practice.

**Motion Carried**

**New Business #1:**

**Reformat the Manual of Standard Practice**

It was MOVED by Mr. Maltais, seconded by Mr. Jeschke, that the ALSA contract with an experienced professional technical writer and editor who is familiar with the Alberta land surveying profession to edit, re-format, update, and maintain the Manual of Standard Practice.

**Motion Carried**

**New Business #2:**

**Mandatory Continuing Education**

It was MOVED by Mr. Tripp, seconded by Mr. Fretwell, that is recommended that the Council of the ALSA include in the terms of reference (2008-2009) of the Professional Development Committee the development of a mandatory continuing
education regime for presentation at the 100th AGM.
Motion Carried

NEW BUSINESS #3: CALIBRATION BASELINES
It was MOVED by Mr. Fretwell, seconded by Mr. Tripp, that it is recommended that the Council of the ALSA in its negotiations with the government on the iron post levy ensures that there are adequate funds budgeted to maintain the calibration baselines.
Motion Carried

NEW BUSINESS #4: NON-ACTIVE MEMBERS
It was MOVED by Mr. Miller, seconded by Dr. Radovanovic, that it is recommended that the Council of the ALSA create a category for non-practicing or “inactive” membership with separate annual dues.
Motion Carried

Honours & Recognition
Professional Recognition:
Larry Pals
Outstanding Service:
David Marquardt
Honorary Member:
Alec McEwen

2008-2009 COUNCIL
President:
Ron O. Hall, ALS
Vice-President:
Donald R. George, ALS,
Past-President:
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Secretary-Treasurer:
David R. McWilliam, ALS
Councilors:
Bruce W. Gudim, ALS
John Haggerty, ALS
Jim I. Maidment, ALS
Connie R. Petersen, ALS
Robert Radovanovic, ALS
Brian D. Ross, ALS
Public Member:
Russ Barnes

2009 AGM
The 100th annual general meeting of the Alberta Land Surveyors’ Association will be held April 23-25, 2009 in Banff, Alberta.

Important Dates to be Aware Of
Executive
May 13
Council
May 21
Steering
May 22

Thanks
I would like to thank all of my staff, and in particular, Michelle Woywitka, for making the 99th annual general meeting one of the best ever.
Brian Munday
Executive Director