

**Alberta Land Surveyors' Association  
Professional Examinations  
Spring 2007**

**The Surveying Profession  
(Closed Book Exam)**

**Time Limit: 3 hours**

Note: This exam consists of 15 questions on 3 pages.

1. Descriptive Plan
  - 2 (a) Describe two situations where they may be used?
  - 1 (b) Who makes the decision if a descriptive plan can be prepared and registered?
  - 2 (c) Where can the requirements for descriptive plans be found?
  
2. The abbreviation TILMA has very recently started to make a lot of news recently. If passed, TILMA will have the effect of creating a large economic power within Canada over the next few years.
  - 4 (a) What does TILMA stand for and which provinces does it affect.
  - 2 (b) How does it directly affect the Alberta Land Surveyors' Association (ALSA)?
  
3. The following are related to the Surveys Act and the Manual of Standard Practice (MSP).
  - 2 (a) What is the one fundamental difference between these 2 sources?
    - (b) Who has the final authority to make changes to:
      - 1 (1) The MSP?
      - 1 (2) The Surveys Act?
    - (c) In which document would you find the following:
      - 1 (1) Accuracies of surveys? MSP SA Both
      - 1 (2) Where to place statutory monuments on a right-of-way? MSP SA Both
      - 1 (3) Requirements for collecting and storing your field notes? MSP SA Both
      - 1 (4) How to establish a corner from a witness monument? MSP SA Both
      - 1 (5) Requirements for integrated surveys? MSP SA Both
      - 1 (6) Curve replacement? MSP SA Both
      - 1 (7) Who can establish an ASCM? MSP SA Both
      - 1 (8) Director of Surveys road allowance policy? MSP SA Both

4. Director of Surveys
- 2 (a) What is the role of the Director of Surveys?  
1 (b) What Branch of the government does he work for?
5. Director of Practice Review
- 2 (a) What is the role of the director of practice review?  
1 (b) What organization does he work for?
- 4 6. Briefly describe “accuracy” and “precision” and explain the difference between the 2?
7. Bylaws
- 2 (a) What document gives the ALSA the right to make bylaws (2)  
2 (b) What process must take place for a new or revised bylaws to come into force? (2)  
1 (c) How often, according to the current bylaws, must the membership of the association meet? (1)  
2 (d) What is the latest date that this event can take place? (2)  
2 (e) What is the process that needs to be followed to get a special meeting of the membership organized? (2)  
6 (f) Besides the term Alberta Land Surveyor, there are seven other membership categories established by the Association. Please name three membership categories and indicate whether a fee is required to hold this membership.

<i>Membership name</i>	<i>Fees (Y/N)</i>
_____	_____
_____	_____
_____	_____

8. Boundaries and Monumentation
- 4 Recently there has been some publicity surrounding the location of the Alberta/Saskatchewan Border. The border (4<sup>th</sup> meridian) was intending to be surveyed on the 110<sup>th</sup> degree of longitude, however the monument placed in 1938 along the 49<sup>th</sup> parallel to demarcate the boundary is approximately 80 meters east of the 110<sup>th</sup> degree of longitude, the intended location. Comment on the impact that this fairly recent observation should have on the border.
9. Corner Recordation Index
- 1 (a) What is the Corner Recordation Index?  
1 (b) What kinds of corner monuments are stored in the index?  
1 (c) Which organization keeps that data base information?  
1 (d) Who can access the data?

10. There are nine articles within the ALSA Code of Ethics:
- 10 (a) Describe five of the nine articles (point form)
- 2 (b) With reference to the ALSA Manual of Standard Practice, who has the responsibility to judge whether the Code has been followed or not?
11. Survey Integration
- 2 (a) What is survey integration as described by the MSP and why is it useful?
- 1 (b) When is integration required?
- 1 (c) If integration is not required, when would an ASCM still be required to be tied in?
- 2 (d) When a survey is integrated, how should the bearing note appear on the plan?
12. In the June 2006 *ALS News* SPR Corner article Fred Cheng, ALS, writes about the need to scrutinize survey monuments and who has the right and what legislation exists to allow the removal of a survey monument. Within the MSP there are definitions for the following that relate to survey evidence evaluations. Please define:
- 2 (a) Lost monument;
- 2 (b) Obliterated monument;
- 2 (c) Disturbed monument;
- 2 (d) The hierarchy of evidence.
- 3 13. Mutual Recognition Agreement (MRA)  
In June of 2001, a mutual recognition agreement was created for land surveyors. Briefly explain:
- (a) what it is?
- (b) what it does?
- (c) what parties have endorsed it?
- 5 14. Geomatics  
A member of the public asks you “what is geomatics”? How would you describe it to them in layman’s terms?
15. In the March 2006 issue of *ALS News*, a GuardPost article written by Jeff Boutilier, ALS talks about the process of Practice Review Board (PRB) interpretations.
- 1 (a) Give one reason why the PRB would define or interpret a survey related problem.
- 1 (b) The public has a voice in these interpretations. Who (position, not name) represents the public?
- 2 (c) Name two other bodies that could be asked for an opinion.
- 6 (d) There are currently six PRB interpretations published, please name or describe three of them?

**100 marks**