The Driving Force

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Sharpline

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**ON THE COVER**

The cover is a photo of the Peter Fidler statue at Elk Point which has been manipulated by the watercolor effect in Adobe Photoshop.

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**ALS News**

September 2001  
www.alsa.ab.ca  
ALS News • 3
Ensight
(repeat)

requested this page
Capitalizing on Those Hidden Assets

Time flies, summer is almost over, and the Association office is back into the swing of another busy season.

I’ve always said in my many visits to survey meetings and conferences around the world that “if you sit in the back row of a survey meeting anywhere in the world, shut your eyes and listen to the discussion, you’d swear that you were right at home because the issues are so similar.” I haven’t been disappointed in my travels to provincial annual meetings so far this year.

In Newfoundland, where very few plans get registered in the provincial land registry and become of public record, a unique proposal was put forward at their annual meeting. A Newfoundland Land Surveyor has proposed that any and, hopefully, all Newfoundland surveyors would voluntarily provide their records (plans) to a private corporation that he would set up to store, index and distribute images of those plans for a fee, either to other surveyors or the general public. In exchange, each surveyor would receive a portion of the fee for each search and the Association of Newfoundland Land Surveyors would also receive a portion of the fee, with the remainder going to the private corporation. It is estimated that the project could generate over a million dollars per year. In this way, each historical record would potentially produce continuous revenue and provide a service to the public. I would like to think that the proposal has the potential to provide the Province of Newfoundland with a well-needed, comprehensive cadastre which currently exists in an organized fashion in the files of many practising, retired and deceased surveyors.

In the Province of Québec, a graphical database is in place, managed by a private survey corporation which shows the location of otherwise non-public surveys which have been conducted by other private surveyors. Again, the data is provided voluntarily by participating members. The only information available on the database is the graphical location, the type of survey, (stakeout, location certificate, topographic, and so on) and the year of the survey. If people want further information, they can send an e-mail to the surveyor who conducted the survey (although the surveyor remains anonymous), and the surveyor can then determine if he or she wants to do business with that person. If, for instance, the original survey was a confidential matter, or was subject to legal proceedings, the surveyor may not be in a position to disclose the details and would remain anonymous. (The website is www.urbic.qc.ca but was still under construction when I last checked.)

These two instances reminded me of the RPR Index System that our own Association is setting up to advise the public of the availability of real property reports. Although our own system is designed with a slightly different purpose in mind and with different criteria, all three systems are voluntary and have the effect of adding value to professional services that have been performed in the past. Over time, I expect that we will all learn the advantages and disadvantages of the respective provinces’ proposals and perhaps we will revise and expand our respective systems. Surveyors have always held a wealth of information in their files but have not had a ready means to make the public aware of that fact. We now have innovative new technology that will permit us to capitalize on our hidden assets and provide value-added services to an expanding clientele.

These are real projects which are expanding the surveying profession as well as capitalizing on our hidden assets.

We also must reflect on the project that Alberta-based AltaLIS Ltd., in conjunction with Spatial Data Warehouse, is engaged in to provide cadastral and title mapping to both public and private organizations. This project is obviously much larger than those being proposed in other provinces but every project must start from a seed somewhere. These are real projects which are expanding the surveying profession as well as capitalizing on our hidden assets.
Leica

(repeat)
I would like to add to Dave McWilliam’s column in the June 2001 issue of ALS News. I also have concerns with the Manual of Standard Practice (MSP). The MSP has evolved from a collection of a few simple motherhood statements through to the Manual of Good Practice and then to its present form as a manual to be deviated from at one’s peril.

The Manual of Good Practice was initially prepared as a guide for articling students and new Alberta Land Surveyors. It was intended to assist them in gaining an understanding of the process of carrying out legal surveys for registration at Land Titles.

With each re-write of the Land Surveyors Act, the Surveys Act and the regulation under the Surveys Act, we have continually dropped key pieces of information or instructions relating to the re-establishment or restoration of survey evidence.

This “history,” as I call it, is key in understanding the process of how evidence was placed under previous acts or regulations. When a surveyor is required to re-establish the position of a monument placed in the original survey, the surveyor shall do so from the best available evidence and in a manner that carries out the evident intention of the original surveyor.

How can a surveyor follow the intention of the original surveyor when re-establishing monuments placed under previous acts or regulations if they have no understanding of the process of how the monument was placed to begin with?

I would like to see a publication or a supplement to the Manual of Standard Practice outlining the history of surveys as defined in previous acts and regulations. This history would assist a surveyor in re-establishing monuments and following the evident intention of the original surveyor.

This additional information placed in the Manual would assist in bringing the Manual of Standard Practice back to its original intent as being a manual of instructions.

On another point, as Past Chairman of the Public Relations Committee, I would like to commend the ALSA staff and Past President Larry Pals for an outstanding job of public relations with respect to its membership.

The distribution of pins, individual photos, recognition awards for 25 and 50 years of membership and recognition of committee chairs was truly a job well done.

Since we are on the subject of public relations, I would like to blow the PR horn.

The Public Relations Committee has one of the largest budgets of all the committees of the ALSA.

I have listed below some of their activities undertaken over the past year:

1. Developed, produced and circulated the following brochures:
   (a) Understanding Easements and Rights-of-Way
   (b) Real Property Report
   (c) The Real Property Story
   (d) Alberta’s Subdivision Process
   (e) Owning Land
   (f) Educational brochure and poster. These items are free of charge and available from the Association office.

2. Along with the British Columbia, Saskatchewan and Manitoba land survey associations, hosted the annual Beef and Bun Reception for University of Calgary 2nd, 3rd and 4th year students. All surveyors are invited and are encouraged to attend.

3. Published a number of articles through the members of the Alberta Weekly Newspaper Association.
   • GPS Units Display 3 Decimal Places...But Are They Accurate To 3 Decimal Places? (May 3, 2000)
   • Beam Me Up, Scotty! (May 10, 2000)
   • New Foundation and Garage Move Costs $5,000 (May 17, 2000)
   • Hi-tech Survey Technology Comes to the Oil Industry (March 20, 2001)
   • Tips for the New Home Purchaser (April 2, 2001)
   • 5 Steps to an Easy Real Estate Transaction (June 5, 2001).

4. Developed criteria for and awarded the first Geomatics Award of Excellence in 2000.

The Public Relations Committee is always looking for capable public relations oriented members to assist with its activities.
**Editor’s Notes**

**Miscellaneus** (ms-ln-s) adj.
1. Made up of a variety of parts or ingredients;
2. Having a variety of characteristics, abilities, or appearances;
3. Concerned with diverse subjects or aspects.

*From Latin miscellaneus, from miscellus, mixed, from miscere, to mix. Cmeik in Indo-European roots.*

If you haven’t guessed by now, my article for this issue of *ALS News* is a mixed assortment of various matters within the Association.

When you call the Association office, you will likely notice that it is a different voice that answers the phone. Janet Davis will be working at the Association for the next several months while Brighid McGarry takes a leave of absence. Janet will be responsible for the Professional Development Committee, Public Relations Committee and the Historical and Biographical Committee as well as taking on a number of day to day administrative responsibilities. Dawn Phelan has shifted offices and is working with Lyall Pratt and the gang on systematic practice reviews and the Practice Review Board. Dawn will also continue to be responsible for the Standards Committee and the Real Property Report Task Force.

Brighid is expected to return in November.

The Association has recently acquired several new books for its library. President Ken Allred will be doing a review of some of these new books which appears in this and upcoming issues. The books include *Mapping the World* by Alastair MacDonald. *Mapping the World* is about the Directorate of Overseas Surveys whose purpose was to provide national geodetic frameworks throughout the colonial empire and to produce mapping using modern methods based on aerial photography. A little closer to home, we also have *A History of the Boundaries of Nebraska and Indian Surveyor Stories.*

Even closer yet, former NAIT instructor and retired Alberta Land Surveyor Doug Barnett has put together *Early Surveys and Settlements in Central Alberta.* His work is a good explanation to the lay person of survey terminology and early survey practices.

For those members looking for something with a more technical bent, there is Dr. Buckner’s *Land Survey Review Manual* and K. Michael’s *Computer Aided Design Modelling and Mapping for Geographic Information Systems.*

Speaking of books, Council has approved a request from the Historical and Biographical Committee to retain Judy Larmour to write a book on the history of surveying in Alberta. It is expected that the book would be published in time for the centennial of the province in 2005. The book will give a lively overview of many aspects of surveying and celebrate the milestones and achievements of the profession. It will be a testimony to the early surveyors of the province, capture memories of older surveyors, and provide a historical context for younger surveyors as they take the profession into the 21st century. Ms. Larmour has worked with the Historical and Biographical Committee for the last two years seeking out sources for research and helping them conduct interviews with senior members of the Association. Judy Larmour has a B.A. in history from Trinity College in Dublin and an M.A. in Canadian History from the University of Alberta. She is also the author of *How Will We Find Our Way Home* and *Really Big Art.*

Throughout the summer, the Association has been asked to comment on several acts and regulations. In the last issue of *ALS News*, we mentioned Bill 21, The Electronic Transactions Act which is expected to outline standards for conducting e-commerce in Alberta.

We commented on the review of the Conservation Easement Registration Regulation. We expressed concern about the continuing use of metes and bounds descriptions but did not propose any amendments.

The Subdivision and Development Regulation is also being reviewed at this time. The Association made a number of comments regarding setback relaxations and defining terms such as bounded and adjacent.

The General Safety Regulation sparked a great deal of interest. In the Association’s response, we commented on the section dealing with buried facilities and the requirements to contact owners of facilities prior to disturbing the ground.

The Association is working with Professions and Occupations and Legislative Counsel to amend our own Examination and Training Regulation under the Land Surveyors Act. The regulation outlines our articling and registration provisions. The amendments will remove references to the Universities Coordinating Council and to residency as well as update the regulation as a result of
the recently signed Mutual Recognition Agreement (MRA). The purpose of the MRA is to promote the mobility of land surveyors across the country.

Most of the professional survey associations in Canada have some type of continuing education program. In some cases, it is mandatory; in others, it is not. At the 2000 Annual General Meeting of the ALSA, the membership approved a professional maintenance program (PMP). The PMP was designed to be a voluntary program that would provide information to members who wish to undertake some type of continuing education.

The Professional Maintenance Program would have two chief components: a resource centre on the ALSA website and a web-based self-assessment questionnaire. The Resource Centre has been online for a year now and Professional Development Committee member and NAIT instructor Allan Theriault discusses the Resource Centre in this issue of ALS News.

The assessment questionnaire has proven to be a more difficult subject to address. The Association could find no comparable approach being undertaken at the professional level. So, the Association circulated a five question poll to the membership before potentially committing large sums of money to this project. Only thirty-eight responses were received. Twenty-six members (or 68%) had visited the Resource Centre and of those twenty-six, five had taken a course identified through the Resource Centre. While thirty-three of the thirty-eight respondents indicated that they were somewhat likely or very likely to take a course based on the results of an assessment questionnaire, the Professional Development Committee was concerned about the overall response rate. Committee members agreed that there appeared to be insufficient interest within the membership for the expense and development of the proposed online self-assessment questionnaire. Instead, it was suggested that the biannual seminar questionnaire (what seminars you would like to see the Association present as opposed to what courses you should take) would act as a simple form of self-assessment. The Resource Centre will continue to be online and updated.

It has been interesting for me to see the reaction from individuals and municipalities as they begin to work with the new requirements.

It has been several months since the Annual General Meeting and already plans are underway for the May 2-4, 2002 Annual General Meeting in Edmonton. The changes to the real property report standards were certainly one of the most hotly debated subjects. The purpose of those amendments was to remove so-called “nuisance items” that complicate the real property report but do not detract from its overall integrity. For example, Alberta Land Surveyors are no longer required to show portable sheds or hot tubs on real property reports. Members of the Real Estate Transaction Committee which consists of lawyers, realtors, municipalities and so on, expressed their general support for the amendments.

It has been interesting for me to see the reaction from individuals and municipalities as they begin to work with the new requirements. Much to my surprise, I have received more calls about Alberta Land Surveyors no longer being required to show hot tubs on their real property reports as a municipality requires a permit for not tubs. One caller wanted real property reports to show the hot tubs but not fences—as fences create too many headaches for him. I expect that I will continue to receive more queries about real property reports than any other subject.

And finally, many thanks to all the land surveyors, town council members and other dignitaries who joined us for the Peter Fidler Rededication Ceremony in early July.

**Net Notes**

In past issues of Net Notes, we have put together lists of websites from the various categories of our Professional Maintenance Program Resource Centre. They have included: business management, computers, legal, libraries and surveying-related websites.

**All Surveyors**

www.landsurveyors.com/netveyor

**Land Surveyor Reference Page**

www.lsrp.com

**Land Surveyor’s Workshops**

www.landsurveys.com

**Online Resources for Surveying and Geomatics**

homepage.interaccess.com/~maynard

**POB Online**

www.pobonline.com

**Professional Surveyor**

www.profsurvey.com

**Sleeping Bear Press**

www.sleepingbearpress.com/catalog.asp?category=mapping

**Spatial News**

www.spatialnews.com

**Survey Careers**

www.surveycareers.com

**Survey Planet**

www.surveyplanet.com

**Surveyor Central**

www.surveyorcentral.com
LPP
(new)
requested this page
Land Measurement Systems
(new)
Congratulations

Mr. Allred:
On behalf of the Government of Alberta, I wish to convey my congratulations to you on your recent election as President of the Alberta Land Surveyors’ Association at this year’s 92nd Annual General Meeting and Convention.

As you know, in my role as Minister of Alberta Human Resources and Employment, I am responsible for the Land Surveyors Act (LSA), the provincial legislation which governs your profession. The LSA is one of the earliest acts to have been proclaimed by the Government of Alberta, and reflects the long-standing contribution your profession has made to the development and prosperity of this province.

I look forward to working with you in continuing to build the positive and productive relationship that has been established between your Association and the Alberta government. Continued best wishes and, again, congratulations.

CLINT DUNFORD, MINISTER
ALBERTA HUMAN RESOURCES AND EMPLOYMENT

Mr. Pals:
On behalf of the Government of Alberta, I wish to convey my sincere congratulations to you on your completion of a highly successful term as President of the Alberta Land Surveyors’ Association (ALS). As the Minister responsible for your Association, I am greatly appreciative of the dedication and commitment you have shown on behalf of your profession during your time as the ALSA’s President. Through your leadership, your profession has continued to make an outstanding contribution to the development and prosperity of this province, while, at the same time, ensuring the ongoing protection of all Albertans. Continued best wishes.

CLINT DUNFORD, MINISTER
ALBERTA HUMAN RESOURCES AND EMPLOYMENT

Thank You

I would like to begin by thanking you for supporting the scholarship program at the University of Lethbridge.

Inspired teaching, innovative research, and world-class technology are the foundation of educational excellence at the University of Lethbridge. These guiding principles ensure that our students are developing the skills needed to be successful in today’s competitive global market.

And, of course, scholarships and bursaries play a key role in strengthening the quality of post-secondary education. The Alberta Land Surveyors’ Association’s support not only gives students the opportunity to attend the University of Lethbridge, it also provides these individuals with the experience and personal growth that will enhance their lives and make them leaders within our community.

The University recognizes its donors by annually listing their names in various publications.

PATRICK MACHACEK
DIRECTOR OF INSTITUTIONAL ADVANCEMENT
THE UNIVERSITY OF LETHBRIDGE

Applied and Pure Mathematics 10

Thank you for your letter dated May 10, 2001. I am pleased to respond to your question regarding Applied and Pure Mathematics 10.

Alberta Learning has advised students contemplating entering any field of engineering that they must possess a strong mathematical background and would, in most cases, require both Pure Mathematics 30 and Mathematics 31 as prerequisites for entry into the Faculty of Engineering.

As you are aware, the Applied Mathematics 10 program includes some of the trigonometry and other related concepts and skills required for post-secondary study and career in surveying. The Pure Mathematics 10 program also teaches these components. It is hoped that a student who becomes interested in land surveying as a potential career would investigate the post-secondary program requirements to qualify as a professional land surveyor. If a student decides to pursue this career path, he or she has the option of transferring into the pure mathematics program while still in high school, or completing the applied mathematics program through to the grade 12 level, and then completing the transition course. The transition course has been designed for those students who graduate with Applied Mathematics 30 and then decide they need Pure Mathematics 30 to gain entry into the science and technology based program of their choice. The transition course will give these students the necessary knowledge and skills they require in lieu of Pure Mathematics 30.

Thank you, again, for writing.

DR. LYLE OBERG, MINISTER
ALBERTA LEARNING

Legislation

Thank you for your May 19, 2001 letter outlining your concerns about delays in amending the Examination and Training Regulation under the Land Surveyors Act.

I understand your desire to complete the project. Amending the detailed requirements in any professional regulation is generally a highly complex task, involving several
ronds of review among the profession, government department officials and Legislative Counsel. What may seem like endless “wordsmithing” is often the development of careful wording aimed at clarifying your authorities and withstanding possible legal challenges.

The Professions and Occupations Unit in my department has advised me that the amendments to your Regulation have now been essentially completed. The department expects to move ahead to the final phase, stakeholder consultation, this summer. Pending the timely completion of this process and any resulting revisions, it is anticipated that the Regulation can go forward in the fall. Continued best wishes.

CLINT DUNFORD, MINISTER
ALBERTA HUMAN RESOURCES AND EMPLOYMENT

Thank you for your submission regarding the proposed amendments to the Subdivision and Development Regulation and the Subdivision and Development Forms Regulation. Your comments and suggestions, along with those of others, will be used to evaluate the process and help fine-tune the drafting of the proposed amendments.

Thank you for your interest and participation in this important consultation process.

ROBIN VOGELESANT, COORDINATOR
PLANNING LEGISLATION
ALBERTA MUNICIPAL AFFAIRS

Government Services
It was a pleasure meeting with you on September 5th. I appreciate the frank discussion which took place and will certainly keep your comments in mind during future deliberations relative to the operation of the Land Titles System.

Please accept my sincere best wishes for your continued success.

DAVID COUTTS
MINISTER OF GOVERNMENT SERVICES

Golf Tournament
Please accept our sincere thanks for the opportunity to attend your 37th Annual Golf Tournament held on Friday, September 7th.

We are aware that arrangements were made at the last moment to accommodate Ray Reid and I from a waiting list. This effort was most appreciated, and we would like to commend those responsible for making this tournament a memorable and fun-filled event.

KEVIN M. ROBINS, CAO
CITY MANAGER, CITY OF LEDUC

Scholarships
On behalf of the University of Calgary, I am pleased to advise you that the recipient selected for the J.H. Holloway Scholarship in Geomatics Engineering is Mr. Steven James Van Berkel (award amount $2,500).

I would like to take this opportunity to express to you the thanks of the University of Calgary for the provision of this award. The financial reward and support you offer to the students here is greatly appreciated. Please do not hesitate to call if you have any questions or comments regarding the administration of this award or the University awards program in general.

Thank you once again for your generous consideration of University of Calgary students.

LINDA SHARMA, DIRECTOR
STUDENT AWARDS AND financial AID
UNIVERSITY OF CALGARY

On behalf of the Northern Alberta Institute of Technology (NAIT), I would like to express the Institute’s sincere appreciation for your past support and interest in the NAIT Awards Program. Your support has provided assistance in recognizing students who have achieved excellence and/or require financial assistance in preparing for their career.

KEVIN M. ROBINS, CAO
CITY MANAGER, CITY OF LEDUC

ASSMT Liaisons
This is my first year of involvement, as a Council member, with the Alberta Society of Surveying and Mapping Technologies (ASSMT).
Students are aware of your award through the published Student Awards Book. Awards will be distributed during December and March.

As a contributor to the Students Awards Program at NAIT, you are providing support that will assist students directly in accessing practical, career-oriented, technical education, helping them achieve their career goals. The growth of Alberta’s economy depends on the availability of people with the skills required by business and industry.

Again, thank you so much for your support.

VINCENT E. DUCKWORTH
DIRECTOR OF DEVELOPMENT

SPIN Wins
Following our national award success last fall it was decided this spring to submit the Digital Plan Registration/SPIN Project to the rigor of an international level competition. As a result, we are pleased to announce that we are a co-winner of this year’s Urban and Regional Information Systems Association (URISA International) 2001 “Exemplary Systems In Government” (ESIG) Award.

Needless to say, we are very pleased with this result and wanted to share this news with the Association given the key role your membership plays within this process.

BILL ELLIOTT, REGISTRIES
ALBERTA GOVERNMENT SERVICES

Understanding Easements
I am writing on behalf of my peers at the Alberta Energy & Utilities Board, St. Albert field centre. We have found the Understanding Easements and Rights-of-Way brochure that your organization produces to be a very useful tool in our efforts.

As a representative of the EUB, part of our role is that of addressing and dealing with issues and concerns that are raised by the public, land owners and residents. Some of the issues are pipeline and right-of-way related and, as mentioned, your brochure serves a very effective means for delivering information.

DARREN ERDELY
SR. FACILITATOR/INSPECTOR
EUB: ST. ALBERT FIELD CENTRE

A Voice From Ontario
Kent McMillan, a brilliant Texas colleague of ours [we should have more like him in Ontario] pointed me [via POB online] to the great posting of Lyall’s Practice Review.

The case bespeaks of the lack of the ALS or OLS in the field and relying on those who may not comprehend the joys of the whole process of being professionally allowed to be opinionated on where one starts and stops.

Naive as I am here in North Aboyne tho’, we still spell metre metre unless we are measuring Alberta oil, then we use eye droppers per ounce, not meters per rubber bootfull.

It also demonstrates how deep the backwater is here in North Aboyne in seeing via the ALS posting of the “Internal Trade Agreement” that we can now inflict our Ontario land surveying expertise on Alberta as of June 16th.

DEREK GRAHAM, OLS

Cansel Advertisement
(repeat)

I prefer surveying for a week to spending a week in fashionable society even of the best class.

ELLEN HENRIETTA SWALLOW RICHARDS
U.S. CHEMIST AND EDUCATOR
(1842-1911)

As quoted in The Life of Ellen H. Richards, ch. 3, by Caroline L. Hunt (1912) from a May 18, 1869 letter to her parents when she was attending Vassar College, where she took a course in land surveying.
Howard Douglas Farnell
(new)
**Changes to the Register**

**Maltais Associates Surveyors Ltd.** in Calgary has a new address: 4852 - 50 Avenue NE T3J 4L8.

**Precision Geomatics Inc.** (Roy Devlin, ALS) has recently changed internet service providers and registered a new domain name: precisiongeo.ca. The new e-mail address is rdevlin@precisiongeo.ca.

**Dennis Tomkinson, ALS** has a new address: PO Box 2006, 61 Broadway Blvd., Sherwood Park, AB T9H 2C1; Tel: 446-9745; E-mail address: djtomkinson@aol.com.

**Regional Meeting Dates**

**October 25, 2001**, Edmonton Petroleum Club (Dinner Meeting)

**October 30, 2001**, Calgary Winter Club (Dinner Meeting)

The guest speaker for the regional meetings will be Wolfgang Janke who will give a presentation on Spatial Data Warehouse and the titles mapping initiative.

**New Members**

**#676 PATTON, William Jeffrey**

Jeff Patton was born in South Porcupine, Ontario on January 2, 1975. He graduated from Grande Prairie Composite High School in 1993 and went on to receive a B.Sc.Eng. from the University of Calgary in 1997.

Ron Hall, ALS served as Jeff’s principal from January 1998 to March 2001. The topic of the technical report submitted as part of the qualifying examination was **Process and Procedures of the Subdivision of Non-patented Land in Alberta as Applied to a Part of the N2 Sec. 36 Twp. 70 Rge. 6 W. 6 Mer.** Commission as an Alberta Land Surveyor was received on March 21, 2001.

Surveying experience includes 2½ years doing oilfield surveys in northern Alberta and 1½ years in project management.

Harley Davidson motorcycles, mountain snowmobiling and restoring old cars are a few of Jeff’s leisure activities.

Jeff is currently employed with The Focus Corporation Ltd. in Grande Prairie.

**#678 ten BROEK, David Charles**

David was born in Vancouver, British Columbia on August 7, 1968. After graduating from Lord Beaverbrook High School of Calgary in 1986 he went on to receive a B.Sc. in Geomatics from the University of Calgary in 1995.

Articles were served from July 1997 to June 2001 under principal John Matthyssen, ALS. The topic of the technical report submitted as part of the qualifying examination was **The Development and Integration of a Database for the Operations of a Survey Firm.**

From 1996 to 1997, David was employed by Terramatic Technologies Inc. and was involved in real property reports, construction surveys, GPS and software development. He has worked for The Cadastral Group Inc. since 1997 doing oilfield related surveys.

David enjoys golfing, mountain biking and renovating a heritage home that he and his wife, Heather Coburn share.

**#679 DESROCHERS, Marc A.**


He went on to receive a B.Sc. from the University of Calgary in 1993.

Articles were served under Barry Fleece, ALS from January 1995 to December 1996 and Aziz Dharamshi, ALS from December 1996 to June 2001. The topic of the technical report submitted as part of the qualifying examination was **Utilizing a Strata Plan to Facilitate Multiple Condominiums Within the Same Parcel of Land.** Marc received his commission as an Alberta Land Surveyor on September 7, 2001.


Marc resides in Calgary and has a daughter, Tylar, aged 5 years.
Analysis of 2001 Professional Exams

The Surveying Profession
Twenty-seven candidates wrote the Surveying Professional examination; 16 passed.

Answers for Questions Under 75%

1. There are 9 articles under the Code of Ethics for Alberta Land Surveyors. Please list and then briefly state the purpose of each one of these articles.

27 marks
The answer to question 1 can be found in the Manual of Standard Practice.

6. (b) To what body does the Director (of Systematic Practice Review) report?

2 marks
The Director of Systematic Practice Review reports to the Practice Review Board.

7. During the 2000 ALSA Annual General Meeting, a recommendation for a Coordinate Based Cadastre Test Project was brought forward. Briefly explain what this proposed test project involved by explaining the objectives, how it would be managed, its duration, and so on. Was this recommendation carried?

10 marks
The answer to question 7 can be found on Page 77 (Appendix “B”) of the Report of Proceedings of the Ninety-first Annual General Meeting.

Statute Law
Twenty-seven candidates wrote the Statute Law examination; 12 passed.

This year’s exam followed the same format as in previous years and covered the following acts and regulations: Surveys Act, Land Titles Act, Municipal Government Act, Oil and Gas Conservation Act, Land Surveyors Act, Condominium Act and one general question on the hierarchy of evidence.

The marks ranged from 44% to 88% with an average mark of 67%. 46% of the candidates obtained a passing grade.

The following is a list of questions that, generally, students performed poorly on (referenced section of the appropriate Act/Regulation followed in brackets):

1. Who administers the Surveys Act?
   1 mark
   Surveys Act, Part 1 – Sec. 1(k).

2. What lands in Alberta does the Surveys Act not apply to?
   2 marks
   Surveys Act, Part 1 – Sec. 9.

3. What is the legal term used to define the limit of a water boundary?
   1 mark
   Bank.

10. Define: (a) Statutory Plan, (b) Encumbrance, (c) Registration, (d) Restrictive Covenant, (e) Strata Space.
    10 marks
    Land Titles Act, Sec. 1.

11. What land cannot be included in one certificate of title?
    2 marks
    Land Titles Act, Sec. 29.

18. What four (4) requirements must be met before a subdivision authority can approve an application for subdivision?
    4 marks
    Municipal Government Act, Sec. 654(1).

20. How is the drilling space unit determined on a fractional section?
    1 mark
    Oil & Gas Conservation Regulations, Sec. 4.050(1).

23. Council may make “regulations” and “by-laws.” Explain the difference.
    4 marks
    Land Surveyors Act, Part 3, Secs.15 & 16. (Most candidates restricted their explanations to describing the differences on how a regulation and by-law come into force rather than describing the actual differences between them.)

30. When a plan is registered as a condominium plan under which the building or plan is to be developed in phases, what document must accompany the plan?
    1 mark
    Condominium Property Regulation, Sec. 35.

31. A plan presented for registration as a condominium plan must be accompanied by a certificate from a land surveyor. Describe the three (3) things the surveyor certifies.
    6 marks
    Condominium Property Act, Sec. 8(1).

Practical Surveying
Earlier in April, roughly half of those pupils articling to be Alberta Land Surveyors tackled the Practical Survey professional exam required as part of qualifying for registration under the Land Surveyors Act. This exam has long had the image of being the most difficult of the professional exams. The problem has lied largely with both the reference materials (or lack thereof) and the diversity of the types of questions that are perceived to be fundamental to test for knowledge of practical surveying.

This has forced the relationship between the articling pupil and their principal to be more interactive as a majority of the information to be gleaned has been passed down from land surveyor to land surveyor, as opposed to textbooks. Those that have not had this sort of privilege will be able to attest to the high level of difficulty one faces in learning the practical aspects of land surveying without a guide to show the “peaks and valleys” one encounters in our profession.

The Registration Committee has a great deal of difficulty in the annual setting of a well-rounded practical
exam as is obvious by the diverse areas of practice our profession progressively deals with. It is a challenge to narrow down the fundamental topics to test candidates’ broad range of knowledge within a four-hour period. Even at four hours, there is a significant amount of seemingly important questions that are deleted in the interest of time.

In brief, 10 out of 35 successfully passed the exam. The average mark scored on the exam was 60% (9 candidates scored less than 50%).

This year’s exam questions (and results) spanned the following scenarios:

1. **Well Site in Unsurveyed Territory**  
   **(Average mark - 56%)**

   In this question, the candidate had to use conventional field notes in the layout of a lease and well center in unsurveyed territory. GPS processed UTM coordinates also provided an alternative for the candidate in computing total coordinates of the new well center. Required to understand and incorporate trigonometric and GPS determined elevations. Processed elevations (ellipsoidal) were given as well as the geoidal undulations necessary to convert them to orthometric. Manual of Standard Practice.

2. **Subdivision**  
   **(Average mark - 77%)**

   For this question, the candidate needed to demonstrate an understanding of:
   1. base requirements for the application, preparation, and registration of a (Descriptive) Plan for Subdivision;
   2. which registered instruments require consent for registration;
   3. what monumentation governs in a rural setting and where monuments would be required to adequately define a new parcel for a plan of survey.

3. **Pipeline Right of Way**  
   **(Average mark - 63%)**

   This question involved the five basic monumentation layout questions according to Bulletin 38. Field note sketch supplied for a pipeline right of way through four different quarter sections, including two section line intersections. One evidence problem existed that candidates were expected to at least recognize was there. Required to determine areas and monumentation to be placed.

4. **Cell Tower Lease Site**  
   **(Average mark - 47%)**

   Mechanics are that of a well site in surveyed territory, just changed the name and removed the need for understanding Guide 56 of the EUB. Ample number of plans supplied to calculate around the subject section and across a correction line. Need to understand metes and bounds descriptions in titles.

5. **Real Property Report**  
   **(Average mark - 46%)**

   Required to (iteratively) coordinate the layout of a house onto an existing pie-shaped lot and be able to derive offset and lot coverage information from that. To compute the dimensions required for the subsequent Real Property Report.

Candidates were given the option of answering either question number 4 or 5, but not both.

4. **Spend “practical” time with your principal.**

   This may require pursuing time together outside of regular working hours or even spend time working on projects together in all phases. After all, this is the point of having the articling process. To learn the practical aspects of land surveying in Alberta by direct mentorship.

5. **Study with a peer.**

   As our professional practice is not documented in textbooks as well as other professions, this is vital in realizing that professional judgment can end up with more than one answer to the same question. Often,
depending on whom you are article to, you may have learned a different way of solving the same problem. This is apparent to anyone who has attended the Getting It Right seminars.

To everyone who did not pass this year and will be re-writing this exam in the future, don’t give up, study hard, and good luck. Your efforts will be worth it.

**Date Set for Next Sitting of ALSA Professional Examinations**

The next sitting of the Alberta Land Surveyors’ Association Professional Examinations in Statute Law, the Surveying Profession and Practical Surveying will take place on April 2nd and 3rd, 2002 in Edmonton and Calgary.

**Titles Mapping Backgrounder**

**Project Description**

A joint initiative between Alberta Municipal Affairs (AMA), the Alberta Association of Municipal Districts and Counties (AAMD&C), the Alberta Urban Municipalities Association (AUMA) and Spatial Data Warehouse (SDW) will create a titles mapping database for the province of Alberta (excluding Calgary and Edmonton). This will further enhance Alberta’s already valuable cadastral mapping data.

**History**

- Provincial cadastral products (formerly the urban MISAM and rural PARCEL datasets) were started over 25 years ago by the provincial government.

- The cadastral products depict township, section, subdivisions, lot, block, plan, right of way, dimensions and other information found on plans of survey, registered at the Land Titles Office.

- Currently, the cadastral products do not show the extent or limits defined by title or ownership information and, as a result, many municipalities have maintained local information on their own.

- Spatial Data Warehouse has had responsibility for the maintenance, updating and distribution of the cadastral products since 1996.

- Under a joint venture arrangement with SDW, AltaLIS has been performing the continued updating, re-engineering, storage, distribution, value-added redistribution and general management of the cadastral products since 1998.

- AAMD&C and AUMA have recently become members of SDW, bringing the total number of SDW members to eight.

**Project Objective**

To create and maintain titles mapping data, including all existing titles and historical metes and bounds information, for the province of Alberta. This additional data will allow municipalities to have low-cost access to reliable and current title mapping data and to use this data to build other value-added applications, such as: property tax assessment, addressing, emergency response systems and others.

**Final Product**

- The project will create an additional layer of mapping data that depicts (the extent of) ownership together with the title “LINC” identifier. This additional data will be in sync with and can be overlaid on top of the current cadastral mapping data. Over one million ownership polygons will be created through titles mapping.

**Project Benefits**

- Creates an up-to-date, standardized, low-cost, GIS-ready product;
- Data will be in sync with, and can be overlaid on top of, the current cadastral mapping data;
- Allows municipalities and others to have low cost access to up-to-date title mapping data;
- Enables municipalities and value added service providers (VASPs) to build applications that utilize a consistent database;
- Will help identify errors and potential conflicts between titles.

**Project Structure**

- Funding for the creation of historical titles data is being provided by Alberta Municipal Affairs by means of a grant to AAMD&C and AUMA.
- Spatial Data Warehouse has entered into an agreement with AUMA and AAMD&C to create the historical titles mapping data.
- A project management committee consisting of representatives from AMA, AAMD&C, AUMA and SDW has been set up to oversee and direct the project.
- SDW’s Cadastral Mapping Specifications Advisory Committee will be a major source of input for the project.

**Project Timetable**

Currently, committed funding for the project will complete approximately 75% of the titles throughout the province and will take approximately 24 months. The first titles mapping products will be available to users in the spring of 2002.

For additional information and background, please visit www.altalis.com.
Thank You to the Tournament Sponsors:

- Alberta One-Call Corporation
- All Alberta Plumbing and Gasfitting Ltd.
- Butler Survey Supplies Ltd.
- CFE Industries Inc.
- Can-Am Surveys Ltd.
- Cansel Survey Equipment
- Corporate Express
- Continental Imaging Products
- Corporate Express
- Crape Geomatics Corporation
- Creative Concepts
- Crowne Plaza – Chateau Lacombe
- D.W. Data Services
- Ensign Information Services
- Fairmont Jasper Park Lodge
- The Focus Corporation ltd.
- FirstOrder Measurement Solutions Inc.
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- HDF Insurance & Financial Group
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- Land Measurement Systems Inc.
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- TAL Investment Group
- Tarin Resource Services Ltd.
- Trimble Canada Ltd.
- Universal Surveys Inc.
- Usher Canada Ltd.
- WesTel Supply Ltd.

The sale of mulligans raised $1,140 for the J.H. Holloway Scholarship Foundation.

Hole Prize Winners:

- Hole #1: -------------- Jerry Jelinek
  Shortest Drive Men
- Hole #2: -------------- Jay Abbey
  Closest to Pin (2nd shot) Anyone
- Hole #3: -------------- Linda Fawcett
  Closest to Pin Ladies
- Hole #4: -------------- Jamie Hume
  Closest to Pin (2nd shot) Anyone
- Hole #5: -------------- Karen Morcom
  Closest Drive Ladies
- Hole #6: -------------- David Marquardt
  Closest to Pin Anyone
- Hole #8: -------------- Kevin Robins
  Closest to Water Anyone
- Hole #9: -------------- Mark Sutter
  Longest Drive Men
- Hole #10: --------- Colleen Smith
  Shortest Drive Ladies
- Hole #11: --------- Connie Petersen
  Longest Putt Ladies
- Hole #12: --------- Joyce Brown
  Longest Putt Ladies
- Hole #13: --------- Mike Michaud
  Closest to Target Anyone
- Hole #14: --------- Carol Labine
  Ball in Sand (draw) Anyone
- Hole #15: --------- Chris Tucker
  Closest to Pin Anyone
- Hole #16: --------- Cary Glazier
  Closest to Pin Anyone
- Hole #17: --------- Al Nelson
  Closest to Pin Ladies
- Hole #18: --------- Guy Anderson
  Longest Drive Men

Hole-in-One Sponsors:

- Continental Imaging Products 7th Hole — 2002 PT Cruiser or $30,000 cash
- HDF Insurance & Financial Group 16th Hole — $10,000 cash
- Leica GeoSystems Ltd. 3rd Hole — Robotic Total Statin System valued at $43,500 (open to ALSs and articled students only)
- Trimble Canada Ltd. 6th Hole — Trimble 5600 DR200+ valued at $28,000 (open to ALSs and articled students only)
Land Surveyors Sign Internal Trade Agreement

Land Surveyors will now be able to work in any part of Canada thanks to an historic agreement signed in Trois-Rivières, Québec today.

Prior to the signing of the agreement, professional land surveyors faced a number of impediments to working outside their own home jurisdiction. Although professional standards are almost equivalent, land surveyors were required to article to another land surveyor and pass professional examinations in each jurisdiction. Now, land surveyors wanting to work in another province or on federal Crown land will be examined only in subjects that are unique to that area.

“This agreement is good for Alberta,” declared Alberta Land Surveyors’ Association President Ken Allred. “It means more qualified land surveyors will be able to serve the people of this Province while, at the same time, allows Alberta Land Surveyors to export their expertise across the country.”

“This is an agreement that eliminates unnecessary trade barriers to ensure that land surveyors can pursue opportunities anywhere in the country,” announced Canadian Council of Land Surveyors President Greg Browne. “At the same time, the agreement ensures that the public continues to deal with qualified professionals regarding land information matters.”

“Canadian land surveyors are already regarded as land information experts,” continued Mr. Browne, “this agreement can only enhance that reputation.”

In order to work as a professional land surveyor in any province or on federal Crown land, an individual must hold a license to practice from the self-governing professional association in that jurisdiction. To obtain a license, an individual must usually have a university degree or equivalent, article to a land surveyor to gain practical experience, and then pass a series of professional examinations. The signing of today’s agreement provides professional land surveyors with greater flexibility in operating their practices across Canada.

The agreement is part of the Agreement on Internal Trade that was signed by the federal and provincial governments to remove or reduce interprovincial barriers to the movement of workers, goods and services. The Canadian Council of Land Surveyors is a federation of self-regulating land survey associations working on land related issues at national and international levels. The Alberta Land Surveyors’ Association, formed in 1910, is a self-governing professional association legislated under the Land Surveyors Act. The Association regulates the practice of land surveying in Alberta for the protection of the public and administration of the profession.

**Note:** Since the signing of the Mutual Recognition Agreement, the Association has received numerous inquiries from land surveyors in other jurisdictions wanting to obtain their commission as an Alberta Land Surveyor. Three applications have been received to date; one has been considered and approved by the Registration Committee.
IHS Accumap
(new)
Surveyors Honour a Pioneer in the Field...........by Vicki Brooker
reprinted with the permission of The Elk Point Review
Tuesday, July 17, 2001

Members of the Alberta Land Surveyors’ Association from Edmonton, Cold Lake, Lloyminster and St. Paul were in Elk Point last Tuesday (July 10) for the dedication of a new plaque honouring one of their pioneer counterparts, Peter Fidler.

Fidler, a Hudson’s Bay Company employee who built Buckingham House fur trading fort 13 kilometres southeast of present-day Elk Point, also surveyed vast areas of what is now Alberta, journeying as far as the Crowsnest Pass region to the southwest, and keeping detailed records of all he saw along the way.

ALSA President Ken Allred congratulated the Town of Elk Point and the Elk Point Historical Society on having “the vision to erect the statue ten years ago. Peter Fidler has been one of my heroes for many years, and I am pleased that Elk Point took the initiative to honour him.”

Allred had visited Fort George and Buckingham House Interpretive Centre earlier in the day, and feels “the provincial government did an exceptional job of telling the story of the fur trade.” However, he was disappointed to find more reference there to David Thompson than to Fidler.

Allred called Fidler “the complete surveyor. He recorded everything so exactly, and was very observant. His records became the geographical information system of the day, and helped his successors find areas and resources.”

The ALSA “has become very interested in what Elk Point has done,” Allred said. With the province’s centennial coming up in 2005 and the Association’s centennial in 2010, “we hope to dedicate a number of monuments to surveyors, and make the public aware of the fine survey system we have here. It starts at the Saskatchewan and US borders and with it, we can identify land anywhere in the province. It’s a real Alberta advantage, the best survey system in the world.”

Alred thanked Elk Point for honouring “Canada’s forgotten surveyor...and bringing him back to life. There’s a lot of history here.”

MP Leon Benoit congratulated the ALSA for their work in “remembering our history. Its importance is obvious to Canadians that the work of one individual can have such impact.” He said Fidler’s work “led the way to the orderly development of western Canada.” The statue “helps us realize we have a long history of European settlers. We have to look at where we came from to see where we are going, and get beyond the focus on today.” He added that everyone should consider “what we can do to make people remember us.”

St. Paul mayor John Trefanenko, who had been on hand for the dedication of the Fidler statue in late 1991, said that “as my first career, I was a surveyor for seven years in the 1950s and ‘60s.”

“I really commend what Elk Point did. The museum in itself is a tourist attraction which brings people here, some of them by busloads.”
Mayor Ed Buck said he is happy Elk Point has “something of historic value. This individual ended up shaping the country.” He noted Fidler had also been a factor at Buckingham House, “and it was from here that he left to make significant finds in the Crownest Pass. His journals are very interesting.”

Buck said Elk Point plans “to keep Peter Fidler around for another couple of hundred years” and very much appreciates the recognition by the ALSA. He added that the community hopes to do more in the way of tourism promotion in the future.

Elk Point Historical Society president Vicki Brooker added her thanks to the ALSA for the honour they accorded the pioneer surveyor. Chamber of Commerce president Eugene Buck noted that the Historical Society had been the “driving force” in the creation of the statue and the recognition of the district’s part in the fur trade of more than two centuries ago.

**Fidler facts:**

The thirty-foot-plus statue of Peter Fidler was created by St. Paul artisan Herman Pouline from huge timbers harvested in the Iron River area, using a design by Billie Milholland.

The statue was originally dedicated on Friday, November 8, 1991, 199 years to the day after Peter Fidler set out from the just-completed Buckingham House fur trade for his exploration journey to the southern areas of our province. Over a hundred people were in attendance at the ceremony, including descendants of Fidler and his native wife, Mary.

The statue was one of the projects funded with a $70,000 grant from the Community Initiatives Fund of the Community Futures Program which was utilized by the Town of Elk Point’s Fort George/Buckingham House Bicentennial Committee to enhance diversification and tourism development in the area.

**The plaque at the foot of the statue reads:**

Created by Herman Pouline of HuB DeSIGNS St. Paul, from sketches made by Billie Milholland of Bill Doty Edmonton House Brigade.

Chainsaw carved out of 10x10 foot aged spruce beams.

The metal sextant donated by Alberta Land Surveyors.

The statue took 6 weeks to create and had to be carved laying down.

It was built in 4 pieces which took 15 men 4 hours to move from the studio to a flatbed truck where it was bolted together.

The Peter Fidler statue stands 34 feet off the ground.

**Peter Fidler (1769-1822):**

Born: August 16, 1769 (one day after Napoleon) Bolsover, England

Joined Hudson’s Bay Company—1788

Studied surveying with Philip Turnor—1790

Helped build Buckingham House—1792

Mapmaking journey to Southern Alberta to Old Man River System—1793

Married Mary, Cree Woman from York Factory—about 1794

Factor at Buckingham House—1797

Built Bolsover House - Meadow Lake—1799

Built Greenwich House - Lac La Biche—1799

Built Chesterfield House—Empress—1800

Built Nottingham House - Ft. Chipewyan—1802

Helped settle Selkirk Settlers Red River—1813; at Brandon House—1817; at Fort Dauphin—1819

**The ALSA plaque reads:**

The early surveyors, like Peter Fidler, were explorers and adventurers. With remarkable accuracy, they used basic survey instruments to provide the framework for the orderly and peaceful settlement of the West.

In the modern era, Alberta Land Surveyors are recognized as highly-skilled university-educated professionals who use sophisticated technology to resolve local and international boundary and land related questions.

The Alberta Land Surveyors’ Association, formed in 1910, is a self-governing professional association legislated under the Land Surveyors Act. The Association regulates the practice of land surveying for the protection of the public and ensures the peaceful and lawful enjoyment of the land.

This plaque is dedicated to Peter Fidler and all the surveyors who shaped our land and preserved our future.
Giving Back

Permission to publish the following excerpt from an article that was published in the Spring 2001 issue of Alumnait, was given by writer Davis Sheremata and photographer John Ulan.

Helping students is the reason NAIT grad Andy Lee donated to the NAIT Campaign, which will raise $14 million to increase students’ access to high-demand programs. Over $8 million has been raised so far through the campaign launched publicly on March 20th. The NAIT Campaign will increase access to areas where demand is now critical. Its main focus is raising $11 million toward construction of the new Information and Telecommunications Centre on Main Campus. The Campaign will also raise $1.2 million to renovate 11 chemistry labs to create a Centre for Chemical Studies on Main Campus, while $800,000 will be used to complete the expansion of welding facilities at South Campus. Another $1 million will establish an endowment fund to support NAIT’s students awards program.

Andy arrived in Canada from Hong Kong in 1970. “I had to succeed,” he says.

Andy arrived in Edmonton with “$500 and change” in his pocket and moved into a $35 a month basement apartment in the inner city. Andy struggled to support himself, juggling school and work at an Italian restaurant, then later a Chinese eatery where he peeled shrimp and bused tables.

Andy planned to enroll in NAIT’s Electrical Engineering program. But when he arrived to register one afternoon in 1971, “there was a long lineup for electronics and I had to get to work or I’d be late,” Andy recalls. “There were no lineups for surveying which I didn’t know from a hole in the ground and I figured I’d sign up for it and change later.”

Under the counsel of NAIT instructor Ken Wong, Andy decided to stay in surveying to avoid losing a semester or more of school time. “I couldn’t afford to lose that time,” he says, “I just wanted to get a job and graduate so I could support myself.”

Andy had three job offers by the time he completed NAIT’s two-year surveying program, but required landed immigrant status before he could accept any job. It was then that he was touched by the hand of luck; in the months before Andy’s graduation, Prime Minister Pierre Elliott Trudeau announced landed immigrant status for all of Canada’s foreign students.

“I walked into the immigration office and said I was just about to graduate and had work waiting for me. The clerk asked for my passport, stamped it and I was a landed immigrant,” Andy recalls with a smile. “You can’t get luckier than that.”

He accepted a job with Edmonton’s Gillmore Surveys and stayed there for about four years. Often, Andy was required to brave arctic locales including Ellesmere Island and Axel Heiberg Island for weeks at a time. He especially recalls one camp where workers had to cross the garbage dump to get to the outhouse.

“It was four pieces of plywood nailed together and a door you held closed with a rope,” Andy recalls. “The polar bears would be right outside eating.”

In 1980, Andy and wife Marlene moved to Calgary and two years later formed Amar Surveys. At first, Amar consisted solely of Andy, Marlene, a draftsman and a two-man crew.

Today, Amar employs over 30 people, most of them technical graduates.

“This is a great program and a great school,” says Andy, 51. “NAIT graduates are the foot soldiers, the people doing the work that needs to be done.”

Grateful for his success, Andy sent the NAIT Campaign a cheque for $10,000. In memory of his early days in Edmonton, Andy has directed his gift toward bursaries for financially-challenged NAIT students.

“The gift should be targeted to people with a real need, those who have a family to support and can’t go to school otherwise,” he says. “All you need is a burning desire to get there. If you have that in you, you can do anything. I got myself an education and climbed the ladder. If I can do it, anyone can!”

NAIT President Dr. Sam Shaw is calling on all NAIT alumni to help the Campaign if they can.

“NAIT is an institution that walks the talk. 91 percent of our students get jobs within six months,” Sam says. “I think our alumni have benefited from a NAIT education. We’re now asking our alumni to help us help other students and keep NAIT’s programs on the leading edge.”

Sam says NAIT is a careful steward of its resources, especially in times where government support as a percentage of revenue is in decline. In NAIT’s 2001/2002 operating budget, government base grants are estimated to be 47.5 per cent of total revenue, down from 69 per cent in 1993/1994.

“We need some help,” Sam says. “We want to be good stewards of the resources you give us and, I think if we look at the results of what NAIT has achieved with its limited resources, they are outstanding. We thank you.”
Mason and Dixon—Surveyors Extraordinaire

Two recent books have charted the exploits of Charles Mason and Jeremiah Dixon - two English surveyors who were engaged to lay out the first latitudinal boundary in North America in the mid-eighteenth century. These were the days when the first chronometer was just being evaluated as an instrument for determining precise time (and hence longitude) and when there were still frontier scalpings in the eastern United States.

The Mason-Dixon line is the boundary between Pennsylvania and Maryland, and was legally described as a line of latitude running through a point 15 miles south of the southernmost point of Philadelphia. Initially the line was intended to be the 40th parallel of latitude. However, because of an ambiguous legal description, it was amended to a more practical location that could actually be laid out on the ground without ambiguity. The survey was further complicated by the already established north boundary of Delaware which is an arc with a 12 mile radius from a church steeple in Newcastle. (Look at a map of the northeastern United States to get a feel for the geometry of the intersection of the Delaware - Maryland - Pennsylvania boundaries.) Most people know the Mason-Dixon line as the symbolic division line between north and south in the American Civil War or the partition line between the free and slave states.

Mason and Dixon by Thomas Pynchon is a tough read, nearly 800 pages in length and written in a conversational style with a lot of antiquated language. Pynchon’s book is also a captivating novel based on the Mason and Dixon story.

Drawing the Line by Edwin Danson is an historical account of Mason and Dixon’s adventures, written by an English surveyor. Drawing the Line sets the scene for this fascinating story with a brief history of England and the American colonies in the 17th century and describes the backgrounds of Charles Mason, an astronomer and geodesist, and Jeremiah Dixon - the practical land surveyor. The book sets out a brief history of the study of geodesy and navigational astronomy, development of the figure of the earth and the manufacture of early surveying and timekeeping instruments. With his survey background, Danson is able to describe the astronomical principles involved in laying out this theoretical mathematical line on the surface of the earth, and the practical and laborious procedures followed by these pioneer surveyors in demarcating the boundary in a hostile environment. Like many surveyors, Mason and Dixon were not very good at giving accurate estimates to their clients. A 6 month project ended up taking four years, albeit with some interesting native problems and considerable delays in communicating with the head office in London.

Both of these books are worth reading but, for the surveyor and historian, Drawing the Line is probably the better choice with only 232 pages and lots of good illustrations of some very complex procedures. Both books start out with an account of Mason and Dixon’s first job together, observing the Transit of Venus in Capetown, South Africa in 1761, and cover the same ground, however with a totally different writing style. Pynchon may be more entertaining but the intricacies and complexity of the survey of this historic boundary is described more explicitly by Danson. Drawing the Line is available from the ALSA Library (H0755).

Early Surveys and Settlement in Central Alberta

by Doug Barnett, ALS, SLS, CLS

Retired NAIT instructor Doug Barnett has recently published a comprehensive and interesting chronology of the development of Central Alberta from a surveyor’s perspective.

Doug takes us through the early exploration of Western Canada, the need for the location of the early transportation routes that were so vital to the competitive fur trade and finally the laying out of Central Alberta in anticipation of early settlement.

Between the covers of this 160 page soft bound publication lies a host of photographs (both historic and current), plans of survey, sketches, field notes, maps and reports in addition to Doug’s own interesting narrative.

Perhaps the most interesting section of this study describes the Special Survey and the laying out of the 14th Baseline and the 5th Meridian by Montague Aldous in 1879 and 1880. How many people realize that the 14th Baseline had to be shifted 240 chains south after the decision was made to adopt the Third System of Surveys for Alberta? (Actually it ended up being 245.5 chains because of a new observation for latitude).

All in all, Early Surveys and Settlements in Central Alberta gives student and seasoned veteran alike a good overview of the early surveys in this part of the province. Available in the ALSA Library (H0757).
Leica
(repeat)
Marker Posts—
A History

Every day, land surveyors place marker posts to reference statutory iron posts. Last year, approximately 40,000 marker posts were sold or one for 4.5 iron posts sold. When and why did we start placing marker posts? I thought it might be interesting to investigate the origin of marker posts.

Part C, Section 3.3 of the Manual of Standard Practice (MSP) says:

Where practical, iron posts shall be referenced by a marker post placed 0.3 metres distant therefrom and the direction noted on the plan.

1. Marker posts should not be placed where they may constitute a hazard to the public or interfere in the normal use of land. In general, marker posts should not be placed in developed urban areas.

2. Marker posts placed along road or right-of-way surveys should be situated on adjacent fence lines whenever possible.

3. For surveys in unsurveyed territory, bearing trees and/or marker posts are required.

4. Where a marker post is placed other than 0.3 metres distant from a monument, both the distance and the direction of the marker post from the monument shall be noted on the plan.

5. Marker posts must be of a design approved by the Alberta Land Surveyors’ Association.

History

How did we get to here, and when were marker posts first introduced? Everyone is familiar with the pits and mounds placed as part of the survey monuments for official surveys under Part 2 (township and settlement surveys) of public lands. Written into the surveys acts until the current Act (June 9, 1988), there was also a specific section for road surveys and the requirement to dig pits for all road monuments. The Surveys Act RSA 1980 under Section 52 said in part:

52(2) The posts planted in accordance with this section shall be numbered consecutively from the point of beginning to the end of the survey, and each post shall have its number together with the letter “R” permanently marked on it, and shall be driven to within 4 inches of the top.

(3) Each point marked by an iron post as provided in this section shall be further marked by digging 4 pits, each 2 feet square and 12 inches deep, and shall be placed so that 2 straight lines drawn through the iron post at right angles to one another will each pass through the centers of 2 of the pits, and the inside edge of each pit shall lie on the side of a square whose sides are 6 feet long and whose centre is the iron post.

(4) Notwithstanding subsection (3), the Director of Surveys may authorize the use of some other supplementary mark that he considers suitable. (This clause was added after the adoption of marker posts.)

Road pits were not the same size as were pits for official surveys. Road pits did not include a mound, rather the 16 cubic feet of dirt excavated was to be scattered about. Speaking from experience, digging pits for an official survey under Part 2 is a lot of shovel work. Depending on the ground conditions and the monument itself, different reference monuments may be called for. Bulletin 38 outlines the various type and configurations of reference monuments that were constructed over the years.

The case for marker posts

Prior to the 1962 AGM, the Practice Committee proposed an alternative that required an amendment to Section 52 of the Surveys Act affecting road posts only. The proposed amendment called for four pits, a wooden post, or a rock mound depending on the circumstances of the case. In the case of the wooden post, a 4x4 inch triangular cedar post 4½ feet long and painted white was proposed. On the broadest face was to be scribed or burnt a 3 inch high letter “R.” The post was to be placed one foot into the right of way and at right angles to the preceding course. The rock mound was proposed to be 18 inches square and 12 inches high centred around the iron post. This proposal was presented at the 1962 AGM but was not adopted. Next year, in 1963, the Practice Committee again raised the idea of using wooden reference posts as an alternative to digging pits for road surveys and, in 1964, the following proposal was brought forward by the Practice Committee:
Iron post for replacing road pits

It is recommended that road pits may be replaced by a “T” angle iron post with a tag. The iron post to be 6’ X 1¼” x 3/16” and shall be placed 12” from the road survey post on a line of survey. A sample of this post will be on display at the annual meeting and, if this recommendation is accepted by the meeting, the Legislative Committee should be instructed to proceed with changing Section 53(4) of the Alberta Surveys Act.

This proposal was adopted at the January 1965 AGM. Later in 1965, Section 50 of the Act was amended (clause 4 was added) and the first marker posts were introduced. The original version of the marker post was galvanized with a metal tag attached by four bolts. Today you still find many of these original marker posts as they were rust resistant. The metal was later changed—likely to reduce costs. To make them stand out better, they were painted red then eventually fluorescent orange. However, these more recent versions do tend to rust over time.

A look to fibreglass

An article in the 1988 fall issue of ALS News on the benefits of fibreglass marker posts prompted an investigation into the issue. A prototype was tested by the Inspector of Surveys in 1991 and a supply was then ordered and offered to the membership. These fibreglass marker posts required a special driver so as not to splinter into shards when driven into the ground. The disadvantages, however, were clear:
1. they were lighter;
2. you could use the pin locator around them;
3. the tag was incorporated into the marker.

The disadvantages must have outweighed the advantages as sales were slow, and when the initial stock was finally gone, a decision was made to offer only the steel marker posts.

Marker posts for more than road posts

The placing of marker posts at locations other than road posts became good practice resolution number 18 in 1969. It read:

It shall be considered good practice in the conduct of a right-of-way survey to reference the statutory iron posts planted on the limit thereof with marker posts or bearing trees. In the unsettled or forested areas of the province, a marker post or at least three bearing trees shall be used to reference each statutory iron post. In the settled areas a marker post shall be placed to reference each iron post on fence line, tree lines, or in any situation where the marker post would not interfere with normal agricultural operations.

Much debate

Over the next several years, the marker post issue was often debated and revised. The issue seemed to be the use of marker posts to reference all statutory iron posts—not just road posts as allowed for under the Act and right-of-way surveys as required by the existing good practice resolutions. At the 1981 AGM, a revision was made to include other monuments, and then finally resolved at the 1982 AGM. The intent of the 1982 amendment was to set a standard of practice as to when and where marker posts should be placed and how they should be shown on the plan. After the 1982 AGM, a visiting delegate commented that Alberta’s meetings can now be shortened, since marker posts will no longer be on the agenda.

Good Practice Resolution number 18 now read:

It shall be considered good practice to reference all statutory iron posts with marker posts or in the unsettled or forested areas of the province with at least three bearing trees or a combination of both.

(a) Marker posts shall be placed 0.3 metres from the iron post and shall be situated within a surveyed right of way or road allowance and at right angles thereto.

(b) Where the above does not apply or is prevented by other circumstances, the distance and direction from the iron post to the marker post shall be shown on the plan of survey, eg. “Mp. 0.3m N”

(c) The marker post shall be placed so that the plaque faces away from the iron post.

(d) Marker posts should not be placed in locations where they would be impractical and constitute a hazard to the public.

(e) The position of marker posts used to reference control or W/S traverses shall be clearly shown on the plan of survey.

Into the Manual of Good Practice

Seven years later (1989), all good practice resolutions were rescinded after the Manual of Good Practice (MGP) was adopted. The MGP contained a chapter 3 on Boundaries and Monumentation and Section 4 dealt with marker posts. It read:

4. Where practical, iron posts should be referenced by a marker post placed 0.3 metres distant therefrom and the direction noted on the plan.

(a) Marker posts should not be placed where they may constitute a hazard to the public or interfere in the normal use of land. In general, marker posts should not be placed in developed urban areas.

(b) Marker posts placed along road or right of way surveys should be situated on adjacent fence lines whenever possible.

(c) For surveys in unsurveyed territory pursuant to the Survey Regulation, bearing trees and/or marker posts are required.

(d) Where a marker post is placed other than 0.3 metres distant from a monument, both the distance and the direction of the marker post from the monument shall be noted on the plan.

The Manual of Standard Practice

The membership at the 1996 AGM adopted a re-write of the Manual of
Good Practice, and the name was changed to the current Manual of Standard Practice. Essentially, the section on marker posts remained the same. Since then, minor changes have removed reference to the survey regulation which was rescinded in 1998, and added a clause stating that marker posts must be of a design approved by the Alberta Land Surveyors’ Association.

Marker posts for Part 2 surveys

Using a marker post in place of digging pits for road surveys started something. In 1987, the Director of Surveys office decided to stop digging pits on township settlement surveys and to place two marker posts at each monument in lieu of digging pits and a mound. One marker post is placed on each side of the corner monument and on the survey boundary. At ¼ corners and at blind line section corners, one is placed each side of the post with the plaque facing the road allowance. The north quarter on a blind line is the sole exception as there are no specific rules for which way the plaque should face. At section corners not on a blind line, one marker post is placed on the limits south (north in the case of a correction line) of the monument and the other, east of the post on the section line. This is still the current practice.

Can a marker post be used as evidence to replace an iron post that has been taken out? I would say yes, if it were the best evidence. However, I cannot personally envision a situation where the iron post and its post hole (2½ to 3 feet deep which is often deeper than the marker post) would be cut out and gone completely, yet the marker post survives. We all know that marker posts are targets for bulldozer operators, and the more likely case is the marker post is gone and maybe even the iron post. A marker post, if it survives the bulldozer, narrows down the search area for the iron post very quickly, and a little spade work will usually prove successful in finding the iron post or post hole.

Lloydminster Sues Over Landmark Towers

by Darren Stewart, Edmonton Journal Staff Writer

The City of Lloydminster has filed a $2-million lawsuit against four Edmonton-based companies that designed and built Lloydminster’s 30-metre-tall, bright orange steel towers.

The loft landmarks, popular with tourists and residents, were deemed unsafe and will be taken down next week.

The towers were erected in 1996 to mark the fourth meridian, which follows the Saskatchewan-Alberta border.

Since their installation, the towers have shaken and twisted in the wind.

Originally, there were four towers. But the city took one of them apart last summer when an inspector discovered that movement had sheared some bolts along the base.

This summer the city brought in structural engineers and hired a prominent metallurgist from Saskatchewan to inspect the remaining towers. The metallurgist said the structures pose an immediate safety risk.

City council voted to take them down.

“The only advice he could give us was to take them down right away in the interest of public safety,” said Tom Lysyk, director of protective services for the City of Lloydminster.

Lysyk said that in ideal circumstances, the city could modify the towers to guarantee safety and re-erect them after recouping some of the initial cost of design, construction and maintenance.

“The sad part is we’ve been left with no timeline on when we could get them back,” Lysyk said. “The community wants the border marked; that’s what we paid for. We all want these things to stay but we’ve been left with no choice.”

Lysyk has worked for the city of 23 years. He said the community was proud of the towers and had grown attached to them in the six years they’ve been erected.

“This is like Calgary losing the Calgary tower,” he said.

Deconstruction of the towers begins on Monday. It will likely take three or four days.

Named in the suit are Edmonton architect Douglas Carlyle, plus local companies Jacobsen Engineering, Hage Engineering, Dawson Wallace Construction and Scott Steel. The suit also names the Lloydminster company Cooper Concrete.

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MicroSurvey Software
(new)
**Case Study No. 9: Finish the Job**

This is the ninth in a series of articles featuring problems commonly encountered in Systematic Practice Review. The purpose of these articles is purely educational and, although the material is taken from an actual practice review, no names or identifying legal descriptions are included. Opinions expressed in this article are those of the author.

**The Problem**

Poor supervision, lack of organization, or procrastination in completing a survey project can lead to an incomplete survey. If more than one field trip is required to complete a field survey, it is important to document the work yet to be done and to ensure that it is completed. If something seems missing in the course of a survey or the plan preparation, checks should be made. Assumptions should not be made, and questions should be asked and answered, before the plan is registered.

**The Project**

The practitioner conducted a rural acreage subdivision survey in the southwest corner of the southwest quarter of Section 25. This parcel was bounded on the south by the north limit of the government road allowance and on the west by the easterly limit of a road widening survey. Intersections were required with two right of way surveys that crossed through the parcel. In addition to the property corners, and the two intersections, the practitioner’s plan also indicated placing monuments at two re-establishments. One at the northeast corner of Section 23, and the second one at the intersection of a right of way plan with the south limit of the road allowance.

**The Plan Examination**

Field notes are always examined and compared to the plan information in the course of our plan examinations. In the field notes provided to SPR, we could not find field notes for the placement of four monuments shown on the plan. The right of way intersection monuments and the two monuments are shown as re-established. We contacted the practitioner and indicated that we did not have field notes showing some of the posting. A few days later the practitioner told us that he was unable to find the notes for these postings.

**The Field Inspection**

Our field inspection took place approximately 15 weeks after the practitioner was last in the field. The field inspection did not locate any monuments at the four locations including the northeast 23, nor did it appear that any monuments were ever placed at the locations. It was our conclusion that no monuments were placed, and this was relayed to the practitioner in the report. The failure to place the monuments shown as placed on a plan is a very serious issue.

**The Practitioner’s Response**

In his response to this matter, the practitioner said he had no explanation why these postings were missed. He goes on to say: “unfortunately on this file I did not follow up the posting after I did the original calculations.” From this answer, it appears that, after an initial field trip, computations were required. It then seems that the practitioner expected someone else to finish the job, and never checked to see if it was completed before he signed the plan.

Even when we requested additional field notes for the postings, and he could not find any, the practitioner still did not question if, in fact, the monuments were placed. It was not until our report and conclusion that the monuments were never placed, that the practitioner began to suspect that they were never placed.

**The Legislation**

To be acceptable for registration in the Land Titles Office, the land surveyor must swear an oath, one part of which is that the survey was made in accordance with good surveying practices and in accordance with the provisions of the Surveys Act. Clearly, in this instance, the survey was not made in accordance with the provisions of the Surveys Act, and the practitioner perhaps unknowingly swore a false affidavit.

Section 3(3) of the Land Surveyors Act states: 

“everything done in the practice of land surveying shall be done by or under the supervision, direction and control of a practitioner.”

This places an obligation on the practitioner to ensure that, if he does not personally do the work, it is done under his supervision. As the person legally responsible, the practitioner must be sure the work supervised is complete before signing the plan.

**The Message**

I suspect that poor supervision led to the problems here, but poor organization and scheduling could also have played a part. Before completing any plan, the contents of the plan should be compared to the field notes. This comparison should be a standard part of all plan examination procedures. What the Director of Practice Review can not understand in this matter, is how monuments not shown as placed by any field notes could get shown as placed on the final plan. Plans should be made based on the field records for the survey.

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**Director of Systematic Practice Review**

by Lyall Pratt, ALS

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**September 2001**

www.alsa.ab.ca  

ALS News • 33
Appropriate Dispute Resolution (ADR) processes were introduced to Alberta’s oil patch at the beginning of the year. Outcomes are being closely tracked now by the Alberta Energy and Utilities Board (EUB) and its standing committee of stakeholders, with the intention of providing reliable data demonstrating the value of the process in an increasingly challenging regulatory environment.

The standing committee includes representation from a broad cross-section of stakeholders. Its role is to evaluate the EUB’s ADR program and issue periodic progress reports, recommend improvements or alterations to the program, and maintain the roster of third-party service providers (currently there are three listings) and mediators (currently 26 listings) located on the EUB’s website at www.eub.gov.ab.ca.

The main intention of the EUB’s ADR program is to directly involve decision-makers in an interest-based, collaborative approach to develop a clear understanding of concerns and issues, discuss their interests, and then develop options for resolution.

**So Far, So Good**

The use and outcomes of ADR for the first six months since the program was launched have been tracked, and early indications are that the program is working. So far, 94 percent of facilitations undertaken by the EUB staff with parties in dispute have led to resolution. This demonstrates the important role staff facilitation is playing in the ADR program.

During this period, 13 disputes went through the Preliminary ADR Meeting and, subsequently, mediation. Of those, nine were between landowners and companies. Seven mediations were completed by press time, of which four had been resolved, one had been partially resolved and had a hearing scheduled to deal with the outstanding issue, and two had been through hearings. Of the fully resolved disputes, three involved landowners and one was between two companies.

If direct negotiation between the parties and efforts by the EUB staff to facilitate do not resolve the concerns, then the EUB strongly encourages the parties to engage the services of a third-party mediator and conduct a Preliminary ADR Meeting. The purpose of such a meeting is to bring together potentially affected parties to discuss the nature and extent of their dispute and to plan possible options for resolution. The meeting should help clarify the issues under dispute and foster discussion of a suitable system design for their particular situation.

Before the parties feel able to commit to participating fully in mediation or other options, many topics may need to be addressed and questions answered, such as:

- What are the key issues?
- What are the options available to resolve the dispute?
- What further process steps will be taken?
- What costs should be considered, and how will payment be handled?
- How will matters of timing and deadlines and of confidentiality and privacy be handled?

**Strong Commitment to Evaluation**

The EUB is committed to monitoring and evaluating its ADR program and is looking to the participants, the service providers, and the mediators to help collect the data needed. Questionnaires have been developed for collecting data into the database. The data will be incorporated into the EUB’s ADR annual report, expected to be released by March 31, 2002. Of course, because of the confidential nature of ADR, it is the process and procedures that are being monitored and evaluated, not the matters under discussion among the parties.

**For More Information**

The key document describing the new program is EUB Informational Letter (IL) 2001-1: Appropriate Dispute Resolution (ADR) Program and Guidelines for Energy Industry Disputes, which is available on the EUB Web site www.eub.gov.ab.ca. Questions may be directed to Bill Remmer or Mika Madunicky at EUB or to members of the stakeholder committee listed on the website. A special telephone line (403-297-3700) and e-mail address eub.adr@gov.ab.ca have also been established to receive feedback and enquiries.
Following are updates to initiatives underway within the Director of Surveys & Technical Services Section, Land Administration Branch, Public Lands Division, Alberta Sustainable Resource Development.

Department re-organization
Subsequent to the major government organizational change in March 2001, the Department of Sustainable Resource Development is in the process of re-organization. Deputy Minister Dr. Bob Fessenden stated in his July 2001 memorandum to all staff, “it has become clear that to enable us to better fulfill our mandate around our core businesses as an integrated whole, organizational restructuring is required.” Restructuring will centre around five core businesses; forest protection; forest land and resource management; fish and wildlife management; and land use disposition management.

On July 16, 2001, the ministry’s new structure, with five divisions, was implemented.

Forest Protection Division
—responsible for wildfire prevention and management.
  · Assistant Deputy Minister Cliff Henderson

Land and Forest Division
—responsible for forest industry development, forest management
  · Assistant Deputy Minister Howard Gray

Fish & Wildlife Division
—responsible for enforcement, fishery management, wildlife management and client and licensing services
  · Assistant Deputy Minister Morley Barrett

Public Lands Division
—responsible for agriculture public lands, public land administration, and resource data
  · Cliff Henderson will be acting Assistant Deputy Minister until the department recruits to this position.

The Director of Surveys and Technical Services Section, within the Land Administration Branch, is now part of the Public Lands Division. The Division is also made up of staff from the old Resource Data Division, and staff from the old Public Lands Division who were part of Alberta Agriculture, Food and Rural Development. Once a new Assistant Deputy Minister is recruited for the Public Lands Division, additional restructuring is anticipated.

**Director of Surveys web site updated**
On August 24, 2001, the Director of Surveys web site (www.gov.ab.ca/env/land/dos/) was updated with additional information on the Electronic Distance Measurement (EDM) Calibration Baselines.

**a) Guidelines for EDM Calibration Baseline Surveys in Alberta**
These guidelines describe the four EDM calibration baselines in Alberta as well as how to undertake an EDM calibration survey. They have been developed to assist users in verifying that their EDM equipment is working within the EDM manufacturer’s stated specifications for scale error and constant error. The guidelines also include requirements for submission of EDM calibration survey data to the Director of Surveys and Technical Services Section for evaluation.

**b) EDM Calibration Baseline Lengths**
A listing of the pillar to pillar (slope distance) baseline lengths for the four EDM calibration baselines in Alberta (Lethbridge, Calgary, Edmonton, and Grande Prairie) is provided. These values are based on precise measurement and adjustment undertaken by Geodetic Survey Division of Geomatics Canada (NRCan). All of the baselines are re-measured, adjusted and new values published on a five-year basis.

_MIKE MICHAUD, ALS_
An Alberta judge has ruled that ownership of accreted lands formed by receding lake waters is limited by the section, quarter-section or legal subdivision lines described in certificates of title. Landowners cannot claim ownership of accreted lands beyond these boundaries onto neighbouring lands whether or not the land has been properly surveyed.

Queen’s Bench Justice Carolyn Phillips arrived at this conclusion in a case in which the plaintiffs, owners of lands around Buffalo Lake in Alberta, about 30 kilometres northeast of Red Deer, sought compensation from the Crown for lands expropriated in 1998.

The parties agreed that the plaintiffs were entitled to compensation for accretions of the former bed of Buffalo Lake, but disagreed as to whether such entitlement ended at the section, quarter-section or legal subdivision boundaries referred to in the plaintiffs’ certificates of title or continued to the current lake edge.

J. Patrick Peacock and Lorenz Berner of Peacock, Linder & Halt in Calgary argued for the plaintiffs that land boundaries are established by the placement of monumentation markers in the ground after surveying.

Since these markers were not placed on the plaintiffs’ lands when the original survey was conducted, primarily because it was impossible to place a monument in the middle of the lake, they should be entitled to accreted land beyond the section, quarter-section or legal subdivision lines to the natural water boundary, plaintiffs’ counsel submitted.

Sheila McNaughtan and William Hurlburt argued for the defendants (the province, the Minister of Public Works, Supply and Services and the Minister of the Environment) that boundaries of land in Alberta are ascertainable based on the Township Survey System, without monumentation markers.

Beginning at the corner of the United States, Alberta, and Saskatchewan border, the Township Survey System divided land in Alberta into townships, each consisting of 36 sections. Each section comprises four quarter-sections.

Certificates of title reflect the position of the parcel of land in comparison to this starting point. The defendants’ counsel argued that the plaintiffs’ land boundary, now exposed by the shrinking of Buffalo lake, is capable of being located, and the fact that land has not been surveyed or has been imperfectly surveyed does not mean that the boundary does not exist.

Consequently, the defendants’ counsel argued, the plaintiffs are entitled to accreted lands only within these ascertainable boundaries.

Both sides presented expert evidence of the practices and procedures of surveying in Alberta—the plaintiffs’ experts saying that monuments are vital to establishing and identifying parcels of land, and the defendants’ experts stating that this was not necessary.

Justice Phillips rejected the plaintiffs’ evidence and accepted the defendants’ submission that much of Alberta is “unsurveyed and/or is less than perfect with respect to monumentation.”

“To hold that a boundary is non-existent or imperfect because of lack of proper monumentation,” she said, “would throw the entire land system into havoc and cause many landowners to question their title.” Thus, whether a parcel of land is surveyed or not surveyed does not affect the validity of the title describing ownership boundaries according to the applicable township, section, quarter-section and legal subdivision.

Justice Phillips was concerned about preserving the integrity of the Torrens system in which “the descriptions in certificates of title ought to be respected.”

She found an earlier Queen’s Bench decision, upheld by the Court of Appeal, to be both persuasive and binding.

In Pitt v. Red Deer (City), [2000] A.J. 1198, the court concluded that “the change of the physical boundaries of the watercourse cannot create an expanded title overriding the boundaries of title [the plaintiff] received.” The title to accreted land is limited by the legal description in the certificate of title.

Justice Phillips noted that the plaintiffs’ certificates of title do not describe the land boundary as being Buffalo Lake.

Rather, the title indicates that the holders are owners of land within the applicable township, section, quarter-section and legal subdivision “that is not covered by any of the waters of Buffalo Lake.”

Section 91 of the Alberta Land Titles Act states that land described in a certificate of title consists only of the actual area within its legal boundaries and not more or less.

The judge said the Torrens system would not work if changes to a body of water expanded the plaintiffs’ title beyond the boundaries referred to in their certificates.

“If we allow accretion to go beyond the limits of the legal description, the plaintiffs will gain title to land they were never entitled to own.” Justice Phillips wrote.

(Reasons in Johnson v. Alberta, 2115-017, 28 pp., are available from FULL TEXT.)

Mind Warping—ALS Style

The leaves are turning, the days are getting shorter, and the kids, eager to learn, are back in school. Young minds are primed and ready to be warped. Not warped in a “Wayne Lee hypnotic style” but in a way that may influence them to someday become an Alberta Land Surveyor. Now is the time for us, as professional land surveyors, to give something back to the community and give a career choice presentation to students at a junior or senior high school. You may be responsible for changing someone’s life.

I have had the pleasure on a number of occasions to talk to a group of students and tell them about the land surveying profession. The experiences were surprisingly nerve wracking and challenging but also very rewarding. The students were genuinely interested in what I had to say. Many of them had little idea about what to do when they grow up and were excited to receive information from a working professional. Even if none of them become land surveyors, I feel as though I’ve made a positive contribution to their lives and the community.

Presentations can be formal or informal, given at a structured career day or simply as a classroom guest speaker. Presentations to junior high students are especially effective as it is important to reach students before they make high school course choices. Preparation for a presentation does not have to be difficult or time consuming. The ALSA trade show booth is usually available and the Public Relations Committee has developed a “canned” modular PowerPoint presentation. The Alberta Land Surveyors’ Association office has brochures, posters and pamphlets, as well as other support materials to help ensure an effective presentation.

As Alberta Land Surveyors, it is our duty to reach out to the public and portray surveying in a positive manner.

For those who wish to organize their own presentation it should include, but not be limited to, the following:

• A description of what an Alberta Land Surveyor is and the industries in which we work.
• The types of courses required at the high school and post-secondary level.
• An outline of the articling process required to obtain a commission.
• The career growth and earning potential of Alberta Land Surveyors.
• The history of the profession (but be sure to mention that Alberta Land Surveyors are at the cutting edge of technology).
• It never hurts to bring along a piece of high tech equipment, like a hand held GPS receiver, for a demonstration or play a “guess the distance” game with an EDM.

But most of all, students want to know what employment opportunities are available and how much money they can make.

As Alberta Land Surveyors, it is our duty to reach out to the public and portray surveying in a positive manner. Always remember that the future of the profession is sitting in the room listening to your every word.

Accountants, doctors, lawyers, architects, and engineers are front and centre at almost every career day. It is time we stepped up and joined them. A presentation at a school career day or in a classroom environment is a rewarding experience for both the students and presenter.

The Association has retained Dick Bassil, ALS (retired) and Bob Haagsma, ALS to make some specific presentations to high school students. However, all land surveyors are encouraged to not only accept any invitations, but also to actively seek out opportunities to give these presentations.
Setting Your Own Course

I sometimes procrastinate and wait for a “rainy day” to take care of some of the tasks that should be done. The advent of a “rainy week” at the end of July surely put an end to such procrastination, and I undertook to prepare this article for PDC Corner.

As a recent addition to the Professional Development Committee, I had volunteered to spend some time surfing the internet. My mission? Simple; investigate and report on what lies within the Resource Centre on the ALSA website and highlight some items of interest for the membership.

The Resource Centre on the ALSA website is an integral component of the Professional Management Program that was approved at the 2000 Annual General Meeting. This non-mandatory program is based on self-motivation and the concept of responsible professional practice. Practitioners determine for themselves a direction to pursue with respect to professional development and find their own path to obtain what they need. The trick is to set a course and to stick with it until you have reached your destination. Along the way, you may decide that you need to take a different path; however, that does not violate the rules of lifelong learning.

The Resource Centre on the ALSA website is meant to be a tool that can assist the membership in finding their way through the continuing education maze. As you are aware, the Resource Centre was introduced to the membership in an article written by Executive Director Brian Munday in the September 2000 issue of ALS News. In that article, Brian stated that “the Resource Centre was envisioned as a web-based listing for articles and reports of interest and links to any Alberta-based university or college to find courses of interest.” Brian and the Association staff established the Resource Centre and it contains a myriad of information and links to a number of resources that are potentially of interest to most land surveyors. I say potentially, for two reasons. First, everyone has different interests. Second, you can’t judge a book by its cover and the same holds true for websites. This is why Brian also stated in his September 2000 article that “the Association has not reviewed the websites and cannot vouch for their claims.” I feel that it is for that very reason that the Professional Development Committee has asked for your comments as you use these resources. If something you know about is great and you think it should be added to benefit the membership, please let the Association know. Conversely, please advise the office if you feel that one of the sites listed in the Resource Centre is substandard, or if a link is “broken.” By providing this feedback, you will have made a contribution and you will help to economically maintain the Resource Centre.

But enough of the background and sales, what about the Resource Centre itself? What does it have to share with the membership?

To find out, I had to gain access to the Resource Centre by logging onto the Association website at www.alsa.ab.ca. Next you must choose the “Member Resources” button and then click on the “Resource Centre” button on the bottom left hand side of the page.

Since there are so many links associated with the centre, the information has been organized into the following categories:
- Business Management
- Computers
- Educational Institutions
- Geomatics
- Legal
- Libraries
- Media
- Research Tools
- Safety
- Seminars

Recall that the purpose of the Resource Centre was to provide an opportunity for individuals to find information that would assist them with their professional development. The first step that one might take is to see what your local educational institutions are offering in terms of continuing education. Just visit the
“Educational Institutions” category and explore the opportunities. In this section, you will find 65 links to educational-related sites in Alberta, Canada, the United States and overseas. As an example, if you are from the Grande Prairie region and you are interested in part-time study at Grande Prairie Regional College, you could find out more about the opportunities by linking to www.gprc.ab.ca/programs PartTimeStudy.html.

In the “Educational Institutions” category, I was able to find quite a bit of information on AutoCAD, Microstation and GIS courses. Using the links in this part of the Resource Centre, I was able to quickly see what was available at SAIT, NAIT and the University of Alberta Faculty of Extension.

If night classes and weekend classes are not for you, then perhaps you could investigate some of the other formal opportunities that exist online. For example, while I was looking at the University of Alberta website, I found many references to a number of online courses on GIS and GPS. See for yourself at www.extension.ualberta.ca/.

Or maybe you just need to brush up on some of the latest technological advances in the areas of GPS or GIS and want to review some of the latest articles in publications. In the Resource Centre, I chose to look under the “Geomatics” category, and spent some time at the GPS World website, located at www.gpsworld.com/.

One of the best websites I have found for an introduction to GPS is available through the GSS Information Centre. I was pleased to see that the Association had included this link under the “Geomatics” category. It is found in the “Lecture Notes and Scientific Papers” under GPS and is published by Peter Dana at the University of Colorado. It is a little hard to find, so here is the direct link: www.colorado.edu/geography/gcraft/notes/gps/gps_f.html

Also under the “Geomatics” category is the Land Surveyors Reference Page. Check this page out to find out who’s listed in the International white and yellow pages and who is not: www.lsrp.com/.

Have you been unable to attend a “Getting it Right” seminar and want to gain some insight as to what the seminar is about? I found that you can do this by choosing the “Seminars” link. You will find a wealth of information including the participant workbook for the Getting it Right seminars. The “Seminars” category also has links to online seminars and training providers such as “online.ie” found at www.online.ie/training/index.adp This is an Irish website that appears to offer over 500 computer and business courses.

Interested in courses on computer software, Word, Excel, PowerPoint and Access? I found many local institutions that provide these courses. In addition, I found that if you select the link entitled “Dell” located under “Seminars” you will find a web-based education site called “Educate U” that offers courses on productivity and business related topics: www.educateu.com/learning_community/dell/frameset.html

If you are like me, sometimes you have a bit of trouble locating some of your own resources and it is encouraging to know that some of the more important ones are available through the Resource Centre under “Seminars” and “Getting it Right.” For example, Bulletin 38 can be found in PDF format at: www.alsa.ab.ca/pdf/gir_participant/bltn38.pdf.

How about the Manual of Standard Practice? All 74 pages are available any time online through the Resource Centre in PDF format at: www.alsa.ab.ca/pdf/msp.pdf.

Last but not least, there is the “research tools” category. There exists a wealth of information here including current reports on relevant issues, SPR case studies and PRB interpretations. I have copied the relevant links below direct from the website so you can see the variety of information available.

Reports
• Digital Plan Submission - The Alberta Experience
• Digital Plans Synopsis
• Digging for Pre-1912 Posts
• Enhancing Survey Plans in Alberta
• Health Professions Legislation
• Mutual Recognition Agreement
In conclusion, I feel that one of the shortcomings of using the internet to find relevant information that can assist you with your professional development initiatives is that the volume of information available can be a bit overwhelming. The Resource Centre does an excellent job of providing assistance by providing shortcuts for you. I encourage you to visit the Resource Centre (please try not to wait for a “rainy day”) and provide the Association office with feedback on this initiative.

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during the Kananaskis Survey Camp, Ken Allred, Ross Woolgar, Brent Taylor and Brian Munday had the opportunity to meet with University of Calgary professors Gerard Lachapelle, Michael Collins, Bill Teskey, Nazer El-sheimy and Nico Sneeuw.

Dr. Lachapelle indicated that there are approximately twenty faculty position within Geomatics Engineering but that some of the positions are vacant at the present time as the department tries to attract appropriate candidates. Dr. Lachapelle indicated that the Department has retained Dr. Caterina Valeo (Civil and Geological Engineering), Nico Sneeuw (Geodesy), Dr. Matthew Tate (Industrial Petrology) and Dr. Richard Klukas (Wireless Location). Dr. Lachapelle also indicated that an offer has been made to a professor whose area of expertise is LIS but is also a land surveyor. The faculty is losing Dr. Vincent Tao. Dr. Lachapelle and another professor have received Canada Research Chairs for their expertise in information technology.

In recent years, Geomatics Engineering has graduated just over thirty people. In April 2001, they graduated thirty-four students. Soon, they will start to graduate forty plus students as more students return from internship. Dr. Lachapelle indicated that he would approach the Dean to be able to start taking fifty plus students each year. Out of approximately six hundred first year students in engineering, geomatics is the first choice for about seventy of them. At the currently time, they can only accept around forty.

At convocation, the University (and not the Department) conducted research and found out that eighty percent of geomatics graduate found employment. This is the best of any engineering faculty (except Petrochemical Engineering which only graduated ten students).

Dr. Lachapelle encouraged the survey profession to take the opportunity to be a guest lecturer at the Professional Lecture Series Offered at Survey Camp

The University of Calgary Department of Geomatics Engineering has just concluded the annual Survey Camp in the Kananaskis during the last two weeks of August. During the last three days of the survey camp, a lecture series was put on through the Geomatics Engineering Liaison Committee. These lectures, originally known as the Block Week course, were intended to give the graduating class an insight into cadastral surveying and the role of the cadastral surveyor.

The survey camp is conducted at the University of Calgary Training
Facility in Kananaskis during the last two weeks of August. It includes field projects based on the following activities:
• Boundary Retracement
• Road Design and Layout
• Precise Engineering Survey
• Precise Levelling
• Differential GPS Positioning
• “Lost Peg” Competition

This year, following the Lost Peg Contest, there were two days of practical lectures and case studies presented by seven members of the western Canadian survey profession.

The lecture series consisted of:
• Geomatics and Condominiums - A Case Study - Brent Taylor, BCLS, CLS.
• History of Surveying - Patrick Ringwood, BCLS, CLS.
• Role of the Professional Land Surveyor - Ken Allred, ALS, CLS.
• The Surveying Profession - Ken Allred, ALS, CLS.
• Nunavut Land Claim Surveys - A Case Study - Paul Dixon, ALS, CLS.
• Environmental Mapping for a Proposed Pipeline - A Project Management Case Study - Bryan Bates, BCLS.
• Business Practices - Brent Taylor, BCLS, CLS and Bryan Bates, BCLS.
• Careers & Internship Opportunities - Jeff Skelton, SLS, P. Eng.
• Pursuing and Executing International Projects - A Case Study - David Thomson, ALS, P. Eng.

The senior class in attendance at the survey camp consisted of 40 students who were going into their final year towards a B.Sc. in Geomatics Engineering. About one third of the class had cadastral survey experience and plan to pursue a career in cadastral surveying.

The Lost Peg
The Lost Peg Competition is usually held on the last day of the Kananaskis Survey Camp. Students are given coordinates and use traditional survey instruments to try to find the lost peg. This year, the winning group was team Orange, with the following members:
• Mark Dempsey
• Samantha Chin
• Magdalena Bytnar
• Voytek Kubacki

Their distance was 0.029 metres.
One of the driest summers in fifty years is almost history which must have meant many hot days for all those busy survey crews across this prosperous province.

Just before the summer break, we certified Kenneth Grendahl as a Technologist, Civil. He works for Stantec Geomatics in Calgary. Blair Richard of Fulton & Associates and Daryl Lysack of the City of Calgary were recertified at higher levels.

The bulk of our efforts over the summer was to upgrade our new website at www.assmt.ab.ca. You are all urged to visit it as much as possible. If employers wish to place an ad for an advertised position, put it online yourself at www.assmt.ab.ca/Classifieds/Classifieds.asp. An application for certification is also available.

We have also posted a list of courses being presented in conjunction with NAIT. When a minimum of twelve have registered for a course, a date will be set for delivery at NAIT. Courses available are: Survey Assistant (Chairperson), Basic Survey Calculations, Basic Total Station, Leveling, Surveyor Field Notes, Advanced Calculations and Advanced Total Station/Data Collection. For more details, check the web page or phone Glen J. Erdely at 780-461-5474. The last Survey Assistant Course at the end of April was oversubscribed.

**Plans for the fall**

Council will be considering a new colour brochure on September 13th designed by our Public Relations Chair, Chris Pichach, CST of the IBI Group. We have also taken possession of the retired ALSA Display Booth and will be upgrading it for SAIT’s Career Directions 2001 on November 7th.

President Farley McKenzie and the Publications Committee are working on a Link newsletter. Regional meetings will be held in Lethbridge, Edmonton and Calgary. Our committees will get back at it and start planning our next Annual Meeting in 2002 in Lethbridge for a start.

Thanks go out to Councillor Ken Revoy for completing certificates for twelve students who took our Bushwork Module at Bow Valley College in May. We are now concentrating on developing survey-oriented courses through NAIT and SAIT.

A note of sympathy is extended to Registrar Hugh Furber on the recent passing of his mother and father. We are glad to see Barry Bleay on the mend and look forward to his participation again in our affairs.

We will certainly have a more extensive report in December after the busy fall season. I hope you have all had a pleasant summer full of holidays and fun and are ready to stoke those fires up again. I can be reached at stuttpottruff@hotmail.com.

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