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What is our Legacy?

In Alberta we are planting pins in the ground (defining boundaries) at an unprecedented rate. The big question is, how many of these remain over time?

Landowners rely on these pins to construct improvements, including houses, garages, fences and other landscaping features. The survey pins let them know the limits of the land they own. Those associated with development are also concerned with boundary locations to ensure that what is being constructed is done so in the proper location. Those involved in the energy industry realize the safety issues created if a pipeline is not put within the right-of-way boundaries.

As land in Alberta becomes more expensive, boundaries become more crucial, together with our job as surveyors, to define these locations.

I believe we have a large problem with the preservation of survey pins in all sectors of the province, but primarily in the urban areas. In the energy industry, boundaries are usually well staked and machine operators understand what a survey pin is and its importance to the task they are performing.

This is not the case in the towns and cities. The only group of people that understands the importance of survey pins is the surveyors themselves. Part of the blame is the system and the remainder is a lack of understanding of the importance of a survey pin. In Alberta, there is also very little consequence for the removal of a survey pin.

Our system of only posting a subdivision once prior to the registration of a survey plan, in many cases, leaves a very small percentage of survey pins remaining. Those that are left are damaged and unreliable. In some subdivisions, there are no pins remaining whatsoever. This is typically bareland condominiums where considerable paving, concrete poured and landscaping is completed after the plan has been posted.

In delayed posting plans, pins are often planted prior to landscaping being completed and the same problem exists with pins being removed and damaged, but perhaps not to the same extent.

In Ontario, subdivisions have development agreements requiring the developer to post a bond that is used to repost the subdivision after construction is complete. The result is a complete survey fabric that can be used for future boundary determination. Would this work in Alberta? Perhaps this may work, as well as other options—one being a coordinate based cadastre.

In many older areas, the disappearing survey fabric is making boundary re-establishment much more difficult and uncertain. In delayed posting plans, pins are often planted prior to landscaping being completed and the same problem exists with pins being removed and damaged, but perhaps not to the same extent.

In Ontario, subdivisions have development agreements requiring the developer to post a bond that is used to repost the subdivision after construction is complete. The result is a complete survey fabric that can be used for future boundary determination. Would this work in Alberta? Perhaps this may work, as well as other options—one being a coordinate based cadastre.

In many older areas, the disappearing survey fabric is making boundary re-establishment much more difficult and uncertain. The public demands one boundary, not uncertain opinions from two or more surveyors who are trying to piece together a complicated jigsaw puzzle with missing pieces.

The largest obstacle, as I see it, is the lack of understanding of the importance of survey markers by everyone. The ALSA has done a great job of heightening the awareness of its members. Maybe it is time to change course and educate people on boundaries and the importance of survey markers.

Developers and municipalities must make an effort to preserve survey pins and implement penalties for those who damage or remove pins. The ALSA must develop a system to allow for the simple re-establishment of a removed or damaged pin.

The City of Winnipeg is proactive in preserving survey pins and enforces penalties to those who damage or remove pins. New Brunswick has a similar system.

Our municipalities are unaware of this issue and remain a large contributor to the problem with infrastructure construction which removes survey pins in large numbers.

In Calgary, 16th Avenue has been widened, destroying old survey evidence which dates back 100 years. No effort was made to reference and witness this evidence, even after requests by concerned surveyors. It wasn’t in the budget.

The ALSA continues to dialogue with the municipal and provincial governments on an ongoing basis. This topic must be raised and solutions found and implemented.

Is this an ALSA problem? Partly, because we are the keepers of the survey fabric. It is also the problem of whoever destroys or disturbs monuments. It is also the responsibility of our provincial government who charges fees for the registration of titles and the creation of new land parcels. Part of the integrity of the Torrens System is its structure in the ground. The title insurance companies would have us ignore these issues, build where we want and sweep it under the rug under the guise of a title insurance policy.

As surveyors, being on the front lines, you must be proactive in the area you work to ensure that the survey fabric is preserved and your local government, developers and construction companies are aware of survey markers and that they leave them alone. In a circumstance where that is impossible, there must be a provision to restore the damaged monument.

That would be our legacy!
The Alberta economy has slowed, is making a correction, going through a slight adjustment or whatever you want to call it. The high Canadian dollar, the energy royalties and possibly the high cost of labour in Alberta have all contributed to this slowdown. The survey industry has not seen a slowdown in many years. The membership in the Association is growing. Surveyors, party chiefs and draftsmen are being hired from around the country to support our Alberta industry. Some companies have created alliances with companies in other countries to outsource drafting and engineering services. This infrastructure that has been put in place was keeping up with the demand from industry for survey services. We are able to offer high-paying stable jobs in our industry and it is attracting many people to it.

In 1982, the survey industry was booming. Surveyors, party chiefs, draftsmen and other people were arriving from various parts of Canada to support the survey industry in Alberta. The Trudeau government implemented the now infamous National Energy Policy. Without explanation, it is safe to say that it shut down the oil industry in Alberta. What happened over time was that the labour force that supported the oil industry—and that included surveyors—dwindled to match the demand which was a fraction of what it is today. There was a lack of interest by the young to enter the workforce in the geomatics industry.

In the late 1990s, when the oil industry had a resurgence, Alberta ended up with a workforce that was pre-1982 trained or newly-trained in the late 90s. What this created was a gap in the age of skilled labour. This is why we still see those 70-year-old inspectors on plant sites. I am not in anyway saying that a slowdown of the magnitude of 1982 would ever happen again. The world needs Alberta’s oil. This slowdown did get me thinking though, that we worked very hard as a profession to expand our membership and think of innovative ways to get projects completed by immigrating a workforce to Canada or outsourcing drafting to other countries.

As I stated above, we are, as a profession, attracting a geomatics workforce to Alberta. High pay, job security and lots of work are the reasons. A challenge for us might be to come up with a way to maintain a qualified workforce during a slowdown. In the long term, our economy will remain strong. During a slowdown, how do we keep interest among the youth in the school systems, universities and colleges for geomatics if the job market in geomatics does not remain as promising as it is today?
Every morning when Tara brings me the mail, there are always the usual invoices from organizations and people that want to get paid. Once I get past the bills, there are always a number of magazines for me to read and circulate throughout the office. Sometimes there are magazines from other provincial survey associations. Sometimes there are magazines from state surveying societies. We get magazines about the oil and construction industries in Alberta. We get legal periodicals. We get business journals.

We also get some of the magazines from other self-governing professions here in Alberta. Recently, the magazine of the Alberta Veterinary Medical Association came across my desk and they reprinted an article from the College of Dietitians of Alberta. The article was entitled, “The Top Ten Causes of Unprofessional Conduct” and was published by James T. Casey from the Field Law Office in their magazine, Perspectives for the Professions.

I didn’t want to reprint Mr. Casey’s article, although it is very good. I decided, however, to prepare a land surveyor specific article that would list the top ten reasons for disciplinary action against Alberta Land Surveyors.

A short time ago, I had the opportunity to call a practitioner about a boundary matter that was raised by a landowner. When the practitioner answered the phone and realized that it was me calling, he said something to the effect of, “it can’t be a good day when you get a phone call from the Executive Director.” Well, I don’t always phone practitioners with problems or bad news but if you want to avoid those problem phone calls from me, here are ten things that you might want to keep in mind.

1. Communication With Other Alberta Land Surveyors
As a senior Alberta Land Surveyor, you may be reluctant to call one of the newer members of the Association because you don’t know them very well. At the same time, relatively junior Alberta Land Surveyors may be reluctant to call senior members of this Association because they feel intimidated by the experience and knowledge they may have. Result? Neither Alberta Land Surveyor calls the other and problems or concerns go unresolved. Talk to one another. Do it now. Don’t wait.

There is a tendency (and I will admit I’m sometimes as guilty of it as anyone else) to send a letter or an e-mail instead of talking to the other practitioner. It may be important at some time to document your conversations and your findings for the record. However, there is usually nothing better than picking up the phone and talking to the other Alberta Land Surveyor directly. You can have a dynamic conversation and start to understand the other practitioner’s perspective and approach to a surveying matter. When you first put something in writing without speaking to the practitioner first, it is like drawing a line in the sand and making a serious accusation. The tendency for the other practitioner is to get defensive and justify what he has done instead of working towards a resolution. When you speak directly to one another, there is a natural reaction to be less confrontational and more willing to seek a resolution.

2. Communicate With Your Clients
When I do get phone calls from landowners, it is often because they have tried to communicate with a practitioner but the practitioner has not responded or responded to the client’s satisfaction. I’ve seen a number of cases over the years where spending a little bit more time with the client up front would have saved tremendous amounts of time at the end of the project. Sometimes, things are not easy to resolve and no one can pretend that they are. However, direct communication with the client can usually resolve the vast majority of client concerns and problems.

One of the trickiest things about communicating with clients is to try to explain complex technical or legal matters in a way that they can understand them. Why does the Manual of Standard Practice allow for a tolerance of 0.2 metres for fences on real property reports? Why does an Alberta Land Surveyor have to look for evidence at my lot corner when my lot is not the one being surveyed?

3. Communication With Staff
These days, the Alberta Land Surveyor is typically in the office and not in the field. It is not always the case, but we know that Alberta Land Surveyors are relying more and more on their technicians and technologists to be their eyes and ears in the field. Survey companies establish policies and procedures to deal with any number of situations that might be encountered in the field.

...“it can’t be a good day when you get a phone call from the Executive Director.” Well, I don’t always phone practitioners with problems or bad news...
field. A common policy would be for a party chief to knock on the door of a landowner and let them know they need access to the property in order to conduct a particular type of survey. If the landowner is not home, leave a door knocker card to let them know that a survey crew was on the property. It is a reasonable policy and one that we hope that all practitioners would adhere to.

The challenge, of course, is enforcement. The policy is in place but how does anyone really know that the field crews are following the policy. A survey company can have regular meetings with its field staff and conduct periodic field inspections.

It is important for Alberta Land Surveyors to know that, when a landowner speaks to a party chief or any member of a field crew, they will likely assume that the party chief is the Alberta Land Surveyor. If the field crew member has a bad attitude or a bad day, then the Alberta Land Surveyor might not know about it until he or she gets a phone call from the landowner or me about the complaint.

...despite best efforts, the professional life suffers when the personal life suffers.

4. Personal Issues
All of us have, or at least should have, a life outside of our work and our profession. Sometimes that personal life gets in the way of our professional life as much as we try to separate the two. Divorce, drugs and alcohol are common types of personal problems. Often, we will try to put our personal demons behind us and put our energies into our work. However, we have seen situations where, despite best efforts, the professional life suffers when the personal life suffers. It will take somebody with greater skill and expertise than me to suggest how to deal with these personal issues. It is important, though, to recognize when they are happening and get the help that's needed so that both the professional and personal life do not suffer together.

5. Contracts
Much has been said about the need for contracts in the land surveying business for many years. The Alberta Land Surveyors' Association has put on seminars about contracts and the Canadian Council of Land Surveyors put together a booklet on contracts and it is still available on the CCLS website.

There is nothing more frustrating for me than a phone call from a client telling me that they asked an Alberta Land Surveyor to do one thing but received something else. When I speak to the Alberta Land Surveyor, they thought they knew what the landowner wanted or had expected. There is no written contract because it was felt that it was just a routine, straightforward job. In these types of cases, it is often the land surveyor who should have known better who will end up bearing the brunt of the pain when there is a lack of a contract.

6. Current Knowledge
Many Alberta Land Surveyors attend regional meetings but some don’t. Many Alberta Land Surveyors attend annual general meetings but some don’t. Many Alberta Land Surveyors read this magazine and other survey magazines but some don’t. There are many opportunities for practitioners to stay current with the latest technological and professional developments. Of course, it can be difficult to do when there are so many other pressing matters. For me, I have to make a point of allocating time to learn new things and attend seminars. Not staying current and relying on the way things have always been done is a sure way to invite a meeting with the Discipline Committee. Is your binder of acts and regulations up-to-date?

7. Dollars
The discipline process is not a good way to resolve disputes over fees for service. I would prefer that fee disputes get resolved as a civil matter but that doesn’t mean that a client won’t file a complaint against a practitioner over a fee dispute. The Alberta Land Surveyor quotes a price for a job and the client gives the go-ahead to proceed. The Alberta Land Surveyor does the job and then invoices the client and the invoice ends up being much higher than the quoted price. Did the Alberta Land Surveyor explain what disbursements or registration fees might be involved? Did the client change the scope of the work but expected the price to remain the same? Did the field crew arrive on site and realize there was no evidence for miles around and the job was going to take twice as long as originally planned? An Alberta Land Surveyor should receive fair and just compensation from his client but there is also a responsibility to ensure that clients are aware of anything that may affect the quoted price. This will minimize, but not eliminate the possibility of the Alberta Land Surveyor spending time dealing with fee disputes.

8. Inadequate Records
Alberta Land Surveyors keep lots of records. It is in the surveyor’s nature to do that. However, there have been situations where old files could have been lost. Perhaps it was because a survey company was bought out or perhaps there were just so many records that the one in question could not be located. It makes it tough to defend your actions when you don’t have the contemporary documentary evidence to back it up.

Similarly, your field notes may have made sense at the time but when you look at the file several years later, do they still make sense? I cannot recall a discipline case solely based on a practitioner’s field notes but I do know that good field notes have gone a long way to help a practitioner defend himself.

9. Supervision, Direction and Control
“Supervision, direction and control” is a phrase that appears more than once in the Act and regulations. We have seen cases over the years where an Alberta Land Surveyor...
has delegated a great deal of responsibility to a non-professional. The non-professional may be an experienced capable person or may be a raw recruit. As an Alberta Land Surveyor, you are responsible for supervising all staff. You are responsible for directing the work and how it is to be done. You are responsible for controlling the practice overall.

You cannot run any organization without delegating a number of responsibilities and trusting your staff. However, at the end of the day, you must take responsibility for the overall practice and ensure that the products and services you provide are consistent with the high standards of the profession and the expectations of your company.

10. Unauthorized Practice
Sometimes a practitioner will hire staff but not exercise the adequate supervision, direction and control. In some cases, a practitioner will get involved with a non-professional who will offer to do marketing for the land surveyor and do the field work for the land surveyor. All the land surveyor has to do is sign the plan. In these cases, the Association asks itself, who does the client thinks the land surveyor is? In many cases, this type of situation goes to the heart of what it means to be an Alberta Land Surveyor. Quite often, in these situations, it is the Alberta Land Surveyor who appears before the Discipline Committee and must answer to his peers.

It is no coincidence that the first three items on my top ten list deal with communication. In fact, six other items on the list are also related to communication. Only one item, current knowledge, really has anything to do with the technical competence of the Alberta Land Surveyor. If you are ever to find yourself before a Discipline Committee or responding to a formal complaint, it is likely that it will have very little to do with your technical skills and ability but will be centred around how well you have communicated as a professional.
I'm back!!

Just a follow up of my article in the March 2007 issue of ALS News.

First of all, I would like to thank David Marquardt for nominating me to receive the prestigious Professional Recognition Award and for Council approving the nomination. Unfortunately, I was not available to attend the last AGM to receive this honour due to a last minute family tragedy. I am truly humbled by the words that David presented to those in attendance. I very much have enjoyed my 32 years of membership within the Association and especially the last (almost 14) years as being the Assistant to the Director of Practice Review. As most of you know, this year, I signed a one-year contract with the Association and the first part consisted of a six-month leave of absence.

Now, what did I do for the six months that I took off? The first month Eileen and I readied our old motorhome for the trip of our lifetime. During that time we also visited all of our children, grandchildren and other members of our family before heading out. Then on June 6th, we headed out East for three-and-a-half months to see many extraordinary people, places, natural and man-made wonders. It truly was a trip of a lifetime and the good Lord took care of us all the way. We were able to visit all ten provinces in Canada (visited my daughter and her family in BC before leaving). We put on over 18,000 kms on the motorhome and took (kept) about 4,000 pictures.

The last month and a half, we unpacked, winterized our motorhome, visited with family and friends, caught up with the goings on while we were away and prepared for the routine ahead. I am back in the office (started October 29th) and now look forward to getting on with the job and hearing from my friends and acquaintances in the survey world.

I would really recommend that each and every one of you consider not put off taking time to do what you want to do. It is not important whether it is spending more time with the family, seeing more of our great country or something else that is important to you, but just take the time. Remember we don’t know how long we are going to live and what condition we will be in in the near future.

DON GEORGE, ALS

Public Member To Council Appointment

Mr. D. Russell Barnes:

I am pleased to advise you of your appointment as the public member to the Council of the Alberta Land Surveyors’ Association.

The Land Surveyors Act establishes the ALSA as the regulatory body responsible for the regulation, registration and discipline of land surveyors in this province. The term of your appointment is for one year and you are eligible to serve for five further terms of appointment of one year each. Should you find it necessary, you are free to withdraw at any time.

Public members play an important role in serving the broad public interest. Since you are not a member of the Association, you bring an objective viewpoint to the table and ensure the interests of Albertans are represented at professional meetings and hearings.

I appreciate you agreeing to serve the public in this capacity and for your past service as public member on the Practice Review Board of the ALSA. Thank you very much for your willingness to serve your province.

IRIS EVANS, MINISTER

ALBERTA EMPLOYMENT, IMMIGRATION AND INDUSTRY

Science Alberta Foundation Update

For more than 17 years, Science Alberta Foundation has created and delivered innovative programs that promote science literacy in Alberta. We stand alone in taking science where it’s needed most—to families, teachers, librarians and local organizations; within homes, classrooms and learning facilities; from the largest cities to the smallest towns in every corner of Canada’s fastest growing province. We would like to thank you for your help in making this possible. We appreciate the support we have received from the Alberta Land Surveyors’ Association. We are delighted to provide an annual update on the success of the “Made to Measure” Science-In-A Crate.

Awesome crate. The students really enjoyed the survey one. For some of my hands-on or more active students, it really helped make the concepts more clear. Thanks.

G.S. LAKIE, MIDDLE SCHOOL, LETHBRIDGE

Developed with support from the Alberta Land Surveyors’ Association, “Made to Measure” Science-In-A Crate is directly linked to Alberta’s grade eight math curriculum (Shape and Space). Each crate includes seven activities that help students explore the math curriculum through real-life scenarios faced by land surveyors. As they work through the activities, students create and analyze a digital network, build a 3-D model of a potential oil well site, and estimate the composite area of a property.
Students even create a treasure map to determine the location of a lost gold mine!

The activities have been designed to help students develop understanding in difficult concepts ranging from measurement, transformations, and 2-D shapes and 3-D objects. As they work in groups, students enhance their communication and problem-solving skills which are necessary as they role play land surveyors and resolve the scenarios posed in the activities.

Between July 1, 2006 and June 30, 2007, the 12 copies of this crate travelled to 52 classrooms/community groups in 21 venues in 14 communities with 1,152 participants! We are pleased to see the increased use over the prior year—from 18 venues in 13 communities and 710 users.

To increase awareness of “Made to Measure,” we produced promotional mailers featuring our math crates and distributed them to teachers at 1,352 junior high/middle school/high schools across the province. These were distributed at the end of August 2007 in order to reach teachers at the start of the school year when they are developing their lesson plans and schedules. We are pleased to report that there are already 17 bookings for “Made to Measure” crates for the current school year.

We appreciate the contribution you have made to the “Made to Measure” crate and we value our relationship with the Alberta Land Surveyors’ Association. We look forward to continuing to work together to increase the science literacy and awareness across Alberta.

TAMARA L. MCCARRON, BSC, MBA
DIRECTOR, DEVELOPMENT AND COMMUNICATIONS

Thank You
On behalf of the Geomatics Engineering Student Society, I would like to thank you for the sponsorship provided by the ALSA for frosh week T-shirts.

Frosh week is a week-long, engineering-wide event aimed mainly at first-year students. The week has many different types of events, all of which seek to introduce the first years to their new
home for the next four or five years. The goal is to help the new students feel welcome and introduce them to Engineering. As such, frosh week is an excellent opportunity to promote geomatics to students who may never have heard of it. The hope is that some of these students may go on to pick geomatics as their engineering major.

With your kind sponsorship, the Geomatics Engineering students sported T-shirts with the ALSA’s logo and name on the back. These shirts continue to be popular long after frosh week, and as a result, the ALSA’s logo is seen by many engineering students. We hope the logos have brought recognition to the Association.

Again, we appreciate your sponsorship for the Engineering Week’s Geomatics T-shirts!

CORAL BLISS TAYLOR, PRESIDENT
GEOMATICS ENGINEERING STUDENT SOCIETY

A Surveyor’s Prayer

When my surveying days are done, I pray that my boots show the wear and tear of the many miles I have traveled...yet my footsteps show how softly I have trod.

While I was in Haiti this past summer, one of the many inspirational moments I got occurred on the site where we were working. Local labourers were collecting the abundant surface rocks into numerous piles to use for the property wall and building walls for the orphanage we were surveying and designing. I took off my muddy boots and got one of those shots that make you smile. The words came to me a few minutes later.

The message is pretty simple...as surveyors’ priorities go, a comfortable pair of protective boots is high on the priority list...they will get you through the thousands of miles we walk through muck, gravel, jungle, mountains, dust and dirt. While in the process of doing so, like our predecessors, we gather a great respect of God’s creation...this land we walk across.

DAVID N. MARQUARDT, ALS

Bridgeland

I thought you might be interested in seeing these images I took over the summer. My wife and I were hiking near Saskatchewan River Crossing in Banff National Park, and we found this tree.

As you can see, it has been carve and inscribed with Bridgeland’s name and the (assumed) names of his party. I’m not sure if this carving represents a survey monument (i.e. bearing tree) or is simply a postcard announcing ‘we were here.’ I haven’t found anything yet at the CLSR in my attempts to find out just what he might have been doing in that area.

ALLAN MAIN, ALS

Thanks very much for your note. Paul Langevin, Jeanine Rhemtulla and I photographed the tree in 1998 when we were completing a resurvey of M.P. Bridgland’s 1915 phototopographic survey of north-central Jasper. It was as much as a diversion as anything else that took us to the tree.

Since that time, thanks much to the efforts of UofA literary historian, Ian MacLaren (author of Mapper of Mountains) and Rob Watt, Waterton Lakes National Park warden, we have uncovered the vast collection of historical photographs numbering more than 120,000. The survey referred to on the tree is, to my knowledge, the last full survey that Morrison Bridgeland completed in his career. Spanning 1928-30, he surveyed the Brazeau country in southern Jasper and northern Banff National Parks. My interpretation is that the sign on the tree was a rainy day diversion for one of the field crew and not a formal survey monument. It is the survey that I most want to return to with our repeat photographic studies. You may be interested in our project as it evolves, and is presently captured more fully on www.mountainlegacy.ca.

ERIC HIGGS, PROFESSOR & DIRECTOR
SCHOOL OF ENVIRONMENTAL STUDIES
UNIVERSITY OF VICTORIA

Scholarships

I’d like to express my heartfelt thank you for your support of the John Deyholos Memorial Scholarship (University of Calgary). As one of this year’s recipients, I was both surprised and honoured.

I appreciate your confidence in me and willingness to contribute to my future education. Receiving this scholarship will help reduce my financial burdens and provide assistance for me as I continue pursuing my studies.

Again, thank you so much for investing in my future.

SHAUN TSE

I was nominated to receive the J.H. Holloway Scholarship in Geomatics Engineering (4th year), and I would like to express my sincerest thanks to you for providing this scholarship.

It is an honour to be recognized for my hard work and dedication to my studies. Receiving this scholarship motivates me to continue to strive for excellence and will enable...
Paddle, Portages & Pageantry
by Doreen Guilloux
Self published in 2008 and available from the author at RR 2, Site 17, Box 3, Rocky Mountain House, AB, T4T 2A2,

This is the story of the world’s longest canoe race of 3,283 miles (5,283 kilometres) from Rocky Mountain House, Alberta to end at Expo 1967 in Montreal, Quebec. This canoe race and the many centennial celebrations that were held along the race route in the multitude of communities along the race route, was the largest event of all Canada’s 100th birthday celebrations in 1967.

The story weaves together the emotions and stamina in the descriptions of many of the 100 voyageurs of this great Canadian feat. It visits many of the places of the history and adventure of the fur traders such as David Thompson, Simon Fraser, Samuel de Champlain, John Cabot, Pierre La Verendrye and many others.

It is difficult for those of us that live on the prairie to imagine riding 15-foot waves of the big lakes the race paddled. The description of the many encounters on Lake Superior and Lake of the Woods could only be told by an author that was an experienced paddler herself. This is a gripping book, with great detail all along the way and captures the trials and emotions of the crews representing eight provinces and two territories of Canada.


It is a book that all Canadians can relate to as many of them were there at the community celebrations along the race route in 1967. Read and relive the history.
New Members

#784 JEWETT, Kristopher B.

Kristopher Jewett was born in Keswick Ridge, New Brunswick in April 1976. He graduated from Fredericton High School in 1994 and received a B.Sc.Eng. Geomatics from the University of New Brunswick in 2002.

Articles were served under Alberta Land Surveyors, Robert Morrison, Ross Woolgar and David Thomson from January 2003 until he received his commission on September 25, 2007. Kristopher is employed with Challenger Geomatics Ltd. and is currently serving on the ALSA Public Relations Committee.

Surveying experience has involved working as an oilfield party chief for Crape Geomatics Corporation and Usher Canada Limited (MMM Geomatics Alberta Limited) as well as municipal management at Challenger Geomatics Ltd.

Kristopher enjoys skiing, camping and hiking as leisure activities.

#785 THOMPSON, Adam J.F.

Adam John Frederick Thompson was born in Woodstock, New Brunswick in April 1976. He graduated from Nackawic High School in 1994 and went on to receive a B.Sc. (Geomatics Engineering) from the University of New Brunswick in 2000.

Alberta Land Surveyors Doug Lunty and George Munro served as Adam’s principals from January 2002 until he received his commission on October 30, 2007. Adam is also an engineer-in-training with APEGGA.

Adam has worked in both municipal and oilfield surveys since 1998. He also worked in Chad, Africa from 2000 to 2002. Surveying experience before that was with Geodetic Canada from 1996 to 1997.

Adam enjoys woodworking, landscaping, golf and family time. Charity and Adam Thompson and their nine-month old son, Eric, reside in Medicine Hat where he is employed with Focus Surveys Limited Partnership.

#786 FEHR, Jeffery A.

Jeffery Allan Fehr was born in July 1970 at Edmonton, Alberta. He attended LaCrete Public High School and went on to receive an engineering degree from the University of Calgary in 2002.

Greg Stromsmoe, ALS and Philippe Breau, ALS served as Jeff’s principals from January 2003 until he received his commission on November 26, 2007. Surveying experience includes utility, oilfield and municipal surveying. He is currently employed with Altus Geomatics in Grande Prairie. Jeff is also an engineer-in-training with APEGGA.

He enjoys fishing, spending time outdoors, and spending time with family. Heide and Jeff Fehr reside in Sexsmith, Alberta with their children Samuel (11 years), Jared (7 years), Sierra (6 years), Hailey (5 years), Joel (2 years), and Hannah (9 months).

Members on the Move

The following are changes to the Telephone Listing and Supplement to the Annual Register of Members 2007-2008.

ACTIVE

Caroline Anderson: correction in September issue of ALS News—e-mail should be: cfanderson@efirehose.net.

Rocky Annett: new e-mail—anntetr@mmm.ca.

Jeff Blatz is now employed with Boundary Technical Group Inc. E-mail address: jeff.blatz@btgi.ca.

Bruce Drake: e-mail address is bdrake@palssurveysedm.com.

Fred Cheng: e-mail address is cccheng@shaw.ca.

Doug Cloake: e-mail address is cloaked@mmm.ca.

Hugo Engler: e-mail address is englerh@mmm.ca.

Stephen Fediow is now employed with Fugro/SESL Geomatics Ltd. E-mail address: sfediow@fugro.ca.

Jeff Fehr received his commission as ALS #786 on November 26, 2007. Mr. Fehr is employed with Altus Geomatics Limited Partnership in Grande Prairie.

Barry Fleece is employed with IBI Geomatics Inc. in Calgary. His e-mail address has been changed to barry.fleece@ibigroup.com. His direct phone is (403) 270-5600 ext. 514.

Cam Foran: residential address is changed to 14 Oakview Circuit, Brookwater, Queensland 4300, Australia. His e-mail address is camforan@yahoo.com.au.

Rick Gauthier has taken employment with Stewart, Weir & Co. Ltd. in Calgary. His e-mail address is rick.gauthier@dwg.ca.

Bill Halma has moved to 918 - 3 Avenue S, Lethbridge, AB T1J 0H9.

Connie Hanrahan resigned from NAIT on November 22, 2007. She is now employed in the Edmon-
ton office of Challenger Geomatics Ltd. New e-mail: chanrathan@chalgeo.com.

John Ironstone: residential address is changed to PO Box 649, St. Paul, AB T0A 3A0; Tel: (780) 645-5415.

Hal Janes: e-mail address is janesh@mmm.ca.

Kris Jewett received his commission as ALS #784 on September 25, 2007. Mr. Jewett is employed with Challenger Geomatics Ltd. in Calgary.

Bob MacDormand: new e-mail—bob.macdormand@ipsurveys.ca.

Robert Morrison is now with Precision Geomatics Inc. in Calgary. His new e-mail address is rmorrison@precisiongeo.ca.

Rich Nixon has moved to the Fort St. John office of Can-Am Geomatics.

Connie Petersen is now at the Brooks office of Midwest Surveys Inc.

Gerry Smyth is now at the Calgary office of Midwest Surveys Inc.

Adam Thompson received his commission as ALS #785 on October 30, 2007. Mr. Thompson is employed with Focus Surveys Limited Partnership in Medicine Hat.

Paul Westersund: e-mail address is paul@wsinc.ca.

HONORARY LIFE

Bill Dabbs: e-mail address is wrdabbs@shaw.ca.

RETIRED

Keith Davidson has moved to 35 Grier Place NE, Suite 4101 in Calgary T2K 5Y5.

DECEASED

Hal Falkenberg passed away on November 2, 2007. An obituary appears on page 51 of this issue of ALS News.

ARTICLED STUDENTS

Scott Colvin ceased to be an articulated student on September 14, 2007.

Jason Deschamps is now employed with Maltais Geomatics Inc. in Calgary.

Ryan Gordon is now employed by Midwest Surveys Inc. in Peace River.


Michael Lee transferred articles from Geoff Hobbs, ALS to Jerry Rasmussen, ALS of Maltais Geomatics Inc. on September 5, 2007.


Ryan McKellar terminated articles with James Sloan, ALS on October 25, 2007.


Sara Prescott transferred articles from Caroline Anderson, ALS to Iain Skinner, ALS of Focus Surveys Limited Partnership in Calgary on November 2, 2007.

Patrick Wetherup transferred articles to John Matthysen, ALS on August 29 and is now located at the 2891 Sunridge Way NE office of Focus Surveys Limited Partnership in Calgary.

David Young is no longer employed with Navland Geomatics Inc.

AFFILIATE

Eduardo Linhares (AF042) became an affiliate member on September 5, 2007. Eduardo is employed with Stantec Geomatics Ltd. in Calgary.

Jaroslaw Matejko (AF043) became an affiliate member on September 5, 2007. Jaroslaw is employed with Crape Geomatics Corporation in Calgary.

Jason Whale ceased to be an affiliate member effective October 3, 2007.

ASSOCIATE

Jeremy Dawson has moved to 10157 - 134A Street, Suite 107, Surrey, BC V3T 5L7.

COURTSHIP

Altus Geomatic Limited Partnership has removed their post office box from their mailing address. The postal code for their street address is now T9V 2W7.

Halma Surveys MMM Geomatics Alberta Limited: New website—www.mmm.ca; new e-mail addresses: -edm.geomatics@mmm.ca; -cgy.geomatics@mmm.ca; -fmac.geomatics@mmm.ca.

Principia Geomatics Inc., was registered as a surveyor’s corporation with permit number P237 on October 12, 2007. Metin Timocin is the Alberta Land Surveyor responsible for the supervision, direction and control of the corporation. The contact information is: 18 - 9 Street SE Medicine Hat T1A 1M9 Tel: (403) 878-7414 or 529-9257 Fax: (403) 529-6722 E-mail: metintomocin@yahoo.com.

Tara Lacerte Joins the Staff at the ALSA

Tara is a native Edmontonian born in August 1988. She graduated from Ross Sheppard High School in 2006. While attending school, she decided to take a trip to Paris, France for her first time and ended up having a love for their culture. Needless to say, she returned to Paris, France for a second trip a year later. Her interests include an incredible love for animals including two of her own, social events with friends and family, scrap-booking and traveling. She looks forward to a long and wonderful career with the Alberta Land Surveyors’ Association.
Multimedia Land Records Progress Report

Under the supervision of Dr. Michael Barry and funded by ALSA, it has been a year since I started my MSc. program in Geomatics Engineering at the University of Calgary.

During this period, I have been working on analyzing cadastral models and developing land record systems. As a result, I developed a multimedia cadastral model that is sufficiently flexible to serve a wide range of situations. Moreover, using the Microsoft.Net programming language, I am developing the object manager software which, in design at least, is a simple land record system that is capable of storing and retrieving different types cadastral data, including multimedia data.

For testing purposes, I populated the software with local and international cadastral survey and titling data. The data includes real cadastral data for Alberta (downloaded from the SPIN system), and data that Dr. Barry has collected in Somaliland, Nigeria, and South Africa.

Most of the system’s requirements were acquired from the interviews that I have conducted with a vast spectrum of cadastral and survey professionals, in the Land Titles Office and licensed surveyors from different provinces.

Currently, I am in my second year of my master’s programme. I intend to defend my thesis in September 2008.

Finally, I would like to thank ALSA for your ongoing support of post-secondary education in cadastral studies.

ABDEL-RAHMAN MUHSEN
MSC. CANDIDATE
GEOMATICS ENGINEERING
UNIVERSITY OF CALGARY

Question Time

What is the timeline for submitting project reports?

As stated in the project report guidelines, a minimum of one project report must be submitted within two years of the student signing articles with a minimum of one project report per year thereafter. Please note that this statement is not based on the calendar year. If a student’s articles began in January 2006, the first project report is due before the anniversary date in January 2008. Even though an articling student or affiliate member can begin submitting project reports at any time, the absolute deadline for the first one is within two years of signing up.

What is the involvement of the student and principal with respect to project reports?

Student Involvement: As stated in the Project Report Guidelines, “The student should be prepared to personally complete the field work for each of the three project reports at the party chief or supervisory level.” The intent here is clear. The student is required to be in the field for all three projects and to act as either the party chief or as the field supervisor. Implicit to this statement, is the fact that the student cannot act in a supervisory role until such time as the student has acquired significant experience at the party chief level. If appropriate, the student may act as a field supervisor and would be expected, as a minimum, to perform the initial evidence assessment, to provide detailed instructions to the survey crew, to be present during all or a portion of the field observations and to inspect the final placement of statutory monuments. It is expected that the extent of the student’s involvement will increase substantially with each project. For instance, the hands-on involvement with the first project will likely be confined to the field work and the pre-drafting computations, while playing a lesser role in the client liaison, job setup and final submission phases. Student involvement with the last project is expected to be hands-on in every aspect of the project.

Principal Involvement: The project is to be viewed as such, a project. The student shall complete each phase of the project under the supervision of the principal. The purpose of completing the project is to familiarize the pupil with each part of a survey project, from the initial inquiry by the client to the final product. One of the most fundamental reasons for doing a project is to provide an opportunity for the principal and the student to focus on each aspect of the project. It cannot be over-emphasized that principal involvement in each project is paramount. The principal is expected to proofread the pupil’s report.

When do I submit my Affidavit of Service?

Affidavits of Service are to be submitted to the Association office no later than January 15th of each year regardless of when articles commenced. The Affidavit of Service form as well as a sample can be found on the ALSA website on the articling/affiliate member page at www.alsa.ab.ca/MemberResources/articling-affiliate.htm.

Have you registered yet?

99th ALSA Annual General Meeting
Fairmont Chateau Lake Louise
April 24th to 26th, 2008
Implications of the Delgamuukw Decision
Rebecca Broten, Michael Barry and Oliver W. MacLaren,
University of Calgary — Summer 2007

1.0 Introduction
In this article we briefly describe and analyze the Delgamuukw cases, which have had a major impact on aboriginal land law internationally. The context of our investigation is the use of multimedia data as evidentiary tools in resolving land disputes and reducing the number of potential disputes. Delgamuukw is the first of a number of Canadian and international land law cases which we are examining as part of a multimedia land records study in order to develop principles of good practice and identify some of the difficulties in acquiring such evidence.

2.0 History
The Delgamuukw action began in 1984 when the chiefs of two First Nation groups, Gitksan and Wet’suwet’en, filed suit against the province of British Columbia (BC), seeking “ownership of and jurisdiction over” 58,000 square kilometres of land in northern BC. The Gitksan and Wet’suwet’en claimed these lands as their traditional territory, and like most First Nation groups in BC, they had never signed a treaty or land claim agreement and, therefore, could argue that they had never ceded title, aboriginal title or in fact any form of partial rights (e.g. servitudes or leases) over those lands. The decision to launch the suit came after many years of attempting to initiate treaty talks with both the provincial and federal governments, and being refused audience.

The land involved is home to about 5,000 Gitksan, 2,000 Wet’suwet’en and 30,000 non-aboriginal people, and encompasses approximately 6.5% of the total land area of the province. It is heavily forested (and heavily logged), mineral wealthy (coal and molybdenum have been mined there) and has abundant wildlife and fish stocks, especially salmon.

Judge Alan McEachern presided over the first case which began in 1987 in the BC Supreme Court, ultimately dismissing the claim for aboriginal ownership rights in 1991. This trial judgment held aboriginal rights to exist “at the pleasure of the Crown,” and were extinguished at the time of colonization. Furthermore, the trial judge held that he could not grant ownership because aboriginal rights, if they could be proven to exist, constituted only a “personal and usufructuary” right to the land as set out in 1888 by the Privy Council in the St. Catherine’s Milling case.

In addition, the First Nations groups had “not demonstrated the requisite degree of occupation required for ‘ownership’ despite months of testimony from archaeologists and others, and oral histories presented by the elders, often in their respective first languages.

To clarify, in concept, ownership is alodial in character. It implies that the owner’s rights of enjoyment, management and disposal over property are paramount over any other rights that may exist in the land in favour of other persons or the state. In simple terms, ownership as derived from Roman law incorporates the concepts of (1) usus – the right to use; (2) fructus – the rights to the fruits or revenues and profits of the land; and (3) abusus – the right to destroy, change substantially or alienate the land. Since the St. Catherine’s Milling case, the Canadian courts held that only the first two of these legal concepts are present in aboriginal rights until the notion began to be challenged in the 1970s and ‘80s, especially following the patriation of the Constitution and the recognition of aboriginal rights therein in 1982. One should note that if one applies the concept strictly, full ownership (i.e. alodial tenure) does not exist in many Commonwealth countries which have received English law, Canada included. An estate (e.g. a freehold in fee simple estate) is still held to the Crown, which holds

FOOTNOTES
4 Delgamuukw v. British Columbia (1997), 3 S.C.R. 1010 (para. 8 and 9)
5 ibid, para. 23
6 ibid, para. 17
the right of reversion in the case of escheat.

The Delgamuukw case was taken to the BC Court of Appeal in 1993. While the appeal court largely upheld the trial judge’s ruling, a notable exception was made with respect to the issue of extinguishment. The majority of appeal justices stated there had been no “clear and plain” extinguishment of the aboriginal right to use and occupy the lands put down at the time of colonization. In turn, this meant that the Constitution Act of 1982, which affirmed all aboriginal and treaty rights not yet extinguished by 1982, continued to protect these rights also. The justices also commented on the unfortunate wording of the first suit, stating once again that aboriginal “ownership” cannot exist.

The suit was reclassified as an appeal for aboriginal title and was taken to the Supreme Court of Canada in 1997. The Supreme Court is the highest court to which a party can appeal in Canada. The decision has become a landmark in Canada, and in places like the USA, New Zealand, Australia, and more recently southern Africa.

3.0 The Supreme Court of Canada Decision

The Supreme Court agreed with the appeal court that the rights of First Nations had not been extinguished, finding that the trial judge had erred on this point. The Court also found that insufficient weight had been given to the Adaawk and Kungax (the sacred oral histories of the Gitksan and Wet’suwet’en, respectively) more general oral histories, and territorial affidavits of past inhabitants. This was seen as a major personal victory for the First Nations peoples. As these cultures did not traditionally keep written records, such a judicial holding would allow aboriginal groups to compete on a more balanced evidentiary playing field in the courts.

With respect to the formal claim, however, it is important to note that the plaintiffs were not granted aboriginal title; indeed, to date no group has been granted such title in Canada. The final judicial holding instead called for a reassessment of the facts based on the correct standard of interpretation of the aboriginal oral histories. Instead, the significance of the Delgamuukw decision resides in its clear definition of what aboriginal title constitutes, and how it is to be proven to the satisfaction of the courts.

3.1 Admissibility of Oral History Evidence

Chief Justice Lamer’s judgment indicates that the admissibility of oral history evidence is a manifestation of the evidentiary principles established in another Supreme Court decision, R. v. Van der Peet, in which the Supreme Court held “that the common law rules of evidence [ ] be adapted” to take into account the unique nature and characteristics of aboriginal rights. That this adaptation takes the form of admitting oral history evidence is rationalized through the Supreme Court’s acknowledgment that such evidence is often the only history of an aboriginal group’s past. In aboriginal rights cases where pre-sovereignty activities justify the basis for the claim, oral histories therefore “play a crucial role in the litigation.”

The judicial flexibility required to accommodate such a holding is not lost on the Chief Justice, who recognizes the “tangential” history, legend, mythology, politics, and moral obligations interwoven into the legally relevant elements of oral history testimony. Additionally, that oral history testimony largely consists of out-of-court statements being admitted for their truth means that this kind of testimony conflicts with the general courtroom rule against the admissibility of hearsay. Nevertheless, Lamer is clear that notwithstanding these challenges, oral history evidence must both be admitted and “placed on an equal footing with the types of historical evidence that courts are familiar with, which largely consists of historical documents.” To accommodate the concerns expressed above, the court is instructed to evaluate such evidence on a case-by-case basis.

The case-by-case analysis that is then undertaken by the Supreme Court serves as an instructive guide for how the various forms of oral history testimony should be judicially considered. Oral evidence of the claimants re-considered in the Chief Justice’s judgment ranged from the sacred oral performances of the aforementioned Adaawk (Gitksan collection of sacred oral tradition about ancestors, histories, and territories) and Kungax (Wet’suwet’en spiritual song, dance, or performance which ties them to their land), as well as more personal and informal recollections of aboriginal life, and territorial affidavits of use and ownership of the land by deceased persons.

3.1.1 Adaawk and Kungax

With respect to the admission and evidentiary influence of the sacred oral texts, Lamer’s mention of the internal checks and balances indicates how such evidence will be judicially scrutinized for authenticity. Equally important is the mention of the Adaawk and Kungax as falling under an already established exception to the general rule against the admissibility of hearsay, that allows for “declarations made by deceased persons … given in evidence by witnesses as proof of public or general rights.”

FOOTNOTES

This more familiar treatment of certain aspects of the oral testimony in turn allows the court more flexibility with respect to evidentially uncharacteristic aspects of oral histories generally. Whereas at the first trial in the BC Supreme Court, the utility of the sacred oral histories to demonstrate use and occupation of the land was dismissed, as the trial judge found performances and narratives to be “seriously lacking in detail about the specific lands to which they are said to relate,” the Supreme Court of Canada judgment is bolder. The BC court’s finding that oral histories do not automatically convey historical truth, that they are confined to the communities from which they arise, and that they are sometimes insufficiently detailed “are features, to a greater or lesser extent, of all oral histories,” and should not be judicially undervalued in light of these concerns. To do so would be “in contradiction of the express instruction … in Van der Peet that trial courts interpret the evidence of aboriginal peoples in light of the difficulties inherent in adjudicating aboriginal claims.”

3.2 Aboriginal Title Defined

The St. Catherines Milling case, which took place between 1882 and 1886, established, in an oft cited passage by Lord Watson in the Privy Council, that “the tenure of the Indians was a personal and usufructuary right, dependent upon the good will of the Sovereign.”

Chief Justice Lamer stated in his ruling that aboriginal title is more than just a usufructuary right: “it is a right to the land itself.” Thus aboriginal title is a real property interest, equal to other property interests, and not merely giving rise to personal interests, but with three major differences. The first is that it is sui generis, meaning that it is of unique origin and unique nature. It therefore cannot be derived from any known law (i.e. British), or for that matter, exclusively from aboriginal law. It must accept all inputs. The second is that it is held communally by all members of a First Nation group. Finally, aboriginal title differs from other property interests because it is inalienable. It may only be sold to the Crown.

Although the court rejected the notion that aboriginal title is equivalent to an inalienable fee simple system, they nonetheless recognized it as a true property interest. Slattery suggests that the court has in effect stated that alienability then is not a prerequisite for a property right. Another implication of the decision stems from the communal nature of the title. If the land is held communally, and can only be surrendered by group consensus, then the decision may provide a “legal umbrella, in the shelter of which the customary law of an aboriginal group may develop and flourish.” Such a scenario may be helpful in constructing future arguments involving self-governance.

3.2.1 Exclusive Use and Occupation

In accordance with s.18 of the Indian Act, aboriginal title encompasses the exclusive right to use the land “for any purpose for the general welfare of the band.” This was interpreted by the Court to mean that lands under aboriginal title are not bound by traditional uses, and in fact may be used for any purpose whatsoever. Importantly, this also means that aboriginal title encompasses mineral rights, and that the land may be exploited to suit present day needs. This was the first time mineral rights had expressly been granted, although it had been implied in the Indian Oil and Gas Act. Thus, “general welfare of the band” indicated an entitlement of the holders of the title to benefit financially from any exploitation of the titled lands.

FOOTNOTES

24 Supra note 7.
28 ibid, p. 15
29 ibid, p.16
30 As quoted in: Slattery (2000) op. cit., p. 17
31 Slattery (2000) op. cit., p. 17-18
3.2.2 Inherent Limitations
Although holders of aboriginal title have unrestricted use of the lands, the court imposed an “inherent limit” on that use. The limit is such: a forbidden use is one that is “irreconcilable with the nature of the group’s attachment to that land” and that would prevent the group’s future use of that land. Although this appears somewhat contradictory, Chief Justice Lamer was careful to point out that aboriginal title does not restrict the uses to traditional ones: That would amount to a legal straitjacket on Aboriginal peoples who have a legitimate legal claim to the land. Therefore aboriginal title is not restricted to past uses, but it is somewhat restrained by them. To pursue an activity that is not permitted by this limitation, a group must first surrender title to that land.

McNeil has argued that this aspect of the decision is unnecessarily “paternalistic.” He believes Aboriginal people would not be inclined to damage lands since it would threaten their cultural heritage. He points out that the protection of lands is seen by Natives as their responsibility, and is often the driving force behind injunctions and suits for title or ownership.

Others argue that aboriginal groups should not be entitled to destroy lands “given” to them in the interest of cultural preservation, since that would defeat the point. It is submitted that Chief Justice Lamer’s judgment most reasonably follows this line of thinking.

3.3 Establishing Aboriginal Title
Another important aspect of this decision is that it sets the criteria to be used to determine if a claim for aboriginal title is valid. To prove aboriginal title, a group must first show that they occupied the land “at the time at which the Crown asserted sovereignty over the land.” This is in contrast to the previous time-zero, the date of first contact between the Crown and the First Nation, which is very difficult to determine precisely. This also allows groups seeking title to supplement their arguments with written accounts, such as those from Hudson’s Bay traders and explorers. Secondly, they must show near-continuous occupation of the land in question to present day, but that occupation need not be intensive. If that were the case, nearly all land except for village sites or similar would be excluded, proving a severe restriction on nomadic groups. The “near-continuous” modifier is to account for times in which groups were unable to use the land due to suppression or other factors (for example, potlatch ceremonies were outlawed until the mid-fifties). Lastly, the courts were now to give traditional oral histories legal independent weight when proving occupancy of an area.

3.4 Self-governance
In this case, the court ruled that it could not make a judgment on the issue of Native self-government because of the trial judge’s insufficient weighting of the oral histories, although as discussed above, the requirement that aboriginal title be held communally implies that some form of internal government is necessary and even expected if a First Nations group wishes to surrender its aboriginal title over a piece of land.

3.5 Infringement and Extinction
The court tempered its judgment significantly in that it made allowances for infringements of aboriginal title. In very broad terms, Lamer stated that provincial or federal governments may infringe on aboriginal title if the infringement “furthers a compelling and substantial legislative objective” such as “the development of agriculture, forestry, mining, and hydroelectric power, or … general economic development.” This part of the decision has come under much scrutiny. Some argue that since aboriginal title is a constitutionally protected right (under the Constitution Act, 1982) that the government should have even less right to infringe on it than it does to infringe on fee simple property holdings, which are not constitutionally protected.

The court did stipulate, however, that any infringement of rights must be preceded by consultation, and that the infringed-upon party is to receive fair accommodation or compensation. Furthermore, Lamer decreed that the consultation was a “fiduciary obligation” and therefore must be done in good faith. In certain circumstances, the full agreement of the affected First Nations group may be required before a project can proceed.

While this sounds satisfactory, Flanagan raises an interesting question: why should a third party, namely the government, have the legal authority to use the lands in ways that the holders of the title cannot? For instance, the province may decide to mine an area that is culturally sensitive. They will consult and pay all the required compensation surely, but the main issue here is that the holders of the title, the First Nations groups, would be restricted from initiating that same project due to the inherent limitations placed on the land by the courts.

Regarding the issue of extinguishment, the court ruled that both the Constitution Act, 1867 and s. 88 of the Indian Act preclude the provinces from extinguishing aboriginal rights; the federal government, however, as the legislator of the Constitution Act has the jurisdiction to extinguish aboriginal rights if it chooses.

FOOTNOTES
34 McNeil (1998) op. cit., p.5-6
36 Mandel.(1998) op. cit., p. 16-17
4.0 Conclusions
The Delgamuukw action is widely considered to be a landmark case. Specifically, this case was instrumental in defining aboriginal title as a real property interest, setting out a test by which to prove aboriginal title, and giving traditional oral histories legal weight. What is of interest is that some people in the Gitksan band have started to develop a land information system which can capture oral histories and stories from the elders using video clips. There are, however, complex problems associated with this, which will be discussed in a forthcoming article.43

Additionally, the judgment upheld the finding that aboriginal rights had not been extinguished in British Columbia, indicating a lack of provincial authority to do so. Chief Justice Lamer concluded by encouraging further action to be taken through negotiation rather than litigation. In doing so, he stipulated the government’s duty to negotiate in good faith.44

However, the case did not address all the issues that will eventually need to be agreed upon for true closure in this issue. The issue of Native self-governance is among the most important. The Supreme Court refused to make any general statements on this issue, saying that decisions would need to be made on a case-by-case basis.45

Several other questions come to mind regarding this issue. If aboriginal title were to be granted, what would happen to the holders of fee simple properties on that land? The BC Treaty Commission says that the solution is “more likely to be the payment of compensation than any adjustment to private ownership”46 but that is hardly definitive. Would the owners of those properties fall under Aboriginal government if it existed?

A further question arises whether different rules for admissibility of evidence might apply in the event in the event of a dispute between an Aboriginal group and adjacent fee simple land holders or existing fee simple fee simple holders within an area which has been granted aboriginal title. The former case is an unlikely scenario, but, nonetheless, one which is of interest to land surveyors. We don’t know the answer, but one can speculate that given the existence of a fee simple owner, the oral history evidence would have to be sufficiently strong to contradict, on an equal footing, the evidence establishing the fee simple ownership as paramount to the title claim.

And what of the First Nations—now legally bound by the Constitution Act of 1982 to hold property communally? Traditionally, many Native groups operated as families or lineage groups, not as an entire people. How long will it take, and how much process and hardship will it take, to come to a collective decision on every land issue? Flanagan argues that First Nation peoples are likely to be bound to poverty by the forced collective nature of land title. He argues that the time required to reach consensus would undermine a band’s market competitiveness.47 There are of course counter arguments to this assertion, but space does not permit us to explore this.

And how much money will the economy lose overall if aboriginal title is granted to even a majority of those that seek it? The costs associated with doing business on lands held by aboriginal title will be higher due to the required compensation component.48 At present, land claims in British Columbia exceed the actual surface area. Overlapping claims are common. Justice Lamer made reference to the overlaps and suggested that all affected parties be present at negotiations49. The difficulties increase. Negotiations will now require four or more parties, and the agreement of not one, but two or more, entire First Nation groups.

It may be difficult, but a resolution must be found. Canada is not alone in this issue: the United States, New Zealand, and Australia face similar difficulties. The Hui people of Hawaii were so concerned with this case that they asked to testify in the BC Court of Appeal case as amicus curae (friends of the court)50. But one last, important contribution of the Delgamuukw case the Supreme Court’s ruling that these issues must be discussed and discussed fairly. Chief Justice Lamer stated that it is the duty of the courts to learn to hear cases of this nature fairly, regardless of the difficulty.51 It is also upon the levels of government and Aboriginal peoples to pursue out-of-court negotiation as much as possible, and to work towards a solution because, as he said, “Let us face it, we are all here to stay.”52

FOOTNOTES
46 BC Treaty Commission (No date) op. cit., p. 3
47 Flanagan (2000), op. cit., p. 132-133
48 ibid, p. 132-133
50 Supra note 10.
51 Delgamuukw v. British Columbia (1997), 3 S.C.R. 1010 (para. 87)

References


...continued on page 52
Official Settlement Surveys—Surveys of Public Land Within Unsurveyed Territory in Alberta.

Background

Over the past few months, I have received several calls from practitioners and articled students inquiring about the proper nomenclature for surveys of public land within unsurveyed territory in Alberta and how to go about executing them.

A student-at-law called recently and inquired as to the difference between a river lot and a settlement lot within the land subdivision regime in Alberta.

One practitioner was preparing a request for proposal (RFP) for a subdivision straddling surveyed and unsurveyed territories and called for my advice regarding proper field surveys and time estimations, as he had not had much opportunity to deal with one before. I advised him that two plans would be required in this situation. First, the parcel of land within unsurveyed territory would be surveyed as an official settlement plan and confirmed by the Director of Surveys. The entire area could then be subdivided by a second plan.

Practitioners are reminded that Part D, Section 8 of the current Manual of Standard Practice deals with official surveys which includes surveys of public lands (unsurveyed territory) of Alberta:

33(1) A plan of public land surveyed pursuant to Section 29 or a plan of Metis patented land surveyed pursuant to Section 32 (a) shall be plotted from the surveyor’s field notes under the direction of the Director, and (b) shall show the directions and lengths of the boundaries, the nature and positions of the monuments and the areas of the parcels laid out.

2. The confirmation of a plan referred to in subsection (1) by the Director shall be held to be a confirmation of the survey and the confirmed plan is the official plan.

3. No land is considered to be surveyed until the official plan has been confirmed by the Director.

4. If the official plan is found to have been improperly or incorrectly plotted from the field notes of the survey, or if any omission or clerical error or other defect is found on the plan, the Director may cause a new plan to be made showing the omission, error or defect corrected and the new plan shall, after it has been confirmed by the Director, become the official plan and shall be used for all purposes instead of the old plan.

5. The Director shall, forthwith after the confirmation under subsections (2) and (4), file one copy of the official plan with the Registrar.

When performing a survey of public land under Section 33 of the Surveys Act, subdivision approval may not be required with reference to Section 652 of the Municipal Government Act wherein it states:

652 (1) A Registrar may not accept for registration an instrument that has the effect or may have the effect of subdividing a parcel of land unless the subdivision has been approved by a subdivision authority.

(2) Despite subsection (1) and subject to subsection (4), a Registrar may accept for registration without subdivision approval an instrument that has the effect or may have the effect of subdividing...
a parcel of land described in a certificate of title if registration of the instrument results in the issuing of one or more certificates of title and the parcel of land described in each certificate of title so issued would consist only of any or all of the following:
(a) a quarter section;
(b) a river lot shown on an official plan, as defined in the Surveys Act, that is filed or lodged in a land titles office;
(c) a lake lot shown on an official plan, as defined in Surveys Act, that is filed or lodged in a land titles office;
(d) a settlement lot shown on an official plan, as defined in the Survey Act, that filed or lodged in a land titles office;

Readers should note that the word “subdivision” is currently not used in the heading of any official plan in unsurveyed territory, surveyed under part two of the Surveys Act. River lot and lake lot surveys of public land within unsurveyed territory are now regarded only as official settlement plans.

Current Manual of Standard Practice Requirements With Respect to the Survey of Public Lands
In addition to the above legislated requirements, the current requirements for the survey of public lands within unsurveyed territory are stipulated within Part D, Section 8 of the current Manual of Standard Practice wherein it states:
The survey of public lands - townships,
- settlements,
- metis settlements,
- provincial parks, and
- provincial boundaries, requires specific instructions of the Director of Surveys office under the Surveys Act or the Boundary Surveys Act. The survey of Indian reserves and national parks will require specific instructions from the Surveyor General of Canada.

If engaged in any of these surveys, it is considered good practice to involve the above offices early in the process.

Instructions from the Director of Surveys Office may include survey specifications such as integration to survey control, least squares adjustment provisions, posting requirements, line cutting requirements, cautions for provincial forestry protective areas, specific terms-of-reference required if water boundaries are surveyed, and other pertinent requirements as deemed necessary by the Director of Surveys.

Conclusion
While previously employed at the Director of Surveys Office, I encountered some plans rejected by the Land Titles Office when practitioners attempted to register settlement plans in unsurveyed territory without involving the Director of Surveys.

It is important to know that the land tenure system within Alberta requires an official surveys process, under part two of the Surveys Act, to bring crown (public) land into the freehold regime as an initial step. Subdivision surveys can then be carried out under part three of the Surveys Act after an official plan is confirmed by the Director of Surveys.

Practitioners are reminded that this initial process is necessary before a subdivision plan can be registered. Your professional advice to your client should include making him aware of this extra process, time and expense prior to committing to a contract to carry out a survey of public land within unsurveyed territory in Alberta.

Editor’s Note: Fred Cheng was Director of Practice Review until November 8, 2007 but prepared this message before leaving the Association.
Case Study No. 34
Survey Control
Integration—A Tale of Two Bearings

Acknowledgement

The author wishes to acknowledge the practitioner for allowing me to write this educational article regarding the subject non-monumented subdivision plan.

The author also wishes to acknowledge Land Titles Office for permitting the author to use the registered plans contained in this article.

Background

Non-monumented survey plans, commonly known as delayed posting survey plans under Section 47 of the Surveys Act was a hot topic for discussion during the April 2007 Annual General Meeting (AGM) in Lake Louise.

Several motions relating to non-monumented survey plans were passed during the AGM requesting review and/or amendment to parts of the Manual of Standard Practice (MSP) with respect to internal control network, as well as timing requirements for the filing of Form 11.1 Monument Certificate.

This article is inspired by several practitioners’ queries relating to the grid bearing, datum referencing and survey control integration requirements in accordance with the Manual of Standard Practice.

In the past, the Director of Surveys (DOS) Office carried out a comprehensive plan examination on non-monumented survey plans and would require the survey control network to be submitted prior to the survey. The DOS or his designate would run through a computer least squares adjustment program to analyze the strength of the practitioners’ proposed internal control network and to ensure that all posting requirements are met within the provisions of the legislation.

Fundamental Principles

When a land surveyor performs a delayed posting (non-monumented) subdivision survey affecting a parcel of land, it is the surveyor’s responsibility to ascertain the relationship of his subdivision with the existing parcel to the Alberta survey control system when fully integrated. Section 47 of the current Surveys Act [RSA 2000 Chapter S-26] stipulates non-monumented survey plan as follows:

47(1) Notwithstanding anything in this Act, a surveyor may, without placing the monuments required by Section 45(1), submit a plan for registration at the Land Titles Office or filing at the Metis Settlements Land Registry if sufficient survey control markers exist in the vicinity of the survey.

(2) Subject to subsection (4), the coordinates of the survey control markers and of the monuments, as shown on the plan of survey, determine the boundary lines established by the survey and plan.

(3) A surveyor who submits for registration a plan pursuant to subsection (1) shall within one year from its registration or within a longer period of time specified by the Director,

(a) Place the monuments required by Section 45(1) in accordance with the survey control markers and the coordinates shown on the plan, and

(b) File with the Registrar proof under oath, in the form prescribed by regulations under the Land Titles Act, of having done so.

(4) On registration of the form referred to in subsection (3)(b), the Registrar shall endorse a memorandum on the plan, and the monuments placed pursuant to subsection (3) determine the boundary lines as though they had been placed before the registration of the plan.

(5) Notwithstanding subsection (3), if the surveyor who submitted a plan pursuant to subsection (1) ceases to be registered as an Alberta Land Surveyor, or for any other reason fails to satisfy the requirements of subsection (3), some other surveyor appointed by the Director may carry out the requirements of subsection (3).

Further, Part D Section 1.2 of the Manual of Standard Practice states: The recognized datum for spatially-referenced data in Alberta is the North American Datum 1983 (NAD’83), using the GRS 80/WGS 84 ellipsoid. This datum and related ellipsoid therefore shall be used on all plans of survey registered in the Land Titles Office, if plan information relates to grid bearings or grid coordinates. The choice of map projections must be consistent with the requirements of the provincial mapping system. The recommended vertical datum for spatially referenced data in Alberta is CVD28. The plan of survey shall clearly show the datum of origin used for bearings and coordinates on the plan of survey as outlined below:

1. Unless circumstances require greater accuracy, bearings should be shown to the nearest 5 seconds of arc.

Ties to Survey Control Markers shall reflect the actual angle determined.

2. All plans of survey pursuant to Section 47 of the Surveys Act; and Part C Section 5 of the Manual of Standard Practice, using grid bearings
or grid coordinates, shall base
grid bearings or grid coordi-
nates on NAD’83 and show, in
addition, to other requirements
for plans, the following:
A note in the legend of the plan
and header for grid coordinate
listings indicating:
• the datum used,
• the projection used,
• the reference meridian,
• the combined factor (scale/
elevation).
These MSP, Part D, Section 1.2
requirements apply to all integrated
surveys, not just for the non-
monumented plans under Section
47 of the Surveys Act. Of course, all
surveys done under Section 47 of
the Surveys Act must be integrated.

The Non-Monumented
Subdivision Plan
The practitioner submitted his
registered plan for discussion
purposes. The legend of his plan
defines his datum and bearings
definitions as follows:

Bearings are grid and are derived
from registered plan no. (the same
subject registered plan number)

Datum.................................. NAD83
Projection................................. 3TM
Reference Meridian ....... 114 Degree
Combined scale factor ...... 0.999847

Even though integration ties to
Alberta Survey Control Markers
were made and shown on the plan,
the above legend notation indicates
that the grid bearings reference was
generated from something other
than the practitioner’s ties to the
ASCMs. Simply, the practitioner
referred the origin of his grid
bearings to his own plan based on
his own observations.

Further communication with the
practitioner revealed that the
practitioner utilized GPS RTK for
this survey. Integration was
achieved by tying in to a GPS base
station mounted on the roof-top of
his office building. This GPS base
station observes NAD83 (CSRS)
data and broadcast signals to its
remote receivers, hence, making the
ASCM ties as shown on the plan
somewhat misleading.

Figure One is a sanitized copy of
the practitioner’s registered non-
monumented subdivision plan.
The practitioner also revealed
that his own global positioning
system (GPS) observation was used
to determine the origin of the grid
bearings, and the intent was not to
rotate his observations to fit the
Alberta Survey Control network.
Similarly, several practitioners
revealed they would not want to
“downgrade their observations” to
an “inferior” Alberta Survey Control
network, as their observations are
more accurate and would better suit
their own future survey practice.

Furthermore, the practitioner
pointed out the wording within the
MSP (Part D, Section 1.2) is some-
what ambiguous and thereby raised
the following concerns:

What is meant by the recognized
datum for spatially-referenced data
in Alberta is the North American
Datum 1983 (NAD83), using the
GRS 80/WGS 84 ellipsoid?
In terms of datum definition,
should one follow the datum defini-
tion as: NAD83 (original); NAD83
(as observed); or NAD83 (CSRS)?
The province publishes a subset of
ASCM values based on NAD83
(CSRS); does this imply that a
data definition of NAD83 (CSRS)
is to be used?

The Question
The above arguments from the
practitioner are all valid. However,
the fundamental question is—did
the practitioner fulfill the require-
ments of integration within the
Manual of Standard Practice?

Let us examine the MSP require-
ments as per Part C, Section 5 –
Integrated Surveys, wherein it
states:

5.1 Every survey a plan of which is
to be registered under the Land
Titles Act shall be integrated
with survey control if 2 or more
monuments found or placed by
the survey are each within 1
kilometre of any 2 survey control
markers.

5.2 For the purpose of Section 5.1,
integration with survey control
means obtaining sufficient
measurements from survey
control markers into the survey
to permit the derivation of grid
bearings and the computation of
a closure starting at a survey
control marker and proceeding
along the shortest path through
the survey to another survey
control marker.

5.3 When computing a closure
under Section 5.2, the error of
closure when compared to the
coordinates of the survey control
markers, as confirmed and
published by the Director of
Surveys, shall not exceed the
greater of:
.1 the product of 0.00014 and the
direct distance between the 2
survey control markers used for
the closure, or.
.2 25 millimetres.
[…]

5.7 .1 A survey shall not be carried
out under Section 47 of the
The published Alberta Survey Control network; the physical Alberta Survey Control Markers are the physical link between the plan and the GPS observations used to derive it and its orientation in the real world;

- Alberta Survey Control is qualitatively traceable, which other practitioners can use to relate their work.

**Conclusion**

Alberta Land Surveyors must use Alberta Survey Control Markers as stipulated by the MSP. We must be mindful that a plan is not just for the benefit of a single practitioner, but for all other practicing land surveyors. Thus, under Section 47, the idea of integration in order to allow other land surveyors to reliably re-create/reproduce what you have done is inherent. As a consequence, this can only be achieved through properly integrating the Alberta Survey Control network as per the current MSP requirements.

In addition, on the issue of downgrading one’s “superior” GPS observation per se, the current MSP only requires a practitioner to achieve 1:7500 accuracy. This equates to a relative precision of 133.3 ppm or nominally a third order survey. Certainly, in urban areas (and rural, for the most part), ASCMs can support this level of integration.

Another issue of concern is that practitioners may not be clear on the datum definition. Within the MSP it simply says NAD83 without referencing to it meaning NAD83 (original) or NAD83 (CSRS). In my opinion, there are two ways to look at this issue. First, consider the fact that all ASCMs published on SPIN are referenced to NAD83 (original) making this the defacto derivation of NAD83. Second, look at it in terms of the practitioner using either NAD83 (original) or NAD83 (CSRS) as long as he/she clearly states on the plan of survey which reference datum was used. The key is for practitioners to be clear in their approach.

Additional concerns involve practitioners who do not run through least squares adjustment for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates for generating their grid coordinates.

The practitioner also suggested that roof-top base stations should gain ASCM status from the Director of Surveys office, which in my opinion is a good recommendation.

In conclusion, if you are of the opinion that the MSP is not current as per today’s technology, I would encourage you to write to Council and get the standards changed. This way, every Alberta Land Surveyor will be working on a common plane rather than working in isolation.

**Editor’s Note:** Fred Cheng was Director of Practice Review until November 8, 2007. He prepared this case study prior to leaving the Association.
Dormant Plans

While attending a recent regional meeting of our Association, discussion focused on our Association’s financial status. A comment came from one of our members stating that although we appear to be having a record number of plans registered at Land Titles this year, our revenue sources from the sale of statutory iron survey posts and marker posts appears to have declined from previous years. I thought to myself that the Director of Practice Review must be doing an admirable job in directing practitioners to register their dormant plans. The revenue from all these monuments was realized long ago. Obviously any lack of funding is Fred’s fault!

The issue of “dormant plans” has been written about on several occasions in the ALS News, but the practice reviews seems to suggest that it is still a common problem. In 2004, with the commencement of the Phase 3 Systematic Practice Review (SPR) program, the Practice Review Board (PRB) was mandated by Council to have practitioners deal with their dormant plans.

While performing the in-office visits (internal reviews), the Director asks each practitioner if they have any such plans, the number of such, and what process is in place to handle them. During my tenure on the Board, firms have self-identified that they have anywhere from zero to several hundred dormant plans. During Board discussion, it became obvious that some firms are mistaking dormant plans with unregistered plans.

To re-iterate, for the benefit of the membership, the PRB is concerned with surveys that do not meet the requirements of Part C, Section 3.8 of the Manual of Standard Practice, which reads: If a statutory monument has been established but is not shown on a plan registered in the Land Titles Office, the surveyor must register a plan, called an Establishment of Monuments plan, within two years of the monument establishment. This does not negate Sections 44 and 46 of the Act.

During Board discussion it became obvious that some firms are mistaking dormant plans with unregistered plans.

Office, the surveyor must register a plan, called an Establishment of Monuments plan, within two years of the monument establishment. This does not negate Sections 44 and 46 of the Act.

A decent job tracking system will make it very easy to determine when you placed the statutory iron posts and when the plan needs to be registered.

I think this is clear. If I placed a statutory monument two years prior to today’s date and have not registered the plan, it is now “dormant.” A decent job tracking system will make it very easy to determine when you placed the statutory iron posts and when the plan needs to be registered.

One of the reasons for the existence of dormant plans for the resource sector surveying practices is having to fulfill the requirement and the facilitation of having the oil operator sign off on the plan. If this is the case, the solution is simple—a monument plan can be registered and, by Murphy’s Law, the “consent” form will be in your office the next week.

Other common sources of dormant plans may be attributed to the Alberta Land Surveyor responsible for the plan no longer available either through retirement, company changes, or death.

The first item that we swear off to on our affidavit reads “that the survey represented by this plan was made under my personal supervi-

Scenario One

The original surveyor has changed companies and is still practicing. Any time an ALS leaves one company for another, it is imperative that all of the land surveyor’s project files be reviewed prior to leaving. The ALS should identify any plans left to be completed and agreements must be put in place regarding who will be responsible for the outstanding projects. In many instances the original surveyor, while employed with a new company, will sign the affidavit while the permit stamp is that of his previous employment. Another surveyor employed with the previous practice could sign the plan. However, the onus is on him to thoroughly review the project and file, and to undertake all professional responsibilities.

Scenario Two

The original surveyor is now non-practicing. If the ALS has since retired, he/she has no professional authority to sign the affidavit. If the plan is to be registered, does the company have the umbrella authority for another ALS to cover the affidavit? In my opinion, there could be two options: the survey is re-done, or another surveyor within the company reviews the file completely and signs off. As above, all professional responsibilities lie with the signing surveyor. Again, when a member is retiring, all open projects must be reviewed prior to leaving.
When applying to the Association to go on the retired list, you must explain how you are going to resolve any outstanding dormant plans.

When applying to the Association to go on the retired list, you must explain how you are going to resolve any outstanding dormant plans.

**Scenario Three**
The original surveyor is deceased. There is no alternative to another surveyor signing off on the plan. An existing surveyor at the company (if there is one available) must register the plan; that means the survey is re-done or a thorough review of the project and plan to be performed is left up to the professional.

A practice review file cannot be closed if the firm has an outstanding dormant plan issue. Some practitioners are requested to provide a date by which the plans will be registered and then provide proof to the Director when the plan is registered. The Board has also looked if the practice has a process in place and whether the practice has a handle on reducing the number of dormant plans within any given practice.

In closing, although not a dormant plan issue, another thought comes to mind. If an error or omission is discovered on a registered plan from one of the above listed scenarios, how will they be dealt with? It is advisable for practitioners to make similar arrangements with their previous practice prior to departure (or even at the commencement of their new employment) as to who is responsible and how any plan corrections will be dealt with.
The Professional Development Committee (PDC) has had a busy year as usual and all signs point to even busier years to come. Over the past few years, the PDC has been involved in organizing several seminars as well as organizing speakers for the three regional meetings held in Calgary, Edmonton, and Grande Prairie. A fourth regional meeting location has also been added. Medicine Hat will now hold its own regional meeting.

As usual, the PDC annually presents three of the wildly popular Getting It Right seminars; one in Calgary, one in Edmonton and a third which rotates through Red Deer, Grande Prairie, Lloydminster and now Medicine Hat. I would like to thank the recently appointed Getting It Right binder coordinator, Greg Hebb, for the great deal of work he has done to update the Getting It Right binders and create the new plans to be used during the seminar. Thank you Greg for all your work. It is appreciated.

Each Getting It Right seminar accommodates 30 people and always fills up quickly. The number of times the PDC can present this seminar is limited by the number and availability of the members trained to present it. Fortunately, a “train the trainer” seminar took place at the end of November. This three-day seminar, presented by the original consultant that helped the PDC develop the Getting It Right seminar, teaches members to confidently present the material compiled in the seminar package. This seminar will add seven more presenters to the membership, ready to not only assist in the Getting It Right Seminar, but to also help with other PDC seminars, like the recently developed Field Notes seminar, which has been presented twice with a good deal of success.

The 2008 AGM will include a Risk Management seminar featuring some interesting and varied topics. Dr. Rob Radovanovic, ALS will be presenting a GPS Survey Practice—Prevention of Errors session that must be seen.

Unfortunately, not all of our seminar ideas are successful. This September we attempted to present a safety seminar, which focused on key safety issues in the realm of surveying. The enrollment for the seminar was too low to warrant the seminar to take place, so we are hoping the scheduled seminar on safety scheduled for November 2008 will be able to catch the attention of more members. The idea behind this safety seminar is to help the project managers and safety officers for all different sizes of survey companies to develop safe work policies for their companies and employees.

The PDC is now presenting two Exam Prep seminars annually; one before the spring exams and one before the fall exams. The PDC has started a bank of questions to present to articling pupils and affiliate members. The one-day seminar involves the presenters assisting students in working through the questions and providing solutions. It is always difficult to acquire enough questions on a variety of survey topics. That is why the PDC is making a request to all principals to provide an exam prep question and solution to be added to the PDC question bank. This will aid in the students learning and will definitely help the volunteers who give up a Saturday to help the students prepare for their exams.

The role of the PDC may be changing. With rumbles about mandatory professional development and the recent signing of the Memorandum of Understanding on Developing National Distance Learning Opportunities for Canadian Land Surveyors, professional development is taking on a whole new importance. The CCLS has agreed, in principle, to develop a distance learning course for individuals attempting to obtain their CBEPS certification. As a member association, the ALSA will take some responsibility in helping develop this distance learning project. This makes it an opportune time for the ALSA to begin its own form of distance learning. The PDC now has two “canned” presentations, the Getting It Right seminar and the Field Notes seminar, which would be perfect to convert into some form of a distance learning presentation.

The aging membership of the Association means that a great deal of survey knowledge may soon be retiring from the Association, making it even more important to somehow capture the knowledge and experience from those members before it is lost forever. The PDC is looking into ways to record and make seminar materials available for all the members who could not attend the presentation. The methods we are looking into include video, audio recordings, power point presentations and interactive CDs.

It is important that professional development keeps up with the times and is available to the entire membership. With the signing of the TILMA Mutual Recognition Document, the Agreement on Internal Trade and the Mutual Recognition Agreement in 2001, we need to make information for surveying in Alberta readily avail-
able to affiliate members throughout the country.
Finally, the PDC has been given an additional task from Council this year. After the membership gave its support to Dr. Radovanovic's request to “investigate what role a professional educational consultant could provide the Professional Development Committee,” the PDC has been charged with the task of developing ideas and areas where a consultant could be utilized to assist the association with professional development. As previously mentioned, the PDC already utilizes a consultant for training presenters for the Getting It Right seminar, but we will be looking into how a consultant could help develop more seminars and assist our presenters to be more dynamic and better prepared. We are hoping to have some ideas to present to Council shortly, but could always use input from the membership on this or any matters pertaining to professional development. Please do not hesitate to contact the PDC through the Association office with any ideas you have on our role or a seminar suggestion and please volunteer for a committee. Besides being volunteered to write the occasional article for ALS News the experience is definitely rewarding.

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Seminars

Getting It Right
March 6-7, 2008—Lethbridge
March 20-21, 2008—Calgary

Exam Prep
March 22, 2008

Risk Management
April 24, 2008—Lake Louise

For more seminar information, visit www.alsa.ab.ca/events.htm
Although this is my second term serving on the Public Relations Committee, this is my first opportunity to submit an article. The typical first article for ALS News usually involves phrases like “Webster's dictionary defines...” or “On the advice of Brian Munday...” or “past issues of ALS News have dealt with...” Not being one to buck a successful trend, I am choosing option three.

The past two years of ALS News Public Relations Committee articles have dealt with getting the message out. Issues such as recruiting new members to our profession, promoting our profession and our professional image to the public, and addressing challenges to the future of our profession have been raised and discussed by past and current Committee members. These topics, and the discussions they generate, demonstrate our members’ broad commitment to getting our message out.

I do worry, however, that sometimes we focus so much on getting the message out that we forget to let messages come back in. I always reflect on this whenever I open our Manual of Standard Practice, and re-read the Code of Ethics, especially Clause 1 (with commentary): “An Alberta Land Surveyor shall serve society, his clientele and his profession with the ultimate objective of contributing to the knowledge of land, to the better management of land and to the preservation of peaceful and lawful enjoyment of land.

• This public interest must be greater than the interest of any individual client of the Alberta Land Surveyor....

I have often commented to employees that when you read this clause, society is listed before clientele. What does this mean in daily practice? Whose role is it to ensure that this service to society is being met? What role, if any, does our administrative and technical staff play in this? Does serving the public interest always mean carrying out a survey, or is there something else we can do? Is it possible that the best way to serve the public is to sometimes do nothing?

In our daily practice, what if we spent less time promoting and more time listening? One of the most influential books I have ever read, and re-read, is How to Win Friends and Influence People by Dale Carnegie. Written in 1936, the book contains many ideas that are still valid today. The core of the book’s message involves avoiding conflict, finding common ground, and resolving issues before they escalate into intractable situations. Valuable tools for a professional that is often called to stand between two landowners!

We have all received calls from landowners, or other members of the public with questions regarding surveys, survey crews, or boundary issues. When I get these calls, I try to understand not only the issue being presented by the caller but the issue behind the call. This involves listening, asking questions, and most importantly, relating to the caller. Has one of our crews, in the performance of its work, failed to show courtesy and respect to the public, or were they just trying to do their job as quickly as possible? Has one of our administrative staff been so convinced the paperwork was correct, that they came across as abrupt and harsh? Sometimes, we get calls because the caller is frustrated and needs someone to listen to their frustrations. An example will help illustrate the point.

I was with a junior crew, reviewing evidence for a boundary survey of a quarter section. We parked our trucks off of a main road in an approach, about 75 metres from a quarter pin to be found. While reviewing plans, a water truck pulled up and asked if we could move a bit so he could deliver water to a residence. We moved our trucks to the sides of the approach, into a field, as there was high traffic on the road, and no safe place to park on the shoulder. My party chief and I found the posts we were looking for, and were discussing what additional evidence was needed. I looked up to see a gentleman walking (stomping might be a better descriptor) towards us, obviously in a high state of agitation. He asked who was in charge, and when I took responsibility, he proceeded to launch into a tirade about how sick and tired he was having his driveway used to store equipment, change diapers, do drugs and, in general, ruin his life. This was his day to defend his property against all invaders, and we were his enemy. I did the only thing possible in the situation. I listened. He told me he was tired of having his driveway blocked. I agreed, and said that was why I had moved out of the way of his water truck. He told me how he had single-handedly shut down the construction project on the other side of the road. I agreed that I didn’t need my project shut down. He complained that there was so much traffic on the adjoining road, that he felt safety was an issue. I agreed that safety was one of my primary concerns. At this point I asked, based upon his local knowledge, where did he think a safe place would be to park my trucks? Now that he had his chance to vent, he told me he felt that the best place to park while near his property was exactly where we were parked. I thanked him for his help, and he went away happy in the knowledge that he had put me in my place, and was gracious enough.
to allow me to continue doing exactly what I was doing anyway. In preparing this example, I noticed that I had used ten of the Twelve Ways to Win People to Your Way of Thinking outlined in Carnegie’s book. Not too bad for 71 year-old advice. And all we had to do was listen, see his point, and go on about our business.

Our service to the public as a self-governing profession is a tremendous responsibility. Our training, skills and knowledge should be used for the public. Sometimes, all the public needs is an audience. We should make sure that is part of what we do. This is not to say the public is always right. If they were, we wouldn’t be needed. Rather, the public has the right to an opinion.

As we approach the end of 2007, we should ensure that we remember not only who we work for, but who we serve. We should work with our technical staff, who are often the public’s first contact on a survey project, and make sure that our staff is supporting our profession’s efforts in getting the message out by not talking when listening is required.

From my family, to all of yours, I want to wish everyone a Merry Christmas, and a safe and prosperous New Year.
book review

by Ken Allred, ALS

The Curious Life of Robert Hooke — The Man Who Measured London

by Lisa Jardine

By Hook or by Crook

The great fire in London, England, in 1666 destroyed not only the ancient landmarks but all evidence of their former location. The only evidence of their former location was the memory of men still living and the measurements from objects whose location was known. A man by the name of Crooke had been surveying so long in the city that he was supposed to know every corner in it. After the fire, the city council appointed as city surveyor a man by the name of Robert Hooke who was esteemed the most profound mathematician and philosophical mechanic of his time. It is said that the wonderful sagacity, almost intuition, he showed in deducing correct conclusions from meager premises has never before nor since been equalled.

It was generally conceded that the location of any old corner could be correctly located by the memory of Crooke or the reasoning of Hooke. That is, either by Hooke or by Crooke. Hence the expression we hear today. But in no case did they attempt to locate a corner without good evidence that it was where the old corner stood before the fire.

Robert Hooke...was indeed the man who measured London after the great fire of 1666...

Robert Hooke, however, is far from a myth. He was indeed the man who measured London after the great fire of 1666, and a man who created a very successful survey practice as a result of the fire. His practice also extended into architecture as the managing partner with Sir Christopher Wren—the architect of St. Paul’s Cathedral in London as well as many other famous buildings. Hooke is credited with designing the dome of St. Paul’s Cathedral. Hooke also designed a number of famous structures including the Bedlam Hospital and the Royal College of Physicians. The only surviving structure of significance is the Willen Church in Lutton although he is credited with doing some work on the Greenwich Observatory.

Dr. Robert Hooke was not primarily a surveyor but rather was a teacher of mathematics and a brilliant physicist at Gresham College in London. He was an avid inventor and was one of the founders and a lifetime curator of the Royal Society, a society of notable philosophers, inventors and other 15th century notables including Sir Isaac Newton, Sir Christopher Wren, and Edmund Halley.

Hooke was a bit of a cantankerous old bachelor who seems to have been on the leading edge of many new inventions and mathematical discoveries that were perfected by others for which Hooke received little or no credit, which added to his eccentricity. As a leading mathematician and philosopher, Hooke theorized that the inverse square law of gravitational attraction created an elliptical orbit of the planets around the sun in 1676. This theory was accredited to Newton as documented in his Principia published in 1686.

Hooke was himself a great scientist in his own right having invented telescopes and microscopes and having developed various pendulum and spring clocks for determination of longitude at sea. His own Micrographia was a work of art with many fine detailed drawings of various scientific observations including a full page image of a flea as viewed under one of his microscopes. His endeavors reached into the fields of astronomy, chemistry, botany and medicine. He is credited with introducing the theory of elasticity which led him to design many spring clocks.

Lisa Jardine’s biography of Hooke tells an interesting, no holds barred story of Hooke, empathizing with his plight in his various disputes for acclaim but at the same time recognizing the faults in Hooke’s personality which lost him both battles for fame and the respect of loyal friends.

Hooke died at the age of 67 without having finalized his will, thus dying intestate with a large estate and many prized inventions and other possessions.

Ever since I read the above article in The Canadian Surveyor, I have been curious about Dr. Hooke and the survey of London after the great fire of 1666. Having researched whatever information was available, I have found considerable information about Robert Hooke as the surveyor of London after the great fire but have never seen a reference to anyone named Crook or Crooke. Hence I began to doubt the authenticity of the story in The Canadian Surveyor. Lisa Jardine’s book on Dr. Hooke puts my suspicions to rest—Crooke is a myth.
Walking Through the Workers Compensation Board (WCB AB)

These notes have been prepared for the Alberta Land Surveyors’ Association. The information has been collected from consultation with the staff and various WCB publications, including the WCB Alberta Workers Handbook and the WCB partners in injury reduction. This article will deal with industry code # 86401, which relates to surveying, land/general.

The chart refers to a made up survey company called “NewCo. Geomatics” which, in this example, is a WCB member, has 100 employees on staff and has a yearly payroll of approximately 5.5 million dollars.

The Corporation (No Fault Insurance)
The WCB (Alberta) is a not-for-profit mutual insurance corporation funded entirely by its employers. It provides cost-effective workplace liability and disability insurance to more than 1.7 million workers and 117,000 companies.

The Workers Compensation Act is based upon the ‘Meredith Principle’ (1913). Employers agreed to fund the program and in exchange, workers would give up the right to sue their company for the impact of work-related injuries.

Are All Companies Covered?
Not all companies are covered by the WCB. Some industries do not require coverage or have found other options. More information on this area can be obtained by contacting the WCB directly.

Employer Premium Rate Statement
Employer premium rate statements are provided during the October/November of each year for the new year and beyond (ie. 2008).

From the attached sample it can be seen that for 2007, the established industry rate for code #86401

Performance Based Pricing — Impact of Injuries

Account: 1000 NewCo. Geomatics
Industry: 86401 SURVEYING, LAND/GENERAL

Rate Year 2006 - All Costs Transacted to November 20, 2006

Premium Ranges

<table>
<thead>
<tr>
<th>Premium Total</th>
<th>$128,091.60</th>
<th>$99,688.68</th>
<th>$95,790.24</th>
<th>$71,285.76</th>
<th>$42,882.84</th>
<th>$28,402.92</th>
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</thead>
<tbody>
<tr>
<td>Claim Costs Scenarios</td>
<td>$91,673.91</td>
<td>$63,466.56</td>
<td>$59,631.14</td>
<td>$35,259.20</td>
<td>$7,051.84</td>
<td>N/A*</td>
</tr>
</tbody>
</table>

Max PP Surcharge Represents maximum experience rating adjustment percentage plus poor performance percentage applied to industry rate.

Max ER Surcharge Represents maximum experience rating adjustment percentage applied to industry rate.

Industry Rate Represents industry rate.

Your Stats Represents your company’s rate.

Max ER Discount Represents minimum experience rating adjustment percentage applied to industry rate.

Max ER+PIR Discount Represents minimum experience rating adjustment percentage partners in injury reduction percentage discount applied to industry rate.

*There are many different claims costs scenarios that would achieve a PIR discount; therefore, calculating claims costs for PIR is not applicable.
was $1.24 per hundred dollars of payroll.

It should be noted that “NewCo. Geomatics” had claim costs of $48,869.85, while the industry average costs were only $39,196.22. Hence the employer receives a rate adjustment of 12.34% surcharge to $1.39 per hundred dollars of payroll, for an added premium costs of $8,250.00.

The Dreaded Surcharge
Once a company becomes saddled with a surcharge, it will take considerable effort to clear it from its records. Although surcharged employers can eliminate the surcharge quickly if they are at the industry rate the following years, this often does not happen if the employer continues to have incidents each year. Even when a company has been recognized for its exceptional performance in Health and Safety, the surcharge can continue to stain its efforts for many years. Unfortunately, the original intent of the surcharge has become lost and is now used as a grading system by our clients. Surcharges and discounts are features of the WCB’s performance-based pricing system that is aimed at achieving a balance between collective liability and individual employer accountability. The employer safety and labour committees support the concept of a performance based pricing system.

Injury Reporting
Both Time-Lost (TL) and No Time-Lost (NTL) injuries need to be reported to the WCB within 72 hours of the incident. The WCB forms are provided in the workers handbook (January 2007). A NTL may re-appear in one or two years as a TL and, therefore, reporting is required. The TL accident will be reflected in your WCB claim summary, report and will remain charged against you for a minimum period of three years.

Partner in Injury Reduction (PIR)
The PIR program was originally developed by the WCB AB and administered by the WCB AB as a financial incentive program to encourage the development and maintenance of effective safety management and disability management systems to reduce the human and financial costs of workplace injuries. Enrollment in PIR is voluntary and relies on a “partnership” and combined efforts between the WCB AB. Employment Immigration and Industry, industry partners safety associations, employers and labour groups.

PIR employers who are registered for PIR and have a valid COR and are in compliance with WCB AB and Occupational Health and Safety Legislation are eligible to receive a minimum incentive of 5% of industry-rated premium regardless of their claim cost performance. These employers can achieve up to a 20% total incentive depending on their claim cost performance under the Improving Your Performance and/or Maintaining Industry Leadership.

Modified Work Programs
Modified work programs that meet the intent of WCB AB’s guidelines and conditions are well accepted by the medical community, employer associations, labour groups and large numbers of employers and workers.

For work to be considered suitable for modified employment, the following conditions must be met:

- A certified doctor provided clearance for modified work and the modified work meets the worker’s restrictions.
- The modified work keeps the worker active and involved in the workplace.
- The modified work safely challenges the worker’s physical abilities.
- The modified work is meaningful and productive to the employer’s operations.
- The work does not create financial hardship for the worker.

Industry Synopsis
One of the problems with our industry is that they do not do a good job of analyzing injuries. Fortunately, the WCB provides this information. The survey industry is trying to further assess the hazards associated with ATVs, chainsaws, and trucks with ramps for loading/unloading as well as a large number of injuries due to trips, slips and falls.

“NewCo. Geomatics”
Premium Range
As stated earlier, if we refer to a fictitious company like “NewCo. Geomatics” which has a payroll of approximately 5.5 million dollars and a surcharge of 34.5%, then we can quickly see why it is important to have a low incident rate. The performance based pricing chart on impact of injuries, shows that “NewCo. Geomatics” is leaving several thousand dollars per year on the table. Since a three-year rollover is used by the WCB, it becomes a challenge to obtain a suitable pass mark on the company’s premium rate.

Type of Accident
WCB provides an excellent industry synopsis of the type of injuries that occur in our area #86401. Back injuries seem to occur more frequently than injuries to any other body part. Many companies are reducing the number of back injury problems by educating their field employees through training programs on a yearly basis of how to best avoid these incidents. For example, if we were to use the same golf rules whereby we do warm-up exercises before we start the chain saw, work-related back injuries could likely be reduced.

Conclusion
WCB supplies an important service at an extremely reasonable cost and provides peace of mind to both the employer and the injured person. The WCB and employer need to work together to get their employee back to work as quickly and safely as possible. At a projected rate of $1.30 per hundred dollars per year of insurable earnings for the year 2008, it is a most desirable and affordable protection. WCB has developed many tools that can be helpful in reducing injury. It is evident that management is supporting a number of tools such as PIR and COR to make safety pro-
grams work better. Despite this, in my opinion, an area that could be improved in terms of the employer is the rather harsh three-year rollover period and the associated surcharges.

**DEFINITIONS**

**Lost Time Injury (LTO)** — Lost time injuries include fatalities, permanent total disabilities, permanent partial disabilities and lost workday cases resulting from work-related injuries. A lost time injury is any work-related injury that renders the injured person temporarily unable to perform any regular job or restricted work activity on any normally scheduled workday after the day on which the injury occurred.

**Medical Treatment Case (MTC)** — A medical treatment case is any injury that involves neither lost workdays nor restricted workdays but which requires treatment by a physician or other medical professional. Medical treatment does not include first aid treatment (one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care) even though provided by a physician or other registered professional medical personnel.

**Restricted Work Case (RWC)** — Restricted work activity occurs when the employee, because of the job-related injury or illness, is physically or mentally unable to perform all or any part of his or her normal assignment during all or any part of the normal workday or shift.

**First Aid Case (FA)** — Any one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care by a physician. Such treatment and observation are considered first aid even though provided by a physician or registered professional medical personnel.

**Near Miss (NM)** — Any occurrence which did not result in injury/damage or loss but could have under slightly different circumstances. The situation warrants investigation and passing along to other crews/people so that they can learn from it and prevent other similar incidents.

**Lost Time Injury Frequency Rate (LTIF)** — The lost time injury frequency measures the number of lost time injuries in the exposure period as a percentage of the workforce. It is calculated by multiplying the number of lost time injuries (LTI) by 200,000 and dividing by the exposure hours worked during the period. 100 workers work approximately 200,000 hours in one year.

\[
LTIF = \frac{\text{# of LTIs}}{\text{Exposure Hours}} \times 200,000
\]

**Proactive Effort Index Rate (PEIR)** — The Proactive Effort Index Rate (PEIR) is our aggregate measure of proactive workforce engagement in HSE processes. Proactive Efforts may be defined as “Discretionary upstream activities which are performed by line operations in their effort to plan, prepare and execute operations safely and in an environmentally sound manner.” This aggregate measure includes but is not limited to activities such as work observations, Job Safety Analysis and safety meetings and is calculated by multiplying the number of efforts by 1000 and dividing by the exposure hours worked during the period.

\[
PEIR = \frac{\text{# of Proactive Effort}}{\text{Exposure Hours}} \times 1000
\]

**Total Recordable Injury Frequency Rate (TRIF)** — The total recordable injury frequency measures the number of recordable injuries in the exposure period as a percentage of the workforce. It is calculated by multiplying the number of recordable injuries (fatalities, LTI, RWC & MA) by 200,000 and dividing by the exposure hours worked during the period. 100 workers work approximately 200,000 hours in one year.

\[
TRIF = \frac{(\text{Fatalities} + \text{LTI} + \text{RWC} + \text{MA})}{\text{Exposure Hours}} \times 200,000
\]
Some Musings from my Pen (or keyboard) . . . .

The other day, I was explaining a few basics of “the old methods” to a young party chief, and it occurred to me that, collectively, we are in danger of forever losing a massive amount of EXPERIENCE-BASED KNOWLEDGE as older land surveyors and party chiefs move into the office or retire. I’m sure that this has happened before, but that doesn’t mean we should accept this loss as inevitable.

Technology changes, methods change, but the ancient art of “super sleuthing” requires a knowledge of “how it was done then.” You can’t figure out how something was done wrong, or even if it is wrong, if you don’t know how it would have been done right. Of course “super sleuthing” isn’t the only use for an understanding of “the old methods.” Knowledge of “how it was done” leads directly to an understanding of “why we do it this way now.” We risk a generation of field staff, from technician and technologist to ALS, who have no understanding of simple things like an offset line, plumbing a back sight, measuring a distance with a plumb bob and chain, transferring an inaccessible point with a plumb bob and tape, and so on.

Does it matter? Of course it matters. No matter how young or old you are, you have some understanding of what came before you, and how, and that knowledge has helped your decisions countless times, whether you were aware of it or not. So, what’s different now? Is this more of the “technology is changing too fast” whine? No. No it’s not. What has changed is the amount of time spent in the field gaining experience. Back in the day, we all spent more than a couple of months gaining experience, wouldn’t you say? Not so now.

“College knowledge” is a great thing but it is not a substitute for experience. The two complement each other, or at least, they are supposed to. Lately, our hot economy is leaving less time for that “experience training.” Someone fresh out of school used to spend quite a while with an experienced field person, learning as he went. Perhaps there might be a bit of a power struggle as the two decided who was the boss, but that was part of the training too. The end result was a party chief with some experience—some “field smarts.” You can’t teach common sense, but you can hope some of it will rub off if there is enough exposure to it.

Where could the present style lead us? How about this scenario: an inexperienced party chief uses the fantastic accuracy of his new GPS to tie in the iron posts for a rural subdivision. Some of the measurements conflict with the old plans, but they “weren’t very accurate” back then, so this warning flag is ignored. The subdivision is posted, plan drafted and registered. What if several of the “iron posts” tied were actually old anchor guys? What if a couple of the iron posts were under a fence, so the party chief just held the pole “as plumb as possible?” “Well,” you say, “you don’t need much experience to tell the difference between an anchor guy and an iron post. A “little off plumb” is no big deal. Wrong. You need more than a little experience, especially if the posts are buried, or it’s cold outside, or … <insert excuse here>. Meanwhile, the ALS (you) has (potentially) a big mess to fix, depending on how long it took to find out about this blunder.

A party chief with some experience would have been able to estimate which method was used to do the original survey, what likely error tolerances to expect in that survey, would know whether he had found an iron post, would know the importance of keeping his pole plumb, would know how to offset an iron post under a fence, and, what’s more, he would know how to do all these things without making a phone call, and without false confidence!

Don’t get me wrong. I have sympathy. Our newest party chiefs are in a tough spot. We want them to run off and do everything, because they’ve been to school and, therefore, are supposed to know all about this “new stuff,” right? Well, understanding vectors, and knowing how to push a button are important, but so is experience, which we deny them. I can certainly understand why some party chiefs freeze up. The fear of making the wrong decision leads to the fear of making any decision. Hardly the source of heady profits, is it? Here’s a quote some colleagues and I have been kicking around lately: “Not making a decision is the wrong decision.” I think I would rather have someone make a bad decision, than no decision. A bad decision (in surveying) can usually be fixed. A non-decision has no chance of success, and teaches no lessons along the way.

ASSMT continues to certify technicians and technologists through their Panel of Examiners and Certification Committee. These committees consist of representatives from the ALSA and ASSMT. Upon certification, individuals are certified at different levels of technician or technologist in their fields of expertise based on level of education and work EXPERIENCE.
Only an ALS can determine a boundary, but there is a lot of other work that we do that is not so “professional dependant.”

They are encouraged to use the CST designation after their name as a means of identification. Although the ALSA is involved and acknowledges certification through ASSMT, many practitioners do not recognize CST in the hiring or recognition process of their practice. Clarifying the role of the technician/technologist is the first step to recognition.

Wayne Latam, CST, in his article in the last issue of ALS News, described how a young graduate with a degree in geomatics engineering would start his articling period, and as part of that process he would be required to spend time in the field training to be a technician (party chief). There are also technologists (like myself) who are taking exams so that they can become professionals. The lines (in some ways) are blurring between the professional and the technician/technologist. Only an ALS can determine a boundary, but there is a lot of other work that we do that is not so “professional dependant.” That is why the recent (and ongoing) talks between the ALSA and ASSMT are so important.

ASSMT’s mission is “to promote the knowledge, skill and proficiency of technicians and technologists involved in the field of surveying and mapping.” Although ASSMT no longer develops or runs its own courses, we encourage our members to attend ALSA courses, and continue an open dialogue with the various colleges in the province, encouraging our members to attend courses offered through those too.

To return to the point I started with, what can we do to avoid losing this experience-based knowledge? I think this would be a great project for a combined ASSMT/ALSA Professional Development Committee—to produce (in some fashion) bite-sized morsels describing “old methods,” complete with anecdotes, jokes and basically, anything to keep it from becoming too dry.

* For those keeping track, this is the only musical quote in this article. For me, that’s pretty good.
Walter E. Bright, ALS, SLS
August 2, 1918 to July 4, 2007

W.E. (Skinny) Bright was born in Vantage, Saskatchewan in 1918 and passed away peacefully on Wednesday July 4, 2007, at Victoria BC. A "celebration of life" was held on July 25, 2007 at the Trafalgar/Pro Patria Branch No. 292 of the Royal Canadian Legion at Victoria, BC. The ceremony included a tribute located at his favourite bar stool. Beside an earlier photograph was placed a glass of beer and a ticket for the pending meat draw (you only need one to win).

The story goes that Wally was of slight build as a youngster. His father, mother and two brothers all called him 'Skinny'—a name that lasted throughout his lifetime. After completing high school at Assiniboia, Saskatchewan, Skinny entered the Faculty of Engineering at the University of Saskatchewan in 1936. His summers were spent surveying rights-of-way for irrigation canals with the PFRA. With the advent of the Second World War, Skinny left university and started full-time employment as a junior surveyor for the Dominion Department of Transport laying out earthworks, underground drains and runways for airfields. In 1942, he enlisted with the Royal Canadian Engineers and retired with the rank of Warden Officer 2nd Class in 1954.

Jean and Walter were married in Chilliwack, BC, on December 27th, 1946 while Skinny was still in the Canadian Army. Robert John Bright was born on January 29, 1948 and Lucile Ann Bright was born three years later on December 17, 1951. Then Skinny and family were transferred to Calgary where Karen Lynn Bright was born on January 5, 1955, almost at the same time a notice of transfer to Germany came which resulted in Skinny's decision to leave the Army.

Soon after, Skinny entered private practice with the firm of Strong, Lamb & Nelson in Calgary. The Brights purchased a home in Calgary and then decided to build a new house at 43 Windsor Crescent SW. They moved into the new house just before Christmas in 1959, where Skinny lived until his move to Victoria. Jean Bright passed away on November 15th, 1980. Skinny married Elaine four years later in Honolulu, Hawaii.

After an articling period of three years, under the guidance of John A. Lamb, he was commissioned as an Alberta Land Surveyor on November 15, 1957 (Registration #235). He obtain his commission as a Saskatchewan Land Surveyor the following year. He was appointed Calgary branch manager on April 27, 1974 and was involved in almost all facets of Strong, Lamb & Nelson until his retirement in 1976.

Skinny's contributions to the Alberta Land Surveyors' Association were many. He served on Council from 1961 to 1966 and as president in 1965. He will always be known as the one who kept those AGMs on track as the undisputed 'parliamentarian' with a number of 'sidebars' like the singing of 'O Lord It's Hard To Be Humble' during one of the debates. Skinny's 25th anniversary as a member was marked by the publication in ALS News of “The Mechanical Surveyor.” Skinny was recognized for his outstanding service with the presentation of the Professional Recognition Award in 1983.

He was a member of the Shriners Club of Calgary (Al Azhar) and played the glockenspiel in the marching band with great pride. He also played the tenor and alto sax, but his favourite had to be the clarinet which he played until he was hospitalized in May 2007. He passed that love of music onto his only grandchild Linda Jean Pic (Karen's daughter), who also loves to play the tenor and alto sax that grandpa gave her. She has played them in a jazz band for years. Linda was born in Virden, MB on April 1st, 1983 (Good Friday), so she is referred to by the family as the 'Holy Fool.' She earned her Bachelor of Science Degree in physical geography from the University of Manitoba and continues her studies towards a Masters in Environmental Studies.

Skinny loved the outdoors and every weekend from May through October, the family would pack up the camper and head off to the mountains or wherever the car was pointed. Skinny's favourite spot was in Banff at a campground on the old highway called Protection Mountain. Skinny, with children in hand, would walk all the trails and paths in the area, never thinking of taking the sky trams when available. While Jean took the tram, he would explain that it takes away from the nature of the trip. He was famous for his Grey Cup parties and the special spaghetti he made for his guests. There was also the carrot pudding—never to be duplicated—that he would make at Christmas. Later, in Victoria, he perfected the art of brewing his own barley sandwich.

Skinny was loved as a husband and father, respected as a land surveyor, an accomplished musician, a mentor and a devoted friend to many who enjoyed his keen and dry sense of humour. He had the insight to a simple solution to most situations and always enjoyed a...
Jules Francois Brassard
1948 – 2007

Jules was born on June 8, 1948 in Edson. He was the third of four boys and grew up in the Edson and Hinton area. From the ages of 13 to 18, Jules attended College St. Jean in Edmonton where his strong faith and love for hockey became entrenched.

Jules attended the University of Alberta and worked his summers at Northwestern Pulp and Power in Hinton. In 1970, he graduated with a degree in chemical engineering and shortly after he married his sweetheart Vicki in June of that year. They started their family and over time had four children: Nicole, Matthew, and the twins Graeme and Andrea.

Jules started his career in Burlington, Ontario working as a chemical engineer with Dowell of Canada. The busy fishing holes around Toronto were not for him so Jules and Vicki headed back to Edmonton where Jules worked for Dowell for another two years before moving to Hinton where he worked as a process engineer with Northwestern Pulp and Power from 1973 to 1977. His love of the outdoors drew him to open a sporting goods store named “The Hinton Sportsman.” Jules spent 18 years running his store. His four children all worked at the store and, through Jules, they were given the opportunity to appreciate and enjoy nature and learn his passion for the outdoors.

In 1996, Jules’ love of the outdoors grew so strong that he decided to take up surveying so that he could be with nature every day. He sold the family store and started surveying with Dave Armstrong, ALS in Hinton. With the support of his family he went back to the University of Calgary to study geomatics at the tender age of 50. He told many people that he had to complete the program because his children were at university at the same time as he and he could not let them down or set a bad example.

Jules managed the two largest subdivisions that Challenger has ever undertaken. The two subdivisions comprise approximately 4,000 lots. He spent many hours in the field with staff surveying and he loved every minute of it. One of his favorite sayings was “find a job you love and you never work a day in your life.” He lived that.

Council and Staff of the Alberta Land Surveyors’ Association wish you and yours a very Merry Christmas and Happy New Year

S.M. (SYD) LOEFFKY, ALS
Jules was diagnosed with mesothelioma (asbestos exposure cancer) on January 18th of this year. It was traced to his summer jobs as a student in Hinton at the plant sites.

Jules accepted this news and said, “I will just beat this and move on.” During his illness, Jules continued to do all the things he loved. He went to his trap line up on the Little Berland River to finish his and his trapper friends’ cabin. He witnessed the birth of his third grandchild. He traveled with his wife and family and, though he couldn’t play hockey anymore, he spent time with his hockey buddies. Jules, I found out was a very good hockey player. Later on in his illness, Jules commented that he was looking forward to meeting the Lord.

Jules and his wife and four children ran marathons together. Yes, full 26-mile marathons. This year during the Vancouver marathon, Jules could not run but the rest of the family did and Jules was the excited coach waiting at the finish line.

As noted earlier, Jules loved Robert Service poetry. One of his favorites was “The Spell of the Yukon.” The last 4 lines of the poem are very fitting for Jules. They go like this.

*It’s the great, big, broad land ‘way up yonder’,*
*It’s the forests where silence has lease;*
*It’s the beauty that thrills me with wonder;*
*It’s the stillness that fills me with Peace!*

Jules passed away in the early morning of August 28th, 2007 surrounded by family. He was buried in his hometown of Hinton on August 31, 2007. He will be missed by his family and friends. Jules leaves behind his wife Vicki, four children, three grandchildren, two brothers, his mother Dora, his friends and of course his “kids” in Ft. McMurray.

**Hal Falkenberg**

**1931 – 2007**

Harold Gordon Falkenberg was born in 1931 in Edmonton, Alberta. As a farm boy, in the Frederickshelm district near Leduc, he learned how to work the land with horses, pick rocks, milk cows, clean out barns, stook and pitch bundles and tend the large vegetable garden (so necessary for food).

Except for a year-and-a-half attending Eastwood Elementary School in Edmonton for his grades three and four while staying with his grandmother, Harold received his elementary education in the one-room country schools of Parkdale and Frederickshelm. He graduated from King George High School in Leduc. Again he was boarded by his grandfolks. He played on the high school hockey team and also filled in for the Leduc baseball team whenever they were short of players.

Harold enrolled at the University of Alberta in Edmonton in the fall of 1948 and graduated in 1952 with a Bachelor of Science in Civil Engineering. Upon graduation he took employment with a survey firm in Edmonton and obtained his commission as an Alberta Land Surveyor the following year.

In December of 1953, Harold moved to a start-up survey firm from Calgary. This company was to become Midwest Survey & Engineering Ltd. of which he became a partner and general manager of their Edmonton office. The company specialized in surveying drilling locations and pipeline right-of-ways in the booming petroleum industry in Western Canada.

In 1960, he left Midwest Surveys to join Shell Canada Limited as their chief surveyor for all their operations in Canada. During his seven years with Shell, Harold had a varied and interesting work experience. This included surveys in the Northwest Territories as well as special assignments for navigational responsibilities for the first offshore explorations in Canada on the Pacific and Atlantic oceans. Upon the deaths of his wife, Margaret and two daughters, Lisa and Jane, in July of 1967, Harold relocated to Calgary with his three sons. Shortly after, he was retained as a consultant to Panarctic Oils Limited starting petroleum explorations in the Arctic Islands of Canada.

He formed his own company, H.G. Falkenberg & Associates and experienced some of his most challenging and interesting times in his surveying career. This involved the location of drilling positions, conducting ice movement studies on the Arctic Ocean and locating and designing many air strips required by Panarctic on land and ice. All of this in most hostile and fiercest environment in the world with months of total darkness and up to -130F wind-chill temperatures.

In 1978, under a contract with Sheltech Surveys, Harold had his first foreign survey experience on a CIDA project in Zaire, Africa. By this time surveying technology had advanced to positioning by the use of satellites orbiting the earth. He also spent most of a year in Somalia surveying navigational control off the Gulf of Aden.

Before his retirement in 1992, Harold had also worked in Sudan, Spain and Greenland. One of his proudest achievements was his involvement with the survey of the longest railway tunnel in the Western Hemisphere for CP Rail in the Rogers Pass of British Columbia. In 1992, Harold Falkenberg became a life member of the Association of Professional Engineers Geologists and Geophysicists of Alberta and celebrated 50 years as an Alberta Land Surveyor in 2003.

**Excerpted from ‘Our Falkenberg Family’**

**By Lucille Effa**
During the next four years, economic conditions slowly improved and surveying activity gradually increased, but Association affairs were never more stagnant than during this period. Only two new members were registered, while half a dozen died or retired and, by 1939, the membership figure reached an all-time low of 38 and the Association was having difficulty in making ends meet financially. It was reluctant to draw upon its assets, as these consisted entirely of provincial government bonds on which interest payments may have been stopped by the new government and the bonds themselves were worth less than half their face value. The best policy seemed to be to hold on to them until such time as the moratorium on interest payments might be lifted, which hopefully would restore their market value to a higher figure. A membership levy was considered impractical, because most members felt that the normal membership fee of $10.00 was as much as they should be expected to pay for the support of an organization that seemed to be doing little or nothing to further their interests, and those who could not attend meetings even with the aid of the railway fare rebate would have objected to paying higher annual fees for the benefit of those who could.

The Council was thus obliged to hold expenditures down as much as possible, and any ideas that might entail the spending of money received little encouragement. However, this austerity did not extend to the annual meeting, which continued to be held at the best hotels and wound up with the usual sumptuous repast and concomitant entertainment and refreshments for which the Association footed the whole bill. Nor did it prevent the members present at the 1938 Annual Meeting from having second thoughts about boycotting the Canadian Institute of Surveying, when they voted an annual expenditure of $30.00 in renewing their group subscription to *The Canadian Surveyor*. But even these modest extravagances were looked at askance by some, and at the 1939 meeting a formal resolution was passed, instructing the incoming Council to give serious consideration to "ways and means of reducing our expenditures."

Meanwhile, very little action of a constructive or enterprising nature was in evidence. In 1937, the Association did manage to persuade the provincial government that approval and registration fees for subdivision plans should be reduced, but this benefited their clients rather than the surveyors themselves and was, in any case, not particularly significant in view of the relatively small number of subdivisions being made at that time. At the 1938 Annual Meeting, the members adopted a resolution recommending that legislation be enacted to require the filing of plans showing any re-establishment of section, quarter-section or legal subdivision corners carried out by Alberta Land Surveyors, and the Alberta Surveys Act was amended accordingly in 1939.

The 1938 meeting was also notable as the first which Mr. P.N. Johnson had failed to attend since the founding of the Association. Ill health kept him at home and in the spring of that year obliged him to retire as Director of Surveys, thus ending an outstanding career that had been marked throughout by his devotion to the surveying profession and the public interests served by the work of land surveyors.

The 1939 Annual Meeting saw a revival of interest in the provision of a surveyors' manual, and the Publications Committee, after many years of inactivity, was enlarged and instructed once more to look into the matter of contents and cost. This time the project was diligently pursued, and eventually, by dint of the Secretary-Treasurer's efforts in compiling and personally preparing the copy from which it was printed, the first edition of the first ALS Manual was published in 1944.

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**Implications of the Delgamuukw Decision**

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