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One of the duties as president of the Alberta Land Surveyors’ Association is to write a president’s message for each issue of ALS News. I don’t know what my colleagues do when they write their article but I have a tendency to always leave it to the last minute. I don’t know why, because even though I struggle a bit for the words to start, once I sit down and start typing, it is a relatively painless task and does not really take that much time.

As I reflect on the activities of the past few months, I am again impressed with the amount of work that happens within our Association and the dedication of our members and staff. That makes me proud to represent the ALSA in my meetings with other associations and industry groups.

Since the last ALS News, I have had the opportunity to attend, on behalf of the ALSA, the annual meetings of two more of our sister associations.

Association of Manitoba Land Surveyors (AMLS)
This was their 126th Annual General Meeting and was held September 12-15, 2006 at Canad Inns in Brandon. The annual general meeting was held in conjunction with a golf tournament and an educational seminar entitled “Surveying for Profits.” At the time of the AGM, there were 48 practicing members in their Association with two new members obtaining their membership in the past year. In a report from their Board of Examiners Committee it was projected that in five years there may be 23 members under the age of 60. Manitoba is also in the process of re-writing their Land Surveyors Act which is taking a considerable amount of time. Another item of interest is the existence of a joint APEGM (their Professional Engineers Association)/AMLS committee that deals with issues of common interest, including unauthorized practice.

Have a joyous and blessed Christmas and best wishes for a prosperous and happy New Year.

Congratulations to their new president, Les Mclaughlin.

Association of Nova Scotia Land Surveyors (ANSLS)
This was their 56th AGM and was held October 12-14 in Wolfville, which is in the Annapolis Valley and home to Acadia University. This is an orchard and winery area and there were still apples on the trees and grapes on the vine. Quite a contrast from the snow we were having back in Alberta. The ANSLS has a mandatory continuing education program, and it appears that this year there is a small number of members who have not met the requirements. There was some debate on how the next Council should deal with this. There are presently 173 practicing members (down from 261 in 1993) with 140 being registered for the AGM. One new member was sworn in at the AGM which makes for a total of three new members since the last AGM. This Association has a Survey Review Department and is presently in the process of getting a new manger for this department. The strategic plan of this Association has three main strategies: membership—it is projected that by 2016 there will be 45 members below the age of 60. At the present time, government employs 40 members; governance—looking at using the term ‘working groups’ formed for a specific task and ‘committee’ for committees that are required on an ongoing basis by the Act; and public awareness.

Congratulations to Tom Giovannetti, their new president.

The Canadian Council of Land Surveyors (CCLS)
The annual meeting of CCLS was held October 15-16, 2006, also in Wolfville, NS. Our regular CCLS Director, Larry Pals, was unable to attend so I was the ALSA representative at this meeting. A large part of the meeting was spent in strategic planning to focus the efforts and resources of CCLS for the coming year and to evaluate the work done for the past year. One other note that came out of this meeting is that the directors were encouraged to make sure there is good communication between their association and CCLS. The structure within each provincial association as to who is their CCLS Director differs. In our Association, the CCLS Director is also our Secretary Treasurer who serves a term of three years and is part of our Council. This was a very informative meeting for me as I got a chance to see how CCLS functions and makes their plan for the coming year. Congratulations to Bert Hol who is now serving the second year of his two-year term as president.

The meetings between association presidents that we have at each AGM across Canada continue to be valuable in terms of communication between the provinces. A lot of the ‘survey’ issues are similar across the country, particularly the demographics one, and a collaborative approach to the solutions of some of the issues certainly makes sense. One thing that is evident at our recent presidents’ meetings is a growing sense of urgency about dealing with the challenges facing the future of the profession and finding ways to work together on these issues for the benefit of the profession at large.

By the time you receive this issue of ALS News, Christmas will be a very short time away. Hopefully everyone will get a chance to take a break and recharge for the coming year. Have a joyous and blessed Christmas and best wishes for a prosperous and happy new year.
As Councillor, I am privileged to have the opportunity to write one article over my two-year term. This is my attempt at that article.

In researching background material to give me some ideas and see what types of topics have been discussed over the years, I read a number of Councillor’s Forums and found there was not a common theme throughout the articles. It was apparent that the forum is a councillor’s opportunity to discuss, or maybe even vent, on a topic of concern to them and our profession. I also noticed that the articles never have a title. When I write an article or do a presentation I need a starting point. To me that starting point is the title of what I want to talk about. I think I want to talk about “Staff Retention and Growth in a Heated Alberta Economy.” In thinking about how survey companies are being innovative in trying to maintain their current staff, increase staff numbers and turn product out the door in a timely manner, it became evident to me that in this economy it still isn’t enough to be successful.

I’m sure all survey companies are focusing on retaining their current staff and developing ideas on increasing the ability to produce more product. Productivity can be increased by efficiencies whether it is automatic drafting or cookie cutting a field task. Some survey companies are setting offices up in other parts of the country and the world to process their drafting and computing. Others have broadened their search for new staff to other parts of North America and, indeed, the world. Survey companies that can prove a shortage of professional staff can speed the process of getting foreign workers their work visas. All these ideas are unique and inventive but I think still not enough to meet the demand for survey services by the public.

I reviewed how many times in the last two years I have answered the phone at work and it was someone desperate for an RPR saying it was going to be three to five weeks before a surveyor could get their RPR and they have a sale closing. I would then say “we don’t do RPRs. We are just too busy.” I wondered what happened to that person’s house sale. Or I have received a call from someone wanting to take a five acre parcel out of their quarter section to sell to one of their children. I would then say the same response they were getting from other companies they called, “No can’t touch it for weeks. Too busy.” I would then wonder what happened with that family’s subdivision.

I decided that was no different than me waiting months for a plumber to dig my cistern, or months to get a carpenter to do finish work in a room of the house. Then I opened the Manual of Standard Practice, Page 1, Part B, Code of Ethics. It reads: “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.” It goes on to say in the commentary that “This public interest must be greater than the interest of any individual client of the Alberta Land Surveyor and requires that the professional carry out his duties without favour, affection or partiality”.

Unlike the busy plumber or carpenter we are a self-governing profession. Using our Code of Ethics as a guide we have to manage our profession, our service and interaction with the public.

How do we ensure the public being the average homeowner gets his subdivision completed, gets his RPR completed or his property line staked in a timely fashion? I think that that small sector, albeit still a valuable part of the survey public is not being serviced adequately. One could say that even the oil companies and large developers are having to wait longer for product. But I would hazard a guess that the large users of survey services are ultimately getting serviced as we survey companies are throwing all our resources after the areas where the greatest return can be made. There is something to be said for the entrepreneurial spirit but again, as a self-governing profession, we must service all of the public.

I am treating the Councillor’s Forum as a place where I can voice my opinion. That being said, I think if we are unable to service all the public then the public will complain to the Association or to their local MLA and other areas of government.

Complaints could cause the government to focus on a negative aspect in our service sector. I think we as an Association owe it to ourselves to take whatever measures needed to preserve our standing in society by always being able to service society and the public interest.

As Council liaison to ASSMT, I would like to say that I have enjoyed my time in meetings with ASSMT. They are very professional and as we all know play a very important role in the survey industry in Alberta. I often wonder, as our ALSA goes forward with our steady if not heated economy, what role ASSMT might play in the future.
**How The Grinch Stole Surveying with apologies to Dr. Seuss**

But the Grinch who lived just north north-east (at a bearing of 348 degrees) of Survey-ville, Did NOT! The Grinch hated Surveying! The whole Survey season! Now, please don’t ask why. No one quite knows the reason. It could be his head wasn’t screwed on just right. It could be, perhaps, that his shoes were too tight. But I think that the most likely reason of all May have been that his heart was two sizes too small (accurately measured using the latest technology, plus or minus 3 ppm).

But, Whatever the reason, His heart or his shoes, He stood there on Survey season Eve, hating the Surveyors, Staring down from his quarter section with a sour, Grinchy disposition At the warm lighted windows below in their subdivision. For he knew every Surveyor down in Survey-ville land Was busy now, preparing to file their old dormant plans.

“And they’re reading their plumb bobs!” he snarled with a sneer, “Tomorrow is Survey season! It’s practically here!” Then he growled, with his Grinch fingers nervously drumming, “I MUST find some way to stop Survey season from coming!” For, tomorrow, he knew...

...All the Survey party chiefs and assistants Would wake bright and early. They’d run for their lives (in the new half-ton pick-up with GPS tracking).

And then! Oh, the drive! Oh, the Drive! Drive! Drive! Drive! That’s one thing he hated (particularly when the road to Fort McMurray hasn’t been twinned)! The DRIVE! DRIVE! DRIVE! DRIVE!

Then the Surveyors, young and old, would get ready to dig (for survey evidence, of course). And they’d dig! And they’d dig! And they’d DIG! DIG! DIG! DIG!

They would feast on boundary uncertainty, and rare natural boundaries Which put the Grinch in something of a quandary!

And THEN They’d do something He liked least of all! Every Surveyor down in Survey-ville, the tall and the small, Would stand close together, at an annual general meeting. They’d stand hand-in-hand. And the Surveyors would start speaking!

They’d speak! And they’d speak! And they’d SPEAK! SPEAK! SPEAK! SPEAK!

And the more the Grinch thought of this Survey season speak, The more the Grinch thought, “This is making me weak!” “Why, for fifty-three years I’ve put up with it now!” “I MUST stop this Survey season from coming! ...But HOW?”

Then he got an idea! An awful idea! THE GRINCH GOT A WONDERFUL, AWFUL IDEA!

“I know just what to do!” The Grinch laughed in his throat. And he made a quick surveyor hat and a coat (making sure they met all the safety standards for working in remote areas). And he chuckled, and clucked, “What a great Grinchy trick!” “With this coat and this hat, I look just like Registrar Dick!”

“All I need is a party chief...” The Grinch looked around. But, since party chiefs are scarce, there was none to be found. Did that stop the old Grinch...? No! The Grinch simply said, “If I can’t find a party chief, I’ll make one instead!”

So he called his dog, Max. Then he took some red flagging And tied on a big GPS receiver to keep him from lagging.

THEN He loaded some bags And some old empty sacks In an old 4x4 Quad cab He coordinated old Max.

Then the Grinch said, “zoom zoom!” And the Quad cab started down Toward the offices where the Survey crews Lay a-snooze in their subdivided town.

All their windows were dark. Quiet snow filled the air. All the Surveyors were all dreaming easements without care When he came to the first little office on the square. “This is stop number one,” the old Grinchy Surveyor hissed And he barged through the door, empty bags in his fist.
Then he beat the alarm system. A rather tight pinch.
But, if real crooks could do it, then so could the Grinch.
Then he headed straight for the storage room front door.
Where the Surveyor plumb bobs all hung in a row.
“Those plumb bobs,” he grinned, “are the first things to go!”

Then he slithered and slunk, with a smile most unpleasant.
Around the whole room, he took every instrument!
GPS! And total stations! Scanners!
Prism Poles!
Data collectors! Pin Finders! Flagging – he took the whole roll!
And he stuffed them in bags. Then the Grinch, like a bore,
Stuffed all the bags, one by one, out the door!

Then he slunk to the drafting area.
He took the software!
He took the COGO! He took the least squares!
He cleaned out the drafters as quick as a pop.
Why, that Grinch even took their old laptop!

Then he stuffed all the stuff out the door without care.
“And NOW!” grinned the Grinch, “I will shove out the hardware!”

And the Grinch grabbed the hardware, and he started to shove
When he heard a small sound like the coo of a dove.
He turned around fast, and he saw a small Surveyor!
A Surveyor’s assistant. He couldn’t believe she was there.

The Grinch had been caught by this surveying hot shot
Who’d got out of bed to take an old astronomical shot.
She stared at the Grinch and said, “Surveyor, why,
“Why are you taking our hardware? WHY?”

But, you know, that old Grinch was so smart and so slick
He thought up a lie, and he thought it up quick!
“Why, my Surveying hot shot,” the fake Surveyor lied,
“There’s a virus in this computer so it won’t boot up just right.”
“So I’m taking it home to my workshop, my dear.”
“I’ll fix it up there. Then I’ll bring it back here.”
And his fib fooled the assistant.
Then he patted her head
And he got her a drink and he sent her to bed.
And when the survey assistant was asleep beyond a doubt,
HE went to the door and shoved the hardware out!

Then he grabbed the job book
That was the last thing to acquire!
Then he went out the door, himself, the old liar.
In their offices he left nothing but printer cables and some firewire.
And the one speck of equipment that he left in the shop
Was a slide rule too old to read.

Then
He did the same thing
To the other Surveyors’ shops
Leaving slide rules
Much too old
For the other Surveyors’ to read!

It was quarter past dawn...
All the Surveyors, still a-bed,
All the Surveyors, still a-snooze
When he packed up his truck,
Packed it up with their equipment!
The tripods and hardware!
The calculators! RTK GPS!
Microsoft’s latest software!

Three thousand feet up (914.4 metres): Up the side of Mt. Crumpit,
He rode with his load to the tiptop to dump it!
“Pooh-Pooh to the Surveyors!” he was grinch-ish-ly humming.
“They’re finding out now that no Survey season is coming!”
“They’re just waking up! I know just what they’ll find!”
“Their mouths will hang open without their survey supplies
Then the Surveyors down in Survey-ville will all cry cry cry cry!”

“That’s a noise,” grinned the Grinch,
“That I simply MUST hear!” So he paused. And the Grinch put his hand to his ear.
And he did hear a sound rising over the snow. It started in low. Then it started to grow...

But the sound wasn’t sad! Why, this sound sounded glad!
It couldn’t be so! But it WAS glad! VERY glad!

He stared down at Survey-ville!
The Grinch popped his eyes!
Then he shook!
What he saw was a shocking surprise!
Every Surveyor down in Survey-ville, the tall and the small,
Was surveying! Without any equipment at all!
He HADN’T stopped Survey season from coming!
IT CAME!
Somehow or other, it came just the same!

And the Grinch, with his grinch-feet ice-cold in the snow,
Stood puzzling and puzzling: “How could it be so?”
“It came with out tripods! It came without total stations!”
“It came without calculators or any instrumentation!”
And he puzzled three hours, till his puzzler was sore.
Then the Grinch thought of something he hadn’t before!
“Maybe Surveying,” he thought, “doesn’t come from a store.”
“Maybe Surveying...perhaps...means a little bit more!”

And what happened then...?
Well...in Survey-ville they say That the Grinch’s small heart
Grew three sizes (plus or minus at a 95% confidence level) that day!
And the minute his heart didn’t feel quite so tight,
He whizzed with his load through the bright morning light
And he brought back the equipment! And the computers for the drafters!
And he...

...HE HIMSELF...! The Grinch found a pin to preserve the cadastre!
Science Alberta Foundation has experienced a year of exponential growth in all of our program areas. What an amazing way for us to mark our 15th anniversary! 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 and we are delighted to report on the impact of the “Made to Measure” Crate.

The Crate Program
Our crate program continues to be in great demand due to our innovative and creative learning approach that uses real-life contexts and hands-on activities to make learning enjoyable, relevant, and enduring. There are now 327 crates in rotation which allow schools, museums, and community groups province-wide access to amazing activities that link directly to Alberta’s curriculum. In the past fiscal year, over 85,000 students participated in the crate program!

As we are increasing the reach of the crate program, we are also expanding the topics to inspire children and youth with the amazing career possibilities in science, math, engineering and technology. We are currently working to secure funding for more science crates as well as new topics in math and engineering.

“Made to Measure” Crate
Developed with support from the Alberta Land Surveyors’ Association, “Made to Measure” is directly linked to Alberta’s Grade 8 math curriculum [Shape and Space]. “Made to Measure” is a unique math resource as it places the curriculum in a ‘real world’ context and builds an awareness amongst participants of careers in land surveying. Whether it’s the Pythagorean Theorem or a surveyor’s rangefinder, participants learn to make sense out of math while discovering how math helps make sense of the world around us.

Between July 1, 2005 and June 30, 2006, copies of this crate travelled to 18 venues in 13 communities with 710 participants!

With additional support from the Alberta Land Surveyors’ Association, eight new copies of “Made to Measure” were added for the 2005-2006 year which allowed for an increased number of bookings over past years. During this time period, the number of crates going to rural communities has increased and there has been a 62% increase in bookings. We are currently working on several strategies to further promote this crate to additional junior high math teachers across the province.

Science-In-A-Crate
Program Evaluation
We know that it is critical to maintain the high quality of the crate program. In order to do this, we involve science and math and education experts in our development process. We also test crate activities with multiple classrooms and use student feedback to ensure the activity instructions are clear, students are able to duplicate the desired results, and the scenarios are engaging.

Our evaluation process continues beyond the crate launch. Proactive Information Services, a highly regarded organization in the evaluation field with expertise in evaluating programs in formal and informal contexts, conducted an in-depth independent evaluation of the crate program in May 2006. The results of this evaluation demonstrate the continued excellence of the crate program, the high satisfaction of teachers and students, and the contribution of the activities to student learning and attitudes. Highlights of the most recent evaluation summary include:

Student Results:
• 93.2% of the students surveyed in grade 8 and 84.1% of students surveyed in grades 9 to 12 reported that the crate activities helped them learn new things;
• 91% of students in grade 7 reported that the crate activities helped them to understand concepts being studies in science class; and,
• 93.4% of students surveyed in grades kindergarten to 4 agreed that the crate activities made them more interested in science class.

Teacher Results:
• 91% of teachers reported that the crates increased student interest in science or technology while 93% commented that the crates show students that science or technology can be fun;
• 89.5% agreed that the crate activities helped them to achieve curriculum outcomes;
• 89.6% reported that the activities in the crates helped students develop a better understanding of the concepts presented in class and 93.9% reported increased student participation in class activities;
• 89.2% reported that the crate activities engaged students who do not usually show interest in science, with a further 85.6% reporting “at-risk” students and students who are not usually academically successful were engaged; and,
• 97.1% were satisfied with the activities!

This feedback reinforces the important role the crate program can play in making science and
math learning engaging and accessible to an audience with a wide range of learning needs and experience.

Thank you for helping to make the “Made to Measure” crate possible. We value our relationship with the Alberta Land Surveyors’ Association and are proud to include your organization as one of our supporters.

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

Title Insurance

In April 2005, Canada Mortgage and Housing Corporation (CMHC) announced that it was considering enhancing its homeowner mortgage loan insurance to include home buyer protection against title-related risks. CMHC then undertook extensive analysis and consultations with stakeholders to validate a number of items, including:

- the value proposition of title insurance for consumers, lenders and CMHC;
- the implications of title insurance for provincial land registry/titles systems; and,
- assurance that the potential process options were workable and alternative processes were explored.

The purpose of this letter is to advise you that CMHC is not proceeding with a specific title protection initiative. After consulting with numerous industry stakeholders, CMHC was unable to garner a consensus among the industry on a common approach to managing title-related risks. For instance, title insurance is one tool available to consumers that provides protection against a wide range of title-related defects. However, given the myriad of land registry systems and processes across the country, the benefits of title protection vary. CMHC will continue to encourage industry dialogue to address challenges such as identity theft and other types of mortgage fraud.

This fall, CMHC is introducing a measure that, among other things, will help to prevent fraud in some circumstances. Under this new measure, CMHC will, upon approval of a mortgage insurance application, send a letter directly to the borrower indicating that the mortgage loan insurance application has been approved. The letter will explain the benefits of mortgage loan insurance and introduce them to the wealth of housing information available from CMHC. Additionally, should it turn out that the borrower did not actually apply for a mortgage, as would be the case with certain situations involving identity theft, the letter will alert borrowers to contact CMHC immediately.

CMHC remains committed to helping Canadians across the country access a wide choice of quality, affordable homes.

Thank you again for your participation in this important initiative, and for taking the time to share your views and expertise with CMHC.

PIERRE SERRE, VICE PRESIDENT
INSURANCE PRODUCTS AND
BUSINESS DEVELOPMENT, CMHC

Municipal Government Act and Regulations

Thank you for your letter of August 28, 2006 regarding consultation on the Municipal Government Act and the Subdivision and Development Regulation.

Although the timing of consultations and the scope for a general review of the Municipal Government Act have not been determined yet, the Subdivision and Development Regulation is scheduled for review over the next several months. With respect to both reviews, there will be opportunities for the Alberta Land Surveyors’ Association to provide comments on suggested amendments. Be assured that you will be notified once the processes are developed.

I appreciate your bringing your interest in this matter to my attention and I look forward to your input on these reviews.

ROB RENNER
MINISTER OF MUNICIPAL AFFAIRS

When is a Bank Not a Bank?

I feel compelled to respond to the article by Gord Olsson, ALS, CLS in the June 2006 issue (Legal Notes—When is a Bank Not a Bank?) about the case Andriet v. County of Strathcona No. 20, 2005 ABQB 848.

I think the Andriet case has added to the confusion surrounding accretion and natural boundary law and has not added positively to the jurisprudence or survey practice. I could go on at length but Mr. Olsson has already identified the issues
and discrepancies. However, I would like to comment on several specific items.

First, provided the statutory and common law conditions for adverse possession are present in a particular case (running of ten-year limitations of actions; open, visible, notorious and exclusive use and possession, resp.), adverse possession of accretions is a legally recognized claim except as against Crown and municipal accretions. A caveat claiming accretion by adverse possession may be registered against the upland title to protect the accretion until the matter is resolved.

Second, to my knowledge, the Crown has made it a habit of leasing accretions such as those in question. Leasing of accretions does not confer ownership nor is it for the Crown to decide such issues. Often you will find upland landowners paying lease or permit fees for the use of accretions to which they themselves are entitled. In a proper case, those fees should be recoverable.

Third, the tenancy-in-common concept may be useful, especially where accretion by alluvion or by dereliction has been extensive resulting in long, narrow lots in riparian multi-lot subdivisions. In my experience, such situations have a high potential for dispute (e.g., fencing of such lots). However, the riparian lot owners who have been co-operative and casual about reasonable use of the accretions amongst themselves, would probably continue to share use so long as they received a fair pro rata benefit by way of an undivided interest to the accretions when they were brought into titles.

Fourth, and of particular interest to me as the instructing solicitor in the case, is the assertion by Mr. Olsson that Johnson v. Alberta is “well-established” law in Alberta as to accretions across ATS boundaries, that is to say, boundaries arising under the Alberta Township System of Survey. In my respectful opinion, the Surveys Act does not declare such boundaries, surveyed and legal or unsurveyed and theoretical, immutable. Certainly, the Court of Appeal decision in January 2006 appeared to decide the issue although its own analysis of this important area of riparian law was pretty sparse. The Supreme Court of Canada apparently did not consider the issue of sufficient importance (nationally?) to grant an appeal. It gave no reasons for refusal as is its practice. Perhaps it is a matter of perspective. In any event, shortly after the Johnson decision was made, a plan of survey of accretions to riparian lots was registered at the Land Titles Office under which accretion by dereliction across “theoretical” ATS boundaries was recognized.

That, of course, has led to a paradox (when is a natural boundary not a natural boundary?) which needs to be resolved. I have brought the matter to the attention of the Court which advised me a remedy may be available by way of reconsideration of a binding decision in a future case. So, in my respectful opinion, the matter is not “well established” but uncertain.

One problem I have experienced is the practice of analyzing riparian cases (especially accretions) on the basis of certificates of title rather than boundaries of parcels and the descriptions arising therefrom. It seems to me that certificates of title go to the matter of the ownership of interests in land whereas boundaries go to the matter of the extent of those interests. Laying Down the Lines—A History of Land Surveying in Alberta by Judy Larmour, clearly shows that the creation of parcels and their boundaries preceded creation of certificates of title. The dogma that “title is everything” appears to obscure all else.

Finally, it was a mistake not to survey the natural boundary on the ground in the Andret case because not doing so appeared to create greater uncertainty. How could the judge make a definitive finding without that evidence before him? Of course, determining the location of a perambulatory natural boundary has itself become an unduly complex matter in many cases. The current terminology based on English tidewater cases hasn’t helped. For example, the word “bank,” the static element in the determination, is used to describe the natural boundary rather than the words “water’s edge” which is the dynamic perambulatory element of that boundary. This is, as yet, an unresolved issue in the Johnson case.

The common law appears to be quite clear. In the carefully and thoroughly considered case Re Walker et al, and Attorney-General for Ontario (1970), 14 D.L.R. (3d) 643, the Ontario High Court held that the natural boundary to the shore of Lake Erie “...means and carries to the edge of the water in its natural condition at low water mark...” and further “...that any Crown patent [title] which indicates that one of the boundaries of the lands granted is to be a boundary of water, then it establishes that boundary as at the water’s edge and not upon any bank of high water mark...”. That decision was affirmed by the Ontario Court of Appeal, 26 D.L.R. (3d) 162 and the Supreme Court of Canada, 42 D.L.R. (3d) 629. A close examination of the leading U.S. and Canadian Supreme Court cases reveals that the “water’s edge” as defined in Walker has actually formed the basis of those courts’ decisions, as it does in Section 17(3) of the Surveys Act of Alberta. If it didn’t, how could the lands involved be riparian at all? I hope these comments will prove interesting if not useful.

ALEX K.H. ROSE Q.C., P.AG

Scholarships

Mr. McKessock of Mactaquac, NB is the 2006-07 recipient of the Alberta Land Surveyors’ Association Academic Achievement Scholarship, valued at $2,500. He is a fifth year student in the geodesy and geomatics engineering program at UNB’s Fredericton campus. George was on the Dean's List for the 2005-06 academic year.

The thoughtful individuals and organizations establishing these funds have taken the initiative to ensure the long-term well being of the University of New Brunswick. We are most grateful for this investment in UNB.

LOUISE BOLDON, ACTING DIRECTOR
OFFICE OF DEVELOPMENT & DONOR RELATIONS
UNIVERSITY OF NEW BRUNSWICK
Please accept my appreciation for the Alberta Land Surveyors’ Association’s recent gift of $2,500 in support of your academic achievement scholarship at the University of New Brunswick.

I would also like to take this opportunity to once again welcome the Association to the President’s Circle, recognizing those who contribute $1,000 or more annually to UNB.

Because of the generosity of your Association, individuals who may not otherwise have the opportunity will receive the lasting rewards a UNB education provides: the strength of a solid, well-rounded academic experience; confidence in their preparation for competitive and challenging careers; and pride in the privilege of carrying on UNB’s tradition of excellence.

Thank you for your thoughtful generosity, trust, and support.

JOHN D. MCLAUGHLIN
PRESIDENT AND VICE-CHANCELLOR

On behalf of the University of Calgary, I am pleased to advise you that the recipient selected for the Alberta Land Surveyors’ Association Scholarship is Jeremy Lee Park.

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

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

MAUREEN EVANS, ASSOCIATE DIRECTOR
STUDENT AWARDS AND FINANCIAL AID
THE UNIVERSITY OF CALGARY

As the award winner of the Alberta Land Surveyors’ Association Scholarship, I would like to express my utmost thankfulness and appreciation to yourself and the entire Association for the generosity you have shown in providing such a fund. It is an extreme privilege and honour for me to accept this award from such an influential association such as the ALSA in the geomatics and surveying industries.

I am currently enrolled in my final year of Geomatics Engineering at the University of Calgary. Being recognized for my academic achievement motivates me to continue my hard work for my final year of schooling. The scholarship fund provided by the ALSA also helps to alleviate some of the associated financial stress of school and allows me to fully focus on my academic achievement.

My aspiration is to eventually become a professional land surveyor in Alberta. I thank you for your confidence and willingness to help me achieve my goals.

JEREMY PARK

I was chosen to receive the J.H. Holloway Scholarship/John Deyholos Memorial Award this year, and I am writing this letter to express my sincerest thanks to you for providing this scholarship. I was very excited to receive my award notification letter.

It is an honour to be recognized for my hard work, and receiving this scholarship motivates me to continue to strive for excellence. I am currently completing a sixteen month internship with Intermap Technologies in Calgary and next year, I will enter my final year of the Geomatics Engineering Program. This scholarship support will enable me to concentrate on school work without having to worry about finances and will help me to realize my dreams.

Your generosity has made a profound impact on my life and I am truly grateful to be the recipient of your scholarship. Receiving the John Deyholos Memorial Award is of tremendous benefit to me.

Thank you once again for your contributions to the University of Calgary awards program.

BRITTON ARMSTRONG

I have been selected as the recipient of the J.H. Holloway Scholarship for the year 2006 at the University of Calgary’s Department of Geomatics Engineering. I am grateful to be honoured in this manner, as I have sought throughout my university career to be the best that I can be, and this recognition is a validation and confirmation of the value of my effort. As I continue through the last phase of my degree, this recognition will motivate me to continue to pursue excellence not only in the area of academic pursuits, but also in every area of my life.

I am also grateful for the monetary aspect of this award. As all students know, any monetary benefit that can be gained to ease the crunch of tuition is a worthwhile pursuit. As such, this aspect of the J.H. Holloway Scholarship is most welcome as I draw towards the end of my tuition experience and seek to graduate with no debt hanging over me. As such, I want to extend my sincere thanks to both those who selected me and to those who fund this award. Having this extra funding to cover my educational expenses allows me the reduced stress and ease of thought to plan out my future beyond graduation. My future upon graduation is as of yet undecided, but may range from biomedical researcher to grad student to software engineer.

Once again, I wish to extend my gratitude towards those who fund this scholarship and those who seek to honour the students who follow in their footsteps.

TREVOR PHILLIPS
GEOMATICS ENGINEERING INTERN

It is with pleasure that the Student Awards Office announces the recipient of the Alberta Land surveyors’ Association Scholarship as nominated by the Geomatics Engineering Technology program at NAIT.

The selected candidate for the 2006-2007 academic year is Juri Novak, a second year student in the Geomatics Engineering Technology program. He completed his first year with an honours standing of 95.69%.

We, at NAIT, are fortunate to see the impact your award has on students: knowing the assistance you provide to our students helps them to obtain their present and future goals. You are a vital link to the success of NAIT and we truly appreciate your involvement.

SABRINA JOHNSON
STUDENT AWARDS COORDINATOR, NAIT

...continued on page 46
**New Members**

**#771 Flim, Allard V.**

Al Flim was born in the province of Ontario on August 6, 1967. He graduated from Durham Christian High School in 1985 and received a Bachelor of Science—Survey Specialist from the University of Toronto in 1994.

Al came to Alberta as an affiliate member and holds a commission as an Ontario Land Surveyor.

Commission as an Alberta Land Surveyor was received on October 12, 2006. He is also a member of the ALSA Standards Committee. Current employment is with AMEC Land Surveys Limited of Sherwood Park.

Surveying experience includes ten years in Ontario with real property reports, topographical surveys, road and highway work and subdivision/severance surveying.

Al enjoys canoeing, fishing, hiking and camping.

Al is married to Michele. They reside in Sherwood Park with their four children, Nathan (14 years), David (12 years), Jesse (10 years) and Laura (7 years).

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**#772 Connatty, Darrin B.**

Darrin Connatty was born in Calgary, Alberta on January 19, 1965. He graduated from Stanley Humphries Senior Secondary in 1983 and from Selkirk College in 1985. He went on to receive a B.Sc. in Surveying Engineering from the University of Calgary in 1988.

Darrin came to Alberta as an affiliate member and holds a commission as a BC Land Surveyor. He articled to Ray Johnson, BCLS and received his BCLS commission #737 in 1994.

Commission as an Alberta Land Surveyor was received on October 17, 2006. Current employment is with Focus Surveys Limited Partnership of Calgary.

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**#773 Boulanger, Scott G.**

Scott Boulanger was born in Surrey, BC on October 1, 1976. He graduated from Lord Tweedsmuir Secondary School in 1994 and went on to receive a Diploma of Technology in Geomatics from BCIT in 1997. In 2003, he received a B.Sc. with distinction from the University of Calgary.

Articles were served under David Marquardt, ALS from January 2004 until he received his commission on October 18, 2006. Scott serves on the ALSA Standards Committee and is an engineering-in-training with APEGGA.

Scott’s surveying experience includes the following: oil field and land surveying in Fort St. John in 1998; hydrographic surveying in Houston, Texas and Anchorage, Alaska from 1998 to 2003; oil field surveys with Midwest Surveys Inc. in Alberta from 2003 to present.

Scott enjoys wakeboarding, skiing and spending time with family. He is married to Cathy and they reside in Calgary with their three children, Madison (age 7), Ella (age 3) and Leo (age 1).

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**#774 Motz, Troy**

Troy Motz was born in Calgary on September 23, 1979. He graduated from E.P. Scarlett High School and went on to receive a B.Sc. in Engineering from the University of Calgary in 2002.

Articles were served under James Sloan, ALS from September 3, 2002 until he received his commission on November 10, 2006. He is also an engineer-in-training with APEGGA.

Troy has worked in the oil and gas industry with All-Can Engineering & Surveys (1976) Ltd. for the last five years.

In his leisure time, Troy enjoys hiking and skiing.

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**Members on the Move**

**ACTIVE MEMBERS**

**Jessica Barich:** new e-mail—jessica.barich@stantec.com

**Gary Bondarevich** has a new e-mail address: garry.bondarevich@swg.ca.

**Scott Boulanger** received his commission on October 18, 2006. He is employed with Midwest Surveys Inc. of Calgary.

**Charles Chiasson** has ceased to be an employee with Jones Geomatics of Calgary effective August 24, 2006. He has advised the ALSA that he will be setting up his own firm.

**Darrin Connatty** received his commission on October 17, 2006. He is employed with Focus Survey Limited Partnership of Calgary.
Buster Davison has changed his status from retired to active effective November 10, 2006. He is employed with Terrain Group Inc. and can be reached at 3rd Floor, 26 Union Street, Bedford NS B4A 2B5, Tel: (902) 835-9955; Fax: (902) 835-1645; E-mail: busterdavison@ns.sympatico.ca.

Al Flim received his commission (#771) on October 17, 2006. He is employed with AMEC Land Surveys Limited of Sherwood Park.

Hart Karash is now an employee of Focus Surveys Limited Partnership.

Syd Loeppky is no longer with Beiramar Development Corporation. He can now be contacted at his residential address: 1726 - 14 Avenue NW, Suite 902, Calgary T2N 4Y8. Tel: (403) 210-1953 or (403) 861-6149; Fax: (403) 208-0145; E-mail: syd.betty@shaw.ca.

Troy Motz received his commission on November 10, 2006. He is employed with All-Can Engineering & Surveys (1976) Ltd. of Calgary.

Al Nelson is now employed with Midwest Surveys Inc. in Edmonton. His new e-mail address is anelson@midwestsurveys.com.

Roger Ross has taken employment with Focus Surveys Limited Partnership in Grande Prairie effective November 22, 2006. Roger.ross@focus.ca is his new e-mail address.

Richard Schlachter has changed employers as of November 1, 2006. He is now Director, Markets & Product Management with Celero Solutions (Box 3030, 2055 Albert Street, Regina, SK S4P 3G8. Tel: (306) 566-1934; Fax: (306) 566-1660; E-mail: richardschlachter@telus.net. Website: www.celero.ca.

Rob Scott has a new e-mail address: rob.scott@stantec.com.

Steven Van Berkel has taken employment with All West Surveys Limited Partnership in Edmonton effective November 6, 2006.

Scott Westlund: new e-mail—scott.westlund@stantec.com.

Vic Wolchansky has a new mailing address: PO Box 1172, Wabamun, AB T0E 2K0. His phone number is (780) 892-3320.

Mark Woychuk: new e-mail—mark.woychuk@stantec.com.

Jeremy Zettel has taken employment with Caltech Surveys Ltd. in Calgary effective November 1st. His direct phone number is (403) 303-4641 and his new e-mail address is jeremy.zettel@caltechsurveys.com.

CORPORATIONS

Sunbow Consulting Ltd. ceased to exist as a surveyor’s corporation on December 5, 2006 and becomes part of Focus Surveys Limited Partnership.

ARTICLED PUPILS

Gabriela Badranova has changed her last name to Badran.

Rosalind Bobbit has tied the knot and changed her last name to Broderick.

Joel Corcoran articulated to John Van Berkel, ALS of Stantec Geomatics Ltd. on November 28, 2006.

Ryan Dobson articulated to John Landry, ALS of McElhanney Land Surveys (Alta.) on October 27, 2006.

Benjamin Giesbrecht articulated to Bob Wallace, ALS of Global Surveys Group Inc. on October 18, 2006.

Kenneth Kitchen articulated to Bill Lovse, ALS of Terramatic Technologies Inc. on November 6, 2006.

Byron Laurie has taken employment with Midwest Surveys in Medicine Hat effective November 24, 2006.

Mackenzie Lee transferred articles from Andy Lee, ALS to Bill Mintz, ALS of AMAR Surveys Ltd. on September 18, 2006.

Jaroslaw (Jari) Matejko articulated to James Hume, ALS of Crape Geomatics Corporation on September 15, 2006.

Mike Prokopetz transferred articles to Scott Partridge, ALS of Focus Surveys Limited Partnership on September 28, 2006.

Lesley Sick has taken employment with Focus Surveys Limited Partnership in Medicine Hat effective November 24.

Michael Szarmes articulated to Tom Medlicott of D.A. Watt Consulting on November 27, 2006.

Rachel Vincendeau articulated to Allan Main of All West Surveys Limited Partnership on October 16, 2006.

Timothy Williams articulated to Barry Fleece, ALS of Fugro/SESL Geomatics Ltd. on August 11, 2006.

AFFILIATE MEMBERS

Patrick Boudreau, CLS has moved from articulated pupil status to affiliate member status (AF 037) effective November 15, 2006. He is employed with Universal Surveys Inc. in Calgary.

Guy Simms is now employed with McElhanney Land Surveys (Alta.) Ltd. in Grande Prairie. His new e-mail address is gsimms@mcelhanney.net.

ASSOCIATE MEMBERS

Mohamed Abdel-salam (AS050) became an associate member on August 29, 2006.

Stephen Clark (AS051) became an associate member on November 2, 2006.

Leigh Thomas Redding (AS052) became an associate member on December 5, 2006.

Stephen Vickers (AS053) became an associate member on December 5, 2006.
Notes from the Registration Committee

When a candidate is successful in passing the qualifying exam, the Registration Committee asks them to complete a process evaluation form. The information contained in this form is important to the Registration Committee as it provides feedback on the articling process. Similar comments and suggestions have been expressed by the candidates and the Committee would like to take this opportunity to address these suggestions.

“Articling time is too short; the requirements should be 24 months in the field and 12 months in the office.”
The Land Surveyors Act Examination and Training Regulation states:

4 (1) A pupil must complete at least 2 years of articled service.
(2) Except as otherwise permitted by the Registration Committee, the 2 years of articled service referred to in subsection (1) must consist of
(a) at least 18 months of field practice, and
(b) at least 6 months of office practice.

The key words in this excerpt are “at least.” There is nothing to prevent a student from completing more than the minimum requirements. It is imperative that the student and principal discuss these requirements and decide what period of time is appropriate for their particular situation.

“Affiliate members should have access to annual reviews similar to those conducted with articled students.”
Under the Mutual Recognition Agreement (MRA), affiliate members are not required to meet with the Registration Committee upon submitting their application. However, the Committee has recently decided to extend an invitation to meet with the Committee to every affiliate member who is currently registered as well as new affiliate members applying for registration. The Committee recognizes the value in having this contact with future members of the Association.

...it is not the mandate of the Registration Committee to educate. This responsibility lies with the principal and the pupil. They are equally responsible for the training and education...

“The Registration Committee should suggest seminars, and contacts that could help the pupil through the process.”
At the initial interview with the new pupil and their principal, the Committee makes several suggestions regarding government agencies, seminars and other items that may aid the pupil during their articling process. However, it is not the mandate of the Registration Committee to educate. This responsibility lies with the principal and the pupil. They are equally responsible for the training and education aspect and the Committee is responsible for the examination of that pupil to determine if they have met the requirements for registration as a practicing member. In the end, the success of the articling process and, ultimately, the success of the candidate is up to the principal and the pupil.

Why are recent year’s Practical Surveying Exams not available for study purposes?
The Alberta Land Surveyors’ Association requires candidates to pass three professional written exams in order to qualify for registration as a member. The three exams are Statute Law, Survey Profession, and Practical Surveying. Previous exams are available to the students for the Statute Law and Survey Profession exams, but not for the Practical Surveying exam.

Until the adoption of the Mutual Recognition Agreement, the ALSA held only one sitting of the professional exams in April of each year. With the adoption of the MRA, the ALSA decided to switch to two sittings per year.

Preparing the Practical Surveying exam was a challenge for one sitting per year. With the prospect of having to prepare two exams per year, it was decided to create a “bank” of questions that could be mixed and matched to form the exam. Until this “bank” could be expanded sufficiently, the Committee made the decision not to publish the past Practical Surveying exams. To date, the Committee feels there aren’t enough questions in the “bank” to reverse this decision.

The Registration Committee will, most likely, debate the merits of developing a mechanism to get feedback from exam participants, particularly with respect to the Practical Surveying exam. At this time there is no formal method for an exam participant to convey to the Registration Committee concerns with the exams.

Informal feedback from some exam candidates included comments that the Practical Surveying exam was too long and did not provide adequate time to complete all questions. The Registration Committee considered numerous options to try to address this concern. Some considerations were to increase the time allowed to complete the exam; to break the exam into two three-hour periods (in essence two shorter exams); or to reduce the number of questions. The final decision was to present ten questions, with a requirement to complete nine of the ten. The time allowed for the exam was not changed. There was also discussion by the Registration Committee of the merits of making all exams closed book exams and limiting the use of any tools that could communicate wirelessly.

The Registration Committee has obtained information from some of our sister organizations relating to how the qualifying exams are conducted in each of their jurisdictions.
ALS News

ALSA Professional Exam Results—Fall 2006

Statute Law
Twenty-two candidates wrote the fall 2006 Statute Law exam and seven of those were successful in obtaining the 75% pass mark. Scores ranged from 28% to 84.5%, with an average mark of 65.6%. This exam was similar in format, content and length as previous exams, and candidates did well on questions that were similar to past exams. However, there were several questions in particular that many candidates struggled with.

Surveys Act—99 Foot Road Allowances
Many candidates were unfamiliar with the requirements for 99 foot road allowances in modern Part 2 surveys, and in particular how those allowances are determined at a correction line. These requirements are spelled out in Section 20 of the Surveys Act.

Municipal Government Act—Encroachment Agreement
All but three candidates were able to get any marks for defining an encroachment agreement with respect to the Municipal Government Act. This is defined specifically in Section 651.2 of the Act.

Land Surveyors Act—Duties and Responsibilities of Council
Many candidates had difficulty describing what Council must do in the context of the legislation. Section 9 of the Land Surveyors Act defines the general duties and responsibilities of Council in broad form.

Surveying Profession
Twenty-six candidates wrote the fall 2006 Surveying Profession exam. The exam consisted of ten questions on various topics related to professional affairs and current land surveying issues. Sixteen of the twenty-six candidates passed the exam, with an average mark of 77%. Candidates' scores ranged from 57% to 87%. Here are the general themes of each question, along with results for that question:

1. This question dealt with descriptive plans; what situation can they be used in, who gives approvals for their creation, and what statutes or documents can be referred to when preparing descriptive plans. This question was worth 5 marks with the average being 3.25.
2. Candidates were asked to define several acronyms related to survey practice and the profession. This question was worth 8 marks with the average being 7.0.
3. This question dealt with the MSP and the Surveys Act. It dealt with the difference between these two documents, how changes can be made to the documents, and indicating where certain examples were located. This question was worth 12 marks with the average being 8.5.
4. This question was on the role and purpose of the ALSA Council and asked for the names of people serving on Council. This question was worth 6 marks with the average being 5.7.
5. By-laws, the AGM and different memberships where the focus of this question. Students were asked how by-laws come into force, some questions on the AGM, to describe some of the changes to by-laws that the 2006 AGM, and to describe some of the current membership under the current by-laws. This question was worth 24 marks with the average being 17.
6. This question asked candidates to define “practice of surveying” and “practice of land surveying” under the Land Surveyors Act. This question was worth 9 marks with the average being 7.3.
7. The Code of Ethics was the topic of this question. Students were asked to describe five articles of the Code and who judges if the Code is being followed. This question was worth 12 marks with the average being 11.8.
8. What qualities are required of an expert witness was the next question. This question was worth 4 marks with the average being 2.7.
9. This question asked candidates to define “lost monument,” “obliterated Monument,” “disturbed monument,” and “hierarchy of evidence” from the MSP. This question was worth 8 marks with the average being 7.4.
10. The final question looked at the Practice Review Board's interpretations of survey related issues. Questions range as to why the PRB defines or interprets a survey related problem, who the PRB will ask for opinions from, and to describe three of the six current interpretations. This question was worth 12 marks with the average being 6.5.

Overall, the students answered the all questions with good examples and it appears that they have very good knowledge around the acts and Manual. Some of the areas that students struggled was around the role of an expert witness and when asked to name or describe PRB Interpretations Bulletins.

The ALSA Professional Exam Spring Sitting is scheduled for April 3 and 4, 2007 in Calgary, Edmonton and Grande Prairie.

(register online at www.alsa.ab.ca)
Practical Surveying
Sixteen candidates wrote the fall 2006 Practical Surveying exam of which only four candidates achieved a 75% passing grade.

The candidates were given the ability to choose to answer any nine of the ten questions on the exam. If a candidate attempted all ten questions, only the nine highest marks were counted. Each question was worth ten marks. It is interesting to note that attempting all ten questions did not necessarily improve a candidate’s chance of passing the exam.

Below is a summary of the themes for each question:

1. ASCMs
Candidates were asked various questions about information on ASCM cards, where that information comes from, and how it is used. Candidates who did well on this question knew where to find specific information on the cards and how it is used. Candidates also needed to be familiar with the ALS Commitment to Property Damage Mitigation and how that applies to accessing ASCMs. Marks for this question ranged from 1.5 to 9.5 with an average mark of 6.5. All candidates attempted this question.

2. Natural Boundaries
This question dealt with the procedure and documentation required to apply for a change of natural boundary for a parcel with a riparian boundary. Candidates needed to describe what documents were required to do this and needed to read the title and correctly identify on a sketch where the revised boundary is. Some candidates did not successfully identify the revised boundary on the sketch - did not sketch the revised boundary and/or did not clearly indicate the revised boundary. Marks for this question ranged from 2.5 to 7.5 with an average mark of 5.5. Only one candidate did not attempt this question.

3. Pipeline in Surveyed Territory
This question required candidates to identify which pieces of survey evidence needed to be found and placed in order to correctly survey a pipeline R/W. Candidates were also asked to describe the method for determining boundaries of legal subdivisions within a fractional section. Candidates who did well on this question were able to interpret information from a township plan and demonstrate their knowledge of governing evidence. All but one candidate attempted this question, with marks ranging from 2.0 to 9.0. The average mark was 6.9.

4. Field Notes and Evidence Assessment
This question dealt with assessing found evidence that was not shown on the township plan. Candidates were asked how to determine if it was original evidence and how that would affect their boundaries. They were also requested to sketch a monument that was shown on the township plan. Fifteen of the sixteen candidates attempted this question, with an average mark of 6.6. The low mark was 4.0, the high mark was 9.5.

5. Rural Subdivision
This question dealt with the requirements for locating and placing the monuments required for a rural subdivision. A curve was thrown in that several of the monuments were not established during the original township survey. Marks for this question ranged from 4.0 to 9.0, with an average mark of 7.0. All of the candidates attempted this question.

6. Wellsite in Unsurveyed Territory
This question dealt with typical calculations for offsets, total coordinates, and range deflections for a wellsit in unsurveyed territory in Alberta. Marks for this question were generally good, ranging from 6.5 to 9.0. These marks indicate a good theoretical understanding of calculating this kind of wellsit, but a few candidates lost part marks due to mathematical errors in their calculations. Some also tried applying range convergence in the wrong direction. Three candidates did not attempt this question and the average mark was 7.7.

7. Urban Subdivision
This question required candidates to decided on the quickest method to subdivide a consolidated lot into eight lots as shown on the original subdivision plan. The question also asked what documents were required to be submitted to Land Titles. Detailed knowledge of the MGA was required to answer this question. Only nine of the candidates attempted this question. Candidates did poorly on this question with an average of 2.6.

8. Urban Real Property Report
Candidates performed well on this question. Marks for this question ranged from 2 to 10 with an average mark of 7.1. Twelve candidates attempted this question.

9. Using Bulletin 38 Evidence
Some candidates failed to recognize the correction line. Some candidates did not identify the correct section corner monumentation as required. Marks for this question ranged from 2.5 to 6.5 with an average mark of 4.6. Twelve candidates attempted this question.

10. Integrated Surveys
This question dealt with calculations for integrating a survey with ASCM. Marks for this question ranged from 2 to 10, with an average of 6.2. Two candidates chose not to write this question.

Regional Meetings

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<tr>
<td>Calgary</td>
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December 2006
Update on the Chainsaw Faller Training Process

As every surveyor involved in oil & gas related work in Western Canada is very aware of by now, the requirements for chainsaw safety certification has been changed significantly. We truly hope for the better. The national associations of CAPP, CAODC, PSAC, CAGC, SEPAC, and CEPA have unanimously adopted the new faller certification process as the minimum standard to which all oil & gas related work must adhere to.

Effective January 1, 2008, falling any tree six inches in diameter or greater must be done be a certified faller. The proposed chainsaw faller training pilot courses and the grandfathering process is well underway and expected to be fully implemented by the end of 2007. Therefore, to assist our members with better understanding the new and grandfathering processes the following outline has been provided.

The New Chainsaw Faller Competency Program

**Level I – Chainsaw Basics** will be a three-day course meant to prepare the candidate for the falling of trees six inches in diameter or greater. Once completed, the candidate will need another 25 days of supervised cutting by a faller tutor in order to be evaluated as a certified faller. It is anticipated that there will be a maximum allowed time frame in which one must get the 25 days experience before they would have to restart the Level II course and process.

**Level II – Faller Entry Program** will be a five-day course meant to prepare the candidate for the falling of trees six inches in diameter or greater. Once completed, the candidate will need another 25 days of supervised cutting by a faller tutor in order to be evaluated as a certified faller. It is anticipated that there will be a maximum allowed time frame in which one must get the 25 days experience before they would have to restart the Level II course and process.

**Level III – Faller Evaluation** is more of a “final exam” rather than another level. Candidates must achieve a minimum grade of 75% in both the written and practical exams in order to be registered as a certified faller. This exam is conducted by a Qualified Supervisor Trainer (QST). 

**Level IV – Faller Tutor** certification is achievable if a candidate scores 85% or greater in the evaluation. Successful candidates will also be required to take a one-day training course should they wish to be registered as a faller tutor. Faller tutors are necessary for the required mentoring and supervision of those people pursuing Level III faller certification.

**Grandfathering**

For experienced fallers, grandfathering means individuals will be able to challenge the Level III Faller Evaluation. An experienced chainsaw operator is someone who has a minimum of 120 days of documented cutting/falling experience prior to July 31, 2006. Candidates must submit a completed application form and the required payment to Enform in order to receive a faller’s package, which candidates will need to be well versed in prior to their evaluation.

Several companies have found it beneficial to retain the services of a QST to give their crews a two-day (plus or minus) preparation course to better prepare them for the evaluation. Even though it gives an outside impression of QST’s “double-dipping” by being contracted to provide both educational and, evaluation services, our firm’s experience is that the QSTs have been professional and impartial throughout.

Assuming candidates are prepared to be evaluated, they will then have to arrange to be examined by a QST and will only be considered successful if they achieve 75% or greater in the written and practical exams. As above, a grade of 85% or greater will allow the candidate to pursue Faller Tutor certification, if desired.

If one does not qualify for grandfathering directly into the Faller Certification Level, but has the current chainsaw safety training and at least 25 days of cutting/falling experience logged, they may apply to enter the Level II Faller Entry Program without taking the Level I Chainsaw Basics Course.

**Deadlines**

Those companies who want their personnel evaluated under this grandfathering option will have until December 31, 2006 to reserve spots for evaluations. They then have until July 31, 2007 to register the names of those to be evaluated.

The cut-off for “grandfathered” faller evaluations is December 31, 2007.

When you consider that there are over 2,100 individuals registered for grandfathering and only 450+/- have been put through to date, it is easy to see that a supply/demand crunch exists between those who want to be evaluated and the number of QSTs available. The numbers seeking certification also include those within the slashing and seismic industries.

I encourage all who are planning to get themselves and/or their staff grandfathered to get it done as soon as possible. As the deadline fast approaches for the new standard,
there are only 20 to 30 QSTs available to perform the evaluations of the 1,650+ remaining candidates. If you want your staff certified, get it going as soon as possible. Otherwise, you could be competing with the other industries for the few available QSTs.

Commentary
Even though many arguments could, and have, been made regarding the overkill of the new Chainsaw Faller Training Program, we cannot ignore the ultimate intent of it. The safety and well-being of our staff is of paramount importance and is not something we can compromise. The idea of adversely affecting someone’s safety by allowing for dangerous and unsafe practices can jeopardize the very foundation of our professionalism.

Our Code of Ethics refers to our duty to personnel where we “help them to achieve their optimum level of contribution to society through their contribution to the profession.” I take this to mean we have a fundamental obligation towards their safe work practices, as well as their technical development and competence. After all, if they are injured they cannot very well be providing their optimum level of contribution to the profession, can they?

The new training standard is much more comprehensive and difficult compared to what the norm previously was. This we all know. It is easy to come up with 101 reasons as to why this requirement is not appropriate for what we do in our profession and why. However, it is now an industry requirement and any such argument at this time are moot.

Having the right tools for the right job must include proper training as well as the obvious hardware and technical equipment. If we do this, it should make the kind of difference that was originally intended: to simply ensure that our employees make it back safely each and every night.

Victor Hut, ALS Safety Committee Member

Mountain Pine Beetles

An unprecedented massive flight of mountain pine beetles into northwestern Alberta in late July has resulted in the highest number of mountain pine beetle infested trees ever in the province.

The most recent estimate suggests the number of infested trees in Alberta is between 800,000 and 1.5 million. Infested trees have been found in Grande Prairie, Peace River, Berwyn, Fairview, Fox Creek and Swan Hills areas. This is the first time that the beetles have been this far north and this far east from the British Columbia border.

The beetles can also be found in southern Alberta in the Crowsnest Pass and Canmore areas. The number of infested trees in this area has remained relatively stable with a current estimate of 3,500 infested trees.

The Government of Alberta is asking people who work and participate in recreational activities in the forested areas of the province to report any trees they think could be infested with mountain pine beetle by calling the Mountain Pine Beetle Hotline at 310-BUGS (2847).

Mountain pine beetles attack and kill pine trees, usually mature ones, aged 80 to 120 years old. All species of pine, including lodgepole, whitebark, jack, scots and ponderosa pine, are vulnerable. Mountain pine beetles do not attack aspen, spruce or fir trees.

Symptoms of infested trees may include pitch tubes (globs of honey coloured sap on the trunk), sawdust in the crevices of the bark and on the base of the tree, beetles (small, black and about the size of a grain of rice), entrance holes in the bark and/or fading needles.

If you suspect a tree is infested please call the Mountain Pine Beetle Hotline, toll free, at 310-BUGS.

The World of FIG
by G. K. Allred, FIG Vice-President

The International Federation of Surveyors (FIG) just concluded its XXIII Congress, in Munich Germany on October 13. The highlight of the congress which is composed of a general assembly, technical sessions and a trade fair was the election of the new President for the next four years and the new Council. Stig Enemark from Denmark was elected as president for a four-year term from 2007-2010; in the first election of a president at large in the 128-year history of FIG. Matt Higgins of Australia and Ms. Dalal Alnaggar from Egypt were elected as vice presidents for a similar term of office, with Paul van der Molen from the Netherlands being elected for a two year term as vice president from 2007-2008. Ken Allred from Canada continues as vice president until December 31, 2008. The FIG Council is composed of a president and four vice presidents.

The Congress was a huge success with over 1300 registered delegates from 100 countries. Including the 500 booth exhibition INTERGEO, there were over 19,500 persons participating in various events during the week. As such, this was the largest event in the history of FIG. The Congress also consisted of three plenary sessions and nearly 100 technical sessions with a total of over 400 technical papers.

A tight competition to hold the 2011 Working Week of FIG went to Marrakech, Morocco. The next Working Week, which is a one week mini-congress, will be held in Hong Kong from May 12-17, 2007. The XXIV Congress will be held in Sydney, Australia in April, 2010.

The International Federation of Surveyors was formed in 1878 with seven European countries as members. At the XXIII Congress in Munich, the Society of Professionals of Land Information Technologies from Georgia was admitted as the 100th member of FIG. Two further members were also added in Munich bringing the total number of member associations to 102.
My Total Station Battery Has Alzheimer's...and That's a Good Thing!!

By Arthur Dias, B.Sc.

How many times have you heard the phrase, “my battery pack is holding a memory?” Being in the battery business, this is something we hear all the time. This term is used to explain the tendency of a rechargeable battery to remember the point up to which it was discharged over several cycles, before full discharge was attained. Subsequently, the battery behaves as if this point is the point of full discharge. This is a generally misunderstood phenomenon and a term often misused to explain various battery problems. There are many scientific and theoretical explanations for why rechargeable batteries behave poorly at times. But in a practical sense, these problems can be analyzed and addressed without having to have a degree in chemical engineering. So, if your battery has “Alzheimer’s”, based on the explanation above; it’s a good thing.

“Memory effect” is essentially caused when a rechargeable battery is recharged to full capacity, then used in the field to a point where the battery never reaches full discharge before being placed on recharge again. For argument’s sake, let’s imagine a battery being a container of sugar, where you fill it up and then use what you need before refilling it again. If you constantly use only the top portion of the container and refill it with new sugar, the remaining portion you have not touched in a while begins to get stale. The same is true for a battery. The remaining charge you never allow the instrument to access, over time starts to stagnate.

Initially, the charge in a battery is at a uniform voltage throughout the cells. The voltage begins to drop immediately after removal from the charger. If all the charge in the battery is not consumed before recharging, the portion that is left unused continues to drop in voltage and becomes “stale.” Eventually, the voltage in this “stale” portion drops so low that when your instrument is finished gobbling up all the “fresh” charge, it hits this “stale” portion like a brick wall. The instrument is confronted with a sudden drop in voltage, at a level below the “low battery” indicator threshold. The battery cannot power the instrument now without being recharged again.

The only way to recover the performance of the battery is to somehow remove that “stale” charge in the battery and restore a fresh new charge. Unfortunately, some total station manufacturers have designed their instruments and chargers in a way that makes it almost impossible to correct this problem. Chargers with a “discharge” function built in may not work to correct the problem at this point either. The low voltage point of stale charge will also cause the discharge operation to cease prematurely, leaving the stale charge still in the battery. In a case like this, a battery service shop with the proper equipment can analyze the battery, remove the stale charge and solve the problem.

Trying to live with the problem will only make it worse and can actually ruin the chances of correcting the problem at all. Just like the container of sugar example, eventually this stale part will become so solid and entrenched in the battery that it will permanently ruin that part of the battery and diminish its ability to accept a usable charge again. What also appears to happen is that the portion of the battery that is able to receive fresh charge, now goes through many rapid cycles and in effect “wears out” that portion of the battery prematurely. You are now left with a container of hard-packed stale sugar at the bottom, with the top part of the container so worn out that it can barely contain the new sugar you keep replenishing it with.

Here are several things that can be done to avoid this problem. Some I am sure you have heard before, but they are still worth repeating.

1. Always fully discharge the battery each time you use it in the field. Number all your batteries and learn the run-time of each one through regular use. If you still carry enough battery power with you for the next day’s work, wait and use that all up before recharging again. Always avoid recharging any batteries that have not been fully run down.

2. At the first sign of a sudden decrease in performance, set that battery aside until returning to the office. At the office, put this problem battery back into the instrument and set the instrument on a heavy battery demand operation (like “tracking mode” measuring against a prism). Now run the instrument to the point where it shuts off on its own from a lack of battery power. Wait five minutes and repeat the procedure. Repeat this until you feel the instrument has drained as much as possible from the battery. Now put the battery on charge (preferably a slow charge, if your charger has that setting).

3. If storing the instrument away for a week or two, do not recharge the battery until the night before it is needed in the field again.

4. If storing the instrument for a month or two, or even longer, charge up the battery before storage and then once a month until the storage period is over. Every second month, fully discharge the battery before recharging.

5. Always let the battery reach room temperature before recharging. Excessively cold batteries will resist being charged and actually fool auto shut-off chargers into thinking the battery is fully recharged when in reality it is not. When the battery is not allowed to fully recharge over many cycles, you may end up with the same problem as the “memory effect.”

Within the last few years, many instrument manufacturers have switched to Nickel-Metal Hydride (NiMH) cells in their battery packs.
instead of the old industry workhorse, NiCd. The main advantage of NiMH cells is the ability to hold much more charge in the same size cell as the equivalent NiCd and they are more environmentally friendly as well. NiMH cells have also been touted as not having the memory effect problem of the NiCd cells. However, our experience has shown that this is not always the case. Although they may resist the effect from taking hold as easily as NiCds, the same maintenance procedure should be followed… always fully discharge the battery before recharging again. NiMH cells also have one big drawback compared to their NiCd counterparts - their internal resistance is higher.

The internal resistance of a cell will govern how readily it will accept a charge when applied, and how easily it will release that charge while maintaining its voltage when required to do so. Internal resistance also explains why NiMH battery packs sometimes get much warmer during recharge than NiCds. Since internal resistance is a problem that gets worse with the age of the cell for both NiCd and NiMH, designing the instrument and charger to meet these demands is a difficult balancing act, with some manufacturers having done a better job at it than others.

A NiMH charger that is designed to charge the battery in a 10 to 14 hour period will always do a better job of topping up the battery than a charger that is designed to do it in two to three hours. The internal resistance of the battery will always force the charger to apply a higher voltage during recharging to overcome the resistance. This resistance is more pronounced during a fast charge procedure than during a slow charge. Eventually the charger is forced to such a high voltage that it assumes the battery is recharged and shuts off, never recharging the battery to its full potential. As the NiMH battery gets older, the problem gets worse. It is always best, if your field working procedure allows for it, to choose a slow overnight charger cycle. Many OEM chargers for NiMH cells offer both fast and slow charge cycles. Also, chargers that monitor the internal temperature of the battery during a fast charge seem to do the best job of recharging the NiMH batteries quickly.

Another point worth mentioning is the idea of replacing old NiCd cells in a pack with NiMH cells, during a re-cell procedure. This is only recommended if you have just that one battery to run your instrument. You must also be prepared to accept that NiMH cells do not maintain original performance through as many cycles as NiCd cells. But since the NiMH cells start out with the ability to hold much more charge than their NiCd counterparts, the advantages of the NiMH cells are still something worth considering. Unfortunately, your old NiCd charger may never properly recharge the NiMH cells to their full potential because it was not designed for the different requirements of the NiMHs. Even at less than 100% performance, however, the greater capacity of the NiMH cells will generally be realized if that battery is properly maintained from the beginning. In reality though, many users will just add this NiMH battery into a mix of other NiCd batteries being carried into the field for the instrument. Our experience has found that in short order, the NiMH battery will get “lazy” and settle into a performance that is no better than if it had been re-celled using NiCd cells. The advantages of converting to NiMH cells over the original NiCd cells would be lost, not to mention, this “misfit” battery pack now has a diminished life cycle.

The final bit of advice I can give, similar to the advice we often get from our own doctor: batteries stay healthier through regular exercise on a daily basis!

Arthur Dias is a founding partner of Dias & Dias Electronics and www.batteryrevival.com. His company has been repairing battery packs worldwide for surveying equipment for over eleven years.

Arthur Dias is a founding partner of Dias & Dias Electronics and www.batteryrevival.com. His company has been repairing battery packs worldwide for surveying equipment for over eleven years.
Nothing is more troubling than another surveyor following in your footsteps and finding the original monument—the position of which you have re-established!

**Historical Background**

Since 1850, booming economies, in conjunction with increased timber and grain exports to the States and Britain, led to an expansion of railways, canals and other infra-structure. Canada, a vast country of seemingly endless vistas, was affected more than most countries by the railway fever of the Victorian era. Eager politicians pushed through a veritable number of railway charters; often incurring tremendous debt far beyond what could be handled by the infant colonies. The politicians often handed out huge concessions in Crown lands to prospective builders. Many of these prospective railroad builders turned out to be mere speculators, who never laid a foot of railway track on the ground.

Railroads were the first major innovation in land travel for many years, and proved to be effective for long distant transportation of goods and people. Following the 1848 election, legislators struggled to keep up with the social and industrial revolution around the railway development in Canada. In 1857, a movement to bring the fur trading from the Wild West to eastern Canada was initiated.

By 1860, the Grand Trunk was operating from Sarnia, Ontario to Riviere-du-Loup in Quebec, with more than 2,000 miles of railway tracks constructed.

As one could envisage, a connection between government and railroad transportation was a significant part of Canadian land tenure development in Canada’s infancy.

In most prairie townships, odd numbered sections (with the exception of section 11 and section 29) were granted to the railway companies as partial payment for construction of the railroad. Some of the lands, when not taken up by the railway companies, were later granted to private homesteaders.

The main beneficiary of land reserves, in partial payment for railway construction was the Canadian Pacific Railway (CPR). The CPR received approximately 26 million acres in main and branch line land reserves/grants from the Dominion government towards construction of railroads. Whereas, other railway companies received approximately six million acres of land grants, from the Dominion government, for the same purpose.

Railway land grants varied from one region to another within the Dominion. In some areas, fewer sections were taken up by the railway companies if the reserve lands were perceived to be unproductive (less fertile). In other areas, where the railway companies perceived the land to be better for settlement, the railways land grants would be considerably larger in area. In southern Alberta, railway land grants consisted of approximately 135 townships. Almost all reserved lands had been granted to railway companies with rail lines in the fertile southern Alberta region.
24. When a surveyor is employed to make a survey of the lands required by any railroad company for right-of-way, station grounds or other railroad purposes he shall proceed as follows:

(a) He shall make all measurements, both angular and linear on the centre line of the railway, and shall connect the right-of-way to the corners of sections, quarter sections, settlement lots or other surveyed parcels of land in reference thereto;

(b) He shall make all measurements, both angular and linear on the centre line of the railway, and shall connect the right-of-way to the corners of sections, quarter sections, settlement lots or other surveyed parcels of land in reference thereto;

(c) He shall proceed in respect of station grounds in the manner provided in the preceding paragraph, and in addition he shall plant a similar iron post at every angle in the limits of such grounds;

(d) Wherever such centre line intersects the southerly or westerly boundary of a road allowance, or where there is no road allowance, of each section, settlement lot, or surveyed parcel of land, and each such post shall have permanently marked thereon the initial letters of the words composing the name under which such railway company is incorporated, and in no case shall limits of a right-of-way be surveyed as spiral curves; [emphasis added]

(e) Whenever for any reason it is not possible to post the southerly or westerly limit of a right-of-way, such surveyor shall post the northerly or easterly limit thereof;

(f) When the lands required by the railway company as aforesaid are parts of a block or blocks as shown on a registered plan of subdivision an iron post shall be planted at each intersection of the limits of the right-of-way or station grounds with the boundaries of the said block or blocks and the position of such posts shall be connected by admeasurement with the survey of the centre line of the right-of-way and with the nearest corner of the block in which they occur;

(g) The unposted limit of any right-of-way or station grounds shall in all cases be determined on the ground by reference to the posted limit and in accordance with the measurements shown on the registered plan of such right-of-way;

(h) The limit of the right-of-way defined by iron posts as prescribed in this section shall, when a plan of the survey has been accepted and registered in the proper Land Titles Office, be the true and unalterable limit of said right-of-way, whether or not upon measurement on the ground the said iron posts are found to be in the same relative position to one another or to the boundaries of the section, quarter section, settlement lot or other surveyed parcel of land as the same are shown on the plan.

In the 1931 vintage of The Alberta Surveys Act [SA 1931 Chapter 47], the following railway survey provisions are stated:

47. When a surveyor is employed to make a survey of the lands required by any railroad company for right-of-way, station grounds, or other railroad purposes he shall proceed as follows:

(a) He shall make all measurements, both angular and linear, on the centre line of the railway, and shall make all measurements to reference posts or to connect the right-of-way to the corners of sections, quarter sections, settlement lots, or other surveyed parcels of land in reference thereto;

(b) The location and boundaries of the right-of-way shall be referenced and established in the following manner, viz.: by planting iron posts, as herein defined, driven into the ground to within two inches of the top, each post being permanently marked with the initial letters of the words composing the name of the company; such posts shall be planted by right angle offsets from the centre line, and in all cases a uniform distance of three feet within the limit of the right-of-way or station grounds they are intended to define, and on the southerly or westerly side of the centre line wherever possible, except as otherwise provided for in paragraph (e) and (g), and at every angle therein and at the beginning and end of every curve therein having a constant radius, and also at the intersection of the said intersection of the said reference line with the southern or western boundary of each road allowance, or, where there is no road allowance, of each section, settlement lot, or surveyed parcel of land: Provide that an iron post be planted at the intersection of the reference line with one boundary of each quarter section, and in no case shall the limits of a right-of-way be surveyed as spiral curves; [emphasis added]

(c) He shall proceed in respect of station grounds in the manner provided in the preceding paragraph, and in addition he shall plant a similar iron post at every angle in the limits of such grounds;

(d) Wherever such centre line intersects the southerly or westerly boundary of a road allowance, or where there is no road allowance, of a section, settlement lot or other surveyed
When a surveyor is employed to make a survey of the lands required by any railroad company for right-of-way, station grounds, or other railroad purposes, the surveyor shall proceed as follows:

(a) he shall make all measurements, both angular and linear, on the centre line of the railway, and shall make all measurements to connect the right of way to the corners of sections, quarter-sections, settlement lots, or other surveyed parcels of land in reference thereto;

(b) he shall establish the location and boundaries of the right of way by planting iron posts, driven into the ground to within two inches of the top, each post being permanently marked with the initial letters of the words composing the name of the company, and the posts shall be connected by admeasurement with the survey of the centre line of the right-of-way and with the nearest corner of the block in which they occur;

The unposted limit of any right-of-way or station grounds shall in all cases be determined on the ground from the posted reference line and in accordance with the measurements shown on the registered plan of such right-of-way;

(i) The limit of any right-of-way or station grounds as herein defined shall, when a plan of the survey has been accepted and registered in the proper Land Titles Office, fix the true and unalterable limits of said right-of-way or station grounds, whether or not upon admeasurement on the ground the iron posts marking the reference line or posted limit are found to be in the same relative position to one another, or to the boundaries of the quarter section, settlement lot, or other surveyed parcel of land as the same are shown on the plan.

In the 1970 vintage of The Surveys Act in Alberta [RSA 1970 Chapter 358], the following railway survey provisions are stated:

47. When a surveyor is employed to make a survey of the lands required by any railroad company for right-of-way, station grounds, or other railroad purposes, the surveyor shall proceed as follows:

(a) he shall make all measurements, both angular and linear, on the centre line of the railway, and shall make all measurements to connect the right of way to the corners of sections, quarter-sections, settlement lots, or other surveyed parcels of land in reference thereto;

(b) he shall establish the location and boundaries of the right of way by planting iron posts, driven into the ground to within two inches of the top, each post being permanently marked with the initial letters of the words composing the name of the company, and the posts shall be connected by admeasurement with the survey of the centre line of the right-of-way and with the nearest corner of the block in which they occur;

(h) when it is not possible to plant iron posts in the position herein set forth, to mark the limit either of the right-of-way or station grounds, an iron post shall be planted by a right angle offset from the centre line, and shall have clearly marked thereon the distance of such right angle offset from the centre line to the iron post so planted;

The unposted limit of any right-of-way or station grounds shall in all cases be determined on the ground from the posted reference line and in accordance with the measurements shown on the registered plan of such right-of-way;

(i) The limit of any right-of-way or station grounds as herein defined shall, when a plan of the survey has been accepted and registered in the proper Land Titles Office, fix the true and unalterable limits of said right-of-way or station grounds, whether or not upon admeasurement on the ground the iron posts marking the reference line or posted limit are found to be in the same relative position to one another, or to the boundaries of the quarter section, settlement lot, or other surveyed parcel of land; [emphasis added]

(c) notwithstanding clause (b) he shall plant an iron post at the intersection of the limit of the right of way with one boundary of each quarter-section, and in no case shall the limits of a right of way be surveyed as spiral curves;

(d) he shall proceed in respect of station grounds in the manner provided in clauses (b) and (c) and in addition he shall plant a similar iron post at every angle in the limits of the grounds;

(e) where the centre line intersects the southerly or westerly boundary of a road allowance, or, where there is no road allowance, of a section, settlement lot or other surveyed parcel of land, he shall first re-establish the true position of the two nearest monuments on said boundary, being on opposite sides of the centre line, and shall connect the same by a straight line so established and the centre line shall be the point of intersection shown in his field notes and plan of the survey;

(f) when it is not possible to define and post the southerly or westerly limit of the right of way or station grounds, he shall define and post the northerly or easterly limit thereof and in the manner before described in this section;

(g) when the lands required by the railway company as aforesaid are parts of a block or blocks as shown on a registered plan of subdivision, an iron post shall be planted at each intersection of the limits of the right-of-way or station grounds with the boundaries of the said block or blocks, and the position of such posts shall be connected by admeasurement with the survey of the centre line of the right-of-way and with the nearest corner of the block in which they occur;
48(1) The unposted limit of any right of way or station grounds shall in all cases be determined on the ground from the posted limit and in accordance with the measurements shown on the registered plan of the right of way.

(2) The limits of the right of way or station grounds as defined in this Act, shall, when a plan of the survey has been accepted and registered in the proper land titles office, fix the true and unalterable limits of the right of way or station grounds, whether or not upon admeasurement on the ground the iron posts marking the posted limit are found to be in the same relative position to one another, or to the boundaries of the quarter-section, settlement lot or other surveyed parcel of land as the same are shown on the plan.

The legislated requirements for boundary monumentation changed from posting along the limit of the railway boundary from the inception of the first Alberta Surveys Act in 1911-1912 to monumenting on a three-foot offset commencing in 1930, and reverted back to the posting on the boundary again in 1970. Table One summarizes various Alberta Surveys Act enactments which are pertinent to railway boundary posting requirements.

Some history on Railway Plans

In 1913, R.W. Cautley, a surveyor employed by the Land Titles Office in Edmonton expressed the following opinion for railway survey plans:

“Railway Plans, being plans of surveys of railway right of way on which descriptions of land, and titles to the same, are based. Railway plans were called into existence by the provisions of various railway acts which have been passed by the Dominion and provincial legislatures. The object of these plans, as plainly contemplated in the said acts, is to give public notice of intention on the part of the promoting railway companies, first to the government whose approval and sanction are necessary before the privileges granted to the company under its charter can be given effect to in respect of the proposed line, and secondly to the owners of all land through which the line passes. With a view to promoting the second of these objects, it is provided that railway plans shall be deposited in the land registry office for the district in which the land affected occurs. It followed that, because these plans were of record in the local land registry offices, and because there was no other available base of description that was of record, they came to be generally recognized and accepted as a base of description for title to railway lands. Unfortunately, the class of plans made under the provisions of the railway acts and approved by those who administer the said acts as being sufficient for the purposes thereof, lack the essential characteristics which any plan intended to be used as a base of description for land titles should possess. In the first place, such a railway plan is only a plan of survey, insofar as the actual right of way is concerned; in respect to the land boundaries shown on such a plan it is merely a sketch, most of the ties shown on land boundaries, from the intersection of the centre line of the right-of-way to alleged corners of the parcel of land, being derived from calculation based on the assumption of a theoretically perfect original survey, or having been carelessly and incorrectly made. The serious feature of the above is that the survey of the right-of-way itself is not posted or marked on the ground in anyway, and its existence as a matter of record depends on the spurious ties given on plan.

In the second place, the survey represented by such a railway plan is very rarely made by an authorized surveyor, but generally, by a railway engineer whose whole interest in the work is centred in the actual right-of-way and who cares nothing whatever about the land connections thereof.

In the third place, the government officials who pass upon railway plans can only require that they shall fulfill the conditions prescribed in the railway acts, which do not contemplate their being used as a basis of title.”

From R.W. Cautley’s comments, it is not difficult to envisage the ambiguity from the railway plans caused to the surveyor as earlier as 1913. It was further suggested by other experienced surveyors that there could be more than one plan representing the same right-of-way. Due diligence will have to be exercised when researching and ordering plans of the railway that one is working with.

Current Railway Boundaries Re-establishment Standards

Within the current provisions of the Surveys Act [RSA 2000 Chapter S-26] there is no distinction between monumenting a regular right-of-way and a railway right-of-way. However, Part D, Section 4.8 of the Manual of Standard Practice (MSP) of the Alberta Land Surveyors’ Association stipulates the survey of a new railway right-of-way as follows:

4.8.1 When a new railway right-of-way is surveyed, and the track has been constructed prior to the survey, the centre line of actual track shall be related to the right-of-way survey, and such relationship shown on the plans of survey.

4.8.2 Any spiral curves existing on the centre line of track of a new railway shall be replaced with a circular curve in accordance with Part D, Section 4.11 for the purpose of posting the railway limits.

[Author’s note: Readers interested in Railway Spiral Curve Replacements can consult Mr. Fred Rogers’, ALS comprehensive thesis entitled “A Historical Study of the Railway Spiral Replacement Curve in Alberta”, which can be found in the ALSA Library.]

I was questioned by an articled student as to whether an intersection post should be placed on a three-foot offset line of an old railway right-of-way, or should it be placed along the boundary of the railway plan. An examination of the current legislation will provide the answer.

Section 45 of the Surveys Act stipulates statutory monument placement as follows:

45(1) If a surveyor does a survey for
(a) mark the positions of the boundary lines to be established by placing monuments 
(i) at every change of direction and the beginning and end of every curve, and 
(ii) at every intersection of the boundary lines with every surveyed boundary of the parcels affected by the new survey, and

(b) make all measurements necessary to show the positions of the monuments placed and the boundary lines to be established, relative to the existing surveyed boundary lines of the parcels affected.

(2) For the purposes of subsection (1)(a)(i), all curves shall have a constant radius.

(3) \[...\]

(4) All the boundary lines surveyed and established in accordance with subsection (1) shall be defined by the monuments placed for that purpose as shown on the plan of survey registered at the Land Titles Office or filed at the Metis Settlements Land Registry, whether or not the dimensions or areas expressed on the plan are found by re-measurement to be different.

With reference to the above Section 45, and its provisions, it is my opinion the intersecting monuments should not be placed on the offset line of an old railway but should be placed on the boundary of the railway affected by the new survey.

In addition, under the current Manual of Standard Practice (MSP) Part D, Section 4, the definitions of “location plans” and “as construction plans” are as follows:

4.9 Existing rights-of-way based on “location” plans may or may not correspond to actual rail location since “as located” surveys were conducted prior to rail construction. If it is found that the existing centre line of rail agrees reasonably with the centre line as shown on the plan, then it is likely that this is the best evidence of the original survey line. If not, an alternative procedure appropriate to the circumstances may be indicated.

4.10 Existing rights-of-way based on “as constructed” or “as built” surveys will generally refer to centre line of rail existing at the time of survey and ownership is based upon this centre line location. Therefore, the centre line of rail is usually the best evidence of the original survey line provided that no movement has occurred since the original survey.

With respect to re-defining an existing railway right-of-way, the current MSP states:

4.8.4 When establishing the location of a railway right-of-way based on an existing centre line of track, an iron post shall be placed to define the tangent for subsequent use. The iron post shall be located at least 500 metres distant from the survey being conducted, or near the next point of curvature, whichever is nearer. The post shall be tied to the survey being conducted.

In terms of marking inscriptions on the re-established monuments of an existing railway right-of-way, the current MSP Part D Section 4.7 only deals with post markings for road surveys. It may be prudent to follow the same logic as in MSP Part D, Section 4.7 for road surveys

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Table One: Surveys Act Enactments Pertinent to Railway Boundary Surveys in Alberta

[Reference: Alberta Law Foundation Website: www.ourfutureourpast.ca/law]

<table>
<thead>
<tr>
<th>Year of Statute</th>
<th>Title of Statute (section/s governing railway surveys)</th>
<th>Date assented</th>
<th>Posting</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA 1911-12</td>
<td>Chapter 13 The Alberta Surveys Act (s. 24)</td>
<td>February 16, 1912</td>
<td>on the railway boundary</td>
</tr>
<tr>
<td>RSA 1921</td>
<td>Chapter 61 An Act to amend The Alberta Surveys Act (s. 1)</td>
<td>April 19, 1921</td>
<td>on the railway boundary</td>
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<tr>
<td>RSA 1922</td>
<td>Chapter 141 The Alberta Surveys Act (s. 24)</td>
<td>January 19, 1923*</td>
<td>on the railway boundary</td>
</tr>
<tr>
<td>RSA 1930</td>
<td>Chapter 59 An Act to amend The Alberta Surveys Act (s. 2)</td>
<td>March 21, 1930</td>
<td>at a 3-foot offset within the limit</td>
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<td>SA 1931</td>
<td>Chapter 47 The Alberta Surveys Act (s. 47)</td>
<td>March 28, 1931</td>
<td>at a 3-foot offset within the limit</td>
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<td>RSA 1942</td>
<td>Chapter 75 The Alberta Surveys Act (s. 47)</td>
<td>February 15, 1943*</td>
<td>at a 3-foot offset within the limit</td>
</tr>
<tr>
<td>RSA 1955</td>
<td>Chapter 327 The Alberta Surveys Act (s. 47, s. 48)</td>
<td>July 1, 1957*</td>
<td>at a 3-foot offset within the limit</td>
</tr>
<tr>
<td>RSA 1970</td>
<td>Chapter 106 An Act to amend The Alberta Surveys Act (s. 2)</td>
<td>April 15, 1970</td>
<td>on the railway boundary</td>
</tr>
<tr>
<td>RSA 1970</td>
<td>Chapter 358 The Surveys Act (s. 47, s. 48)</td>
<td>March 1, 1971*</td>
<td>on the railway boundary</td>
</tr>
<tr>
<td>RSA 1980</td>
<td>Chapter S-29 The Surveys Act (s. 47, s. 48)</td>
<td>January 1, 1982*</td>
<td>on the railway boundary</td>
</tr>
<tr>
<td>SA 1987</td>
<td>Chapter S-29.1 Surveys Act (s. 41)</td>
<td>June 9, 1988</td>
<td>on the railway boundary</td>
</tr>
<tr>
<td>RSA 2000</td>
<td>Chapter S-26 Surveys Act (s. 45)</td>
<td>May 5, 2000</td>
<td>on the railway boundary</td>
</tr>
</tbody>
</table>

[*Note - Source of dates for statute proclamation: University of Alberta Law Library]
Case Study No. 30: Removal of Survey Monuments

The purpose of this article is purely educational. Opinions expressed herein are those of the author. The author acknowledges Dr. Alec McEwen’s permission to quote his case summary of R. v. Porter published in Geomatica issue Vol. 56, No. 4, 2002.

This article supplements my June 2006 ALS News SPR Corner article entitled Scrutinizing Survey Monuments. There are two very significant provisions in the current Criminal Code of Canada dealing with unlawful removal of survey monuments. This article captures these two provisions and highlights their importance, through a review of a recent court decision in British Columbia wherein a man unlawfully tampered with survey monuments, resulting in a jail term for doing so.

Current Statutes With Respect to Removal of Survey Monuments

As I stated in my June 2006 case study, landowners having knowledge and/or witnessed a third party other than a land surveyor moving or removing survey monuments should report this activity to the law enforcement authority with proper supporting information.

The current provisions of the Criminal Code [RSC 1985 Chapter C-46] specifically refer to the act of unlawfully removing or tampering with survey monuments as “interfering with boundary lines.” These are legislated under Section 442 and Section 443 of the Criminal Code respectively, wherein it states:

442. Every one who willfully pulls down, defaces, alters or removes anything planted or set up as the boundary line or part of the boundary line of land is guilty of an offence punishable on summary conviction.

443. (1) Every one who willfully pulls down, defaces, alters or removes

(a) a boundary mark lawfully placed to mark any international, provincial, county or municipal boundary; or

(b) a boundary mark lawfully placed by a land surveyor to mark any limit, boundary or angle of a concession, range, lot or parcel of land, is guilty of an indictable offence and liable to imprisonment for a term not exceeding five years.

(2) A person who is not a surveyor and knowingly has in the person’s possession, not for any lawful purpose in connection with a survey of land in Alberta, any monument intended, or apparently intended, to be used for the purpose of any survey, or to mark any limit, boundary or angle, is guilty of an offence.

(3) A person who, without the written permission of the Director, pulls down, alters, defaces or removes any monument or survey control marker placed by a surveyor in carrying out the surveyor’s duties under this Act is guilty of an offence and liable to a fine up to $10,000.

Legal Definitions Within the Above Legislation

The followings are some definitions excerpted from the Black’s Law Dictionary (Fifth Edition):

Indictable—Subject to being indicted. An offence, the nature of which is proper or necessary to be prosecuted by process of indictment. Indictable offences embrace common law offences or statutory offences the punishments of which are infamous.

Indictable offence—Any criminal offence for which a person may properly be indicted or complained of.

Offence—A felony of misdemeanor; a breach of the criminal law. The word “offence,” while sometimes used in various senses, generally implies a felony or a misdemeanor infringing public as distinguished from mere private rights, and punishable under the criminal laws, though it may also include the violation of a criminal statute for which the remedy is merely a civil suit to recover penalty.
(Author’s note: the dictionary further goes into classifications of offence, the definitions of continuing offence, criminal offence, Joint den of offence, same offence, and second offence within the same definition.)

**Case Law With Respect to Removal of Survey Monuments**

In the British Columbia case *R. v. Porter* the accused, Mr. Norman Porter, moved a statutory survey monument and forged a building location certificate to show the non-existent of an encroachment (author’s note: a building location certificate in BC is similar to Alberta’s real property report). The court sentenced Mr. Porter to one year imprisonment for his wrong doing.

The citation for the unreported case of *R. v. Porter* is Docket number 102699D in the Victoria Supreme Court Registry, heard February 2, 2001. The court transcript, in its non-digital format, is a 47 page document.


In the *R. v. Porter* (unreported) case, Norman Porter, owner of Strata Lot 4, Strata Plan 469, wished to build a garage on the east side of his lot. He believed, mistakenly but honestly in the court’s views, that an old fence line marked the boundary between him and his neighbour on Lot 3, Plan 18836.

Mr. Porter, received a building permit from the Municipality of Central Saanich, BC in November 1996, based upon his plan showing the location of the proposed garage. The court considered Porter to have the training, background and skill to prepare the construction drawing. Porter then engaged Mr. St. Pierre, a farmer, to pour the concrete foundation, set the building corners and undertake some other parts of the construction without the benefit of the professional service of a land surveyor.

Mr. Porter pointed out the fence corner and an old iron pipe to the contractor, and also gave him a copy of a plan, dated 1967, showing the limits of his property at that time. Porter had subdivided his property into Lot 3 and Lot 4 in 1989. Lot 4, which he retained, had an initial frontage of 60.70 metres. During the subdivision survey in 1989, Mr. Orrico, a land surveyor, shifted Porter’s southwest corner by 4.35 metres west, to accommodate a structure, and marked the new location with a survey monument. None of this recent information was supplied to Mr. St. Pierre, even though Porter apparently expected St. Pierre to ensure that the garage was built on his land. The construction proceeded in accordance with the building permit, but no measurements or calculations were made to determine accurately the location of the garage. The municipal inspector, responding to an inquiry from the owner of Lot 3, respecting the garage’s possible encroachment onto his land. The inspector questioned Porter, who in turn retained Orrico, the original surveyor, to carry out a survey. Mr. Orrico prepared a plan for Porter, dated November 14, 1996, which confirmed that the garage encroached on Lot 3. Mr. Orrico later testified that Porter had requested that he not give a copy of the plan to anyone else.

A second plan, also dated November 14, 1996 and purporting to be made by Mr. Leonard Schofield, a commissioned land surveyor, showed Porter’s garage to be located entirely within his property. No person named Leonard Schofield was at that time, or had ever been, a British Columbia Land Surveyor. Except with respect to the garage location, the two plans were virtually identical. Both the municipality and the owner of Lot 3, upon being presented with the Leonard Schofield plan were satisfied that the garage did not encroach. However, neither the municipality nor the land owner of Lot 3 were aware of the original plan prepared by Mr. Orrico existed at the time.

In July 1997, the owner of Lot 3 sold his property to Mr. Henderson who decided to fence his boundary and retained Mr. Claxton, a commissioned British Columbia Land Surveyor to establish the property line. In January 1998, Claxton discovered that the survey monument intended to mark the southeast corner of Porter’s property was too far east. Mr. Claxton found no monument at the true corner. Both the Claxton and the Orrico plans agreed with respect to the boundary line location and the garage encroachment, and as a result the Leonard Schofield’s plan came into question.

Mr. Claxton returned to the site in September 1998 to mark the actual southeast corner of Lot 4. During the survey he found the corner now marked by a survey monument, whereas the monument he had previously discovered 3.7 metres to the east of the corner no longer existed in that location. The evident removal and replacement of the monument together with a comparison between Orrico’s and Leonard Schofield’s plans, led to the criminal charges against Porter under the *Criminal Code*.

The four counts of indictment against Mr. Norman Porter were fraud, forgery, unlawful removal of a boundary mark, and uttering a false document. Honourable Mr. Justice Melvin dealt in turn with each of those counts.

Fraud, under section 380 of the *Criminal Code* means to deprive by deceit. Deprivation may be satisfied by prejudice to the victim’s economic interest, but actual economic loss is not necessary. In the Porter case, the subject of fraud constituted the triangular sliver of land, lying between the true boundary and the false boundary shown on the Leonard Schofield plan.

Forgery, under section 366 of the *Criminal Code*, means it is committed by a person who makes a false document, knowing it to be false, with the intent that it be used or acted upon as genuine to the prejudice of another person. In the Porter case, the building location certificate, allegedly made by Leonard Schofield, a non-existing British Columbia Land Surveyor, was the false document.

Removal of a boundary mark, under section 443 of the *Criminal Code*, means the willful removal of a boundary mark lawfully placed by a land surveyor to mark a limit,
boundary, or angle of land. The boundary mark in question was the one placed at the southeast corner of Porter’s property.

Uttering a false document, under section 368 of the Criminal Code, is committed when a person, knowing that a document is forged, uses, deals with or acts on it, or causes or attempts to cause any other person to use, deal or act on it, as if the document were genuine. In this particular case, the Leonard Schofield plan represented a false document.

After reviewing all the evidence, in March 2001, the court sentenced Porter to one year’s imprisonment. His appeal against sentence was dismissed on June 14, 2002. The British Columbia Court of Appeal, Honourable Mr. Justice Finch suggested that Porter could have sought the appropriate legislated process when he discovered the garage encroachment. It was pointed out that, upon an application made under Section 36 of the Property Law Act [RSBC 1996 Chapter 377], the Supreme Court of British Columbia may at its discretion, and subject to the payment of compensation, grant an easement over land encroached upon by a building or fence, or vest title to such land in the encroaching owner.

Conclusion

A similar provision in Alberta under Section 69 of the Law of Property Act [RSA 2000 Chapter L-7] would allow for encroachment of a similar nature to be resolved as follow, wherein this provision states:

69. (1) When a person at any time has made lasting improvements on land under the belief that the land was the person’s own, the person or the person’s assigns
   (a) are entitled to a lien on the land to the extent of the amount by which the value of the land is enhanced by the improvements; or
   (b) are entitled to or, may be required to retain the land if the Court is of the opinion or requires that this should be done having regard to what is just under all circumstances of the case.

(2) The person entitled or required to retain the land shall pay any compensation that the Court may direct.

(3) No right to the access and use of light or any other easement, right in gross or profit à prendre shall be acquired by a person by prescription, and no such right is deemed to have ever been so acquired.

While moving or removal of a survey monument is a criminal offence, it is probably not commonly known to the general public that this is the case. It is the responsibility of all land surveyors to educate the clients, neighbours, and public at large.

The Alberta Land Surveyors’ Association published a very useful guide entitled “I just built a fence! I destroyed survey evidence! A practical guide to survey markers for the homeowner, the handyman and the contractor”. Which is available at the ALSA website www.alsa.ab.ca.

The loss of Mr. Norman Porter’s freedom and liberty may seem harsh. However, it was the court’s decision for the preservation of land tenure is fundamental to maintaining the order of land and property rights.

As I mentioned before in my June’s 2006 article, land surveyors are the only persons permitted by law to survey land and determine or establish property boundaries as prescribed by law. The physical movement of a survey monument or boundary marker does not necessarily mean that a boundary is moved without the proper application of the law towards boundary adjustments. Land surveyors are trained to detect these movements and be able to re-establish the property corners and boundary positions at their original locations with confidence.

Hey Mr. Property Owner, think again before contemplating moving or removing a boundary marker!
guardpost
by Blaine Benson, ALS

We are well into Phase 3 of Systematic Practice Review. It has been over three years since Council approved the Phase 3 Framework Document on August 28, 2003. Now that we are past the halfway mark of the five-year term for Phase 3, it is a good time to start thinking about what lies ahead.

I believe some changes to the program need to be considered, both in the short-term and the long-term. In the short-term, it appears we will not complete all Phase 3 reviews in the allotted five-year time frame. Approximately 40% of the total files to be reviewed have been opened. Of those, about half, or 20% of the total have been completed.

In my opinion, the main reason for this is the increasing number of practitioners. When Phase 2 was initiated in 1998, there were approximately 260 active members and 73 articled students. When Phase 3 was initiated in 2003 there were approximately 299 active members and 67 articled students. There were also 16 affiliate members, who through the Mutual Recognition Agreement signed in 2001 were pursuing their commission as an ALS. According to the 2006-2007 Annual Register of Members (July 2006), there are 344 active members, 79 articled students, and 21 affiliate members. The number of articulated students has remained relatively constant over this period, but the number of active members increased 15% from the start of Phase 2 to the start of Phase 3. A further 15% increase has occurred since the start of Phase 3 to today.

Since the beginning of Phase 2 in 1998, the Association has experienced an approximate 32% increase in active members. Staffing levels for SPR have not changed throughout Phase 2 and Phase 3. Adding more SPR staff might be part of the solution. But if the decision was made to add additional staff,...the process of going through an actual SPR provides an opportunity to have your practice evaluated with respect to governing legislation and the Manual of Standard Practice.

changes would have to be made at the Board level to handle the increased volume of reports. It would be difficult for the Board to review additional files without increasing the number of members, the number of meetings, or changing the current review process.

These are challenges that the PRB, in conjunction with Council, must address in the short-term. In the long-term, it is not too soon to start thinking about what happens after Phase 3.

Towards the end of Phase 1, a SPR External Evaluation Report was prepared at the request of Council. It was to examine how well Phase 1 achieved its objectives; and, how effectively, efficiently, and economically these objectives were achieved (how successful was the SPR process). The following is found within the concluding comments: “The Board is convinced that corrective actions undertaken by practitioners and the ongoing SPR process will result in improvement in future findings. This is already borne out in the findings of follow-up reviews conducted to date. It is a goal of the SPR program to identify root causes of deficiencies and assist practitioners in improving quality control procedures.” An evaluation report was not prepared for Phase 2.

I believe Council should consider an external evaluation report for Phase 3 to assist in deciding what Phase 4 may look like. A lot of data exists and a certain amount of analysis and comparisons can be done.

With three sets of available data, a comprehensive review would hopefully answer a number of questions. The question at the top of the list should be, is SPR working? In my opinion, the answer is yes, at least for the majority of practitioners. The quick test of whether or not SPR is working is to look at the scores of an individual practitioner over the three phases. If improvement is evident, it could be argued that SPR is working.

On the other hand, if scores have not improved over the three phases, is this evidence that SPR is not working? This is a harder question to answer, but one that we can not turn away from. The Phase 1 Evaluation Report noted that the Board was convinced that practitioners had taken corrective actions and improvements in future products would be evident.

This has proven to be true with many practitioners as evidenced by their scores in Phase 2 and Phase 3. But what if for a few practitioners this is not the case and their scores have not improved. Does this indicate unskilled practice or unprofessional conduct? As a Phase 4 Framework document is assembled, I think it will be important to keep these practitioners in mind. For them, a different examination process may be necessary.

Alternatively, practitioners that have a record of above average scores or have shown improvement through each phase could be dealt with differently. Perhaps they should not be subject to the same degree of examination.

There are many similarities between the Phase 2 and Phase 3 Framework Documents which govern the SPR process. Of particular note is that both phases were assigned a term of five years.
The differences include an exemption in Phase 3 for non-practicing members and Alberta land surveyors employed by government agencies or educational institutions, assuming these individuals have not authored any products. Another difference in Phase 3 includes the option for the PRB to direct a practitioner to bear any costs associated with remedial action or other actions which may result from the findings in a report. This has resulted in practitioners being ordered by the Board to attend seminars at their own expense. One other difference worth noting concerns the educational component of SPR. In the Phase 2 Framework Document, SPR staff was directed to dedicate up to one-third of their time to identify causes of deficiencies and assist in the development of corrective educational measures to address those causes. In the Phase 3 Framework Document, the specific time requirement has been removed. The educational component is still addressed, however, by noting that SPR staff is to develop and implement educational measures that may address deficiencies discovered. Further, SPR staff is encouraged to provide informal advice of an educational nature to practitioners upon their request.

Regardless of what SPR may look like in the future, I believe much has been accomplished over 13 years and three phases. PRB Interpretation Bulletins, Guardpost articles, and SPR case studies have helped guide numerous practitioners over the years, including myself. As well, the process of going through an actual SPR provides an opportunity to have your practice evaluated with respect to governing legislation and the Manual of Standard Practice. As noted earlier in the description of the framework documents, SPR is to be educational in nature and in my opinion this must continue to be at the cornerstone of SPR, regardless of how the program evolves.

**Food For Thought**

With reference to Section 45 of the Surveys Act, it is my opinion that the legislation requires clarification respecting the intersecting requirement, for the three foot offset monumented railway boundary. Since a railway surveyed and monumented on a three foot offset line is not in fact surveyed on its boundary line, Section 45(1)(a)(ii) does not strictly apply. It is my opinion that the practitioner monument these intersections by placing one post at the intersection of the railway boundary, and show calculated information (such as bearings and distances) to the, three foot offset boundary, centreline, and opposite railway boundary.

In terms of establishing or re-establishing an old or existing railway right-of-way boundary, whether it is a posted, as located, or as constructed survey it is always prudent to base the survey on the centreline of the right-of-way as per the MSP, prior surveys acts and learned land surveyors. As suggested during the seminar, railway tangents and curves were measured along the centreline of the railway; whereas the boundaries were delineated with offsets, with different radii and different arc lengths. The adjacent boundaries were not usually surveyed, but rather calculated in reference to the survey along the railway’s centreline. As a result, the railway right-of-way boundary dimensions were subject to calculation errors. As such when one is determining a railway boundary, one must be cognizant of the manner of the nature of the centreline survey and of the year when the railway survey was performed, and make use of centreline information accordingly.

Always look for monuments at or near the fence along the boundary of the right-of-way first. Pay attention to the year of the survey; the monuments you think disappeared might be at a three foot offset location. Read the legend of the plan carefully. Almost in all instances, clues can be found in the title block and/or the legend of the railway plan.

**Fences themselves, can assist in retracing the original boundary.**

Fences themselves, can assist in retracing the original boundary. The fencing contractors would have used the centreline of track to align themselves for fence construction purposes. If you suspect the original track has been moved, or there was no track at all at the time of your survey, use the centreline of the railway grade to determine where the boundary might have been. Dig for traces of the fence post butts if you suspect that the fences had been wiped out by fire.

When measuring and calculating for railway re-establishment, one must be cautioned that all chainages shown on a railway plan are referred to the centreline dimensions. One must be certain of the railway width to be applied in order to get back to the original boundary of the right-of-way. Again, the title block or the legend of the plan often contains the width of the railway right-of-way.

As Mr. Bruce stated at the seminar, “those split cedar fence posts last a long time.” The evidence you are looking for may be there, look carefully, search thoroughly, ask questions, and investigate every minute detail. Remember the Doctrine of Original Monumentation—original evidence of the boundary governs, exhaust all effort before you make a determination and express an opinion of “Found No Mark.” Nothing is more troubling than another surveyor following in your footsteps and finding the original monument - the position of which you have re-established!
So Help Me God

One of the difficulties facing newly commissioned surveyors—especially those working for long-established companies with plenty of senior staff—is maintaining professional authority. Among non-professional staff, there can exist a lack of understanding about professional responsibilities and this can put tremendous pressure on new land surveyors involved in professional matters.

A surveyor’s integrity depends on the influence he or she exercises over those who assist him. His professionalism is reflected by the thorough and concise work of his field staff, by the diligence of his research staff, by the aesthetics of his drafting staff and by the health of his client relations as expressed by his administrative staff.

Professional supervision of support staff is the key to protecting the interests of the public.

Unlike support staff, the surveyor has taken an oath, reprinted here:

*I do swear that I will diligently, faithfully and to the best of my ability, execute according to law the office of land surveyor; and that I will, as an Alberta land surveyor, conduct all surveys faithfully and to the best of my ability, giving due consideration to the lawful rights of all persons; I will accurately locate and record all evidence of boundary monumentation truly and accurately to the best of my ability, I will measure and record all data truly without prejudice either toward or against any land owner, but in all things conduct myself truly and with integrity; maintaining and upholding the law and the interests of the public.
So help me God.

Professional supervision of support staff is the key to protecting the interests of the public. In certain circumstances, a new surveyor may feel he is not afforded the trust and respect he needs in order to ensure that his impartiality and careful judgment are apparent in his work. He must remain alert so that influence from non-professional staff does not usurp his own. As such circumstances arise, the responsibility falls to his peers and to corporate management teams to preserve an environment of professionalism and respect.

When faced with such situations, re-reading the oath of office can go a long way toward reclaiming a sense of professional authority.
Marketing for the Future of Land Surveying

On the eve of our 100th anniversary, we are facing changes to the landscape of our profession that could result in turbulent times ahead for our industry. The shift relates to the labour force and our ability to attract future professional land surveyors—the professionals we need to continue the essential work we have so diligently promoted in the last century.

As an Association and as professionals, we must awaken the public to these concerns by informing everyone of why it is imperative to have land surveyors today and in the future. We must not become complacent and believe that legislation will always be in place to protect our profession. The British Columbia-Alberta Trade, Investment and Labour Mobility Agreement (TILMA) will take effect on April 30, 2007. Breaking trade barriers and increasing labour mobility are major concerns that TILMA is earnestly addressing.

Some of the initiatives that the Public Relations Committee has been working on to proactively address key public concerns are brochures that outline the following key topics:

- Understanding Easements and Rights-of-ways
- Real Property Reports
- Alberta's Subdivision Process

Designed to help the public understand what we do and why we do it, these brochures are accessible on the ALSA website (www.alsa.ab.ca/surveyors.htm). It is a good idea for practitioners to distribute these brochures to clients to help them understand the importance of our contributions.

We need to continually prove to the public that we are essential to protecting their interests. Governments run on votes. If people do not understand why we are essential, government may view our profession as a barrier that imposes unnecessary restrictions on process.

The Public Relations Committee has also been very active in helping bring the next generation of land surveyors into schools and into our profession. A newly-created brochure distributed to high schools promotes students to choose land surveying as a profession. Other initiatives include a high school math contest, participation at career days at various schools and the expansion of our scholarship program.

As a new member of the Public Relations Committee, I am very impressed with the dedication and hard work shown by the members. It is nice to see that we have strong involvement in government, education and the public. Marketing our profession to ensure that public opinion will be on our side will be critical in the future. It will also be critical to market our profession to current and future students to ensure that we will have land surveyors to carry on the work so important to our province and industry.
The Surveys and Technical Services Section of Alberta Sustainable Resource Development is working on several initiatives designed to improve and update our services to you and all Albertans.

Director of Surveys Approves and Confirms Official Surveys

Since June 1, 2006, the Director of Surveys has approved and confirmed four official settlement plans in accordance with Section 33 of the Surveys Act. Two of the settlement plans are located within the Town of Grande Cache and were registered at the Land Titles Office as Plan Numbers 0625887 and 0625917. The other two settlement plans were prepared for the purposes of the Fort McKay Treaty Land Entitlement Project. One is located in the Numur/Gardiner Lakes area and was registered as Plan Number 0623455. The other is located near Fort McKay and registered as Plan Number 0623841.

Sustainable Resource Development Gets Organizational Tune-up

On April 20, 2006, in order to improve integration and collaboration across divisions, Sustainable Resource Development organized its line divisions according to three core business areas—Forestry, Lands, and Fish and Wildlife, under eleven regional areas and several supporting branches in Edmonton.

Forestry Division—Cliff Henderson, Assistant Deputy Minister
- Smoky, Foothills, Lesser Slave, and Woodlands areas
- Forest Protection, Forest Management, Forestry Research and Development, and Business Services branches

Lands Division—Craig Quintilio, Assistant Deputy Minister
- Clearwater, Prairies, and Southern Rockies areas.
- Land Dispositions, Integrated Land Management, Rangeland Management, and Business Services branches.

Fish and Wildlife Division—Ken Ambrock, Assistant Deputy Minister
- Upper Hay, Peace, Waterways, and Lac La Biche areas.
- Fisheries Management, Wildlife Management, Enforcement Services, and Business Services branches.

Finance and Administration Division—Stew Churlish, Assistant Deputy Minister
- Finance, Resource Information Management, Central Administration and Information, Communications and Technology branches.

The Surveys and Technical Services Section, including the Director of Surveys office resides under the new Land Dispositions Branch within the Lands Division.

Ron Cote, ALS Retires

On November 24, 2006, after 35 years and six months, Mr. Ron Cote, ALS retired from the Director of Surveys office. Ron has worked with five different Director of Surveys' and amassed a wealth of survey knowledge and experience. After a short break, Ron will return to the office and provide consulting services to the Director of Survey. Congratulations on your retirement Ron.

Acting Manager Appointed

Mr. Geoff Banham, P. Eng. was appointed acting program manager of the Land Surveys unit. Geoff is a University of Calgary Geomatics Engineering graduate and has several years experience as project leader of the Geodetic Control unit. Congratulations on your new acting position Geoff.

Paper Plans No Longer Accepted

Currently, surveyors continue to submit paper prints of amended interim or final plans to the Technical Services unit. However, since August 2005, with the introduction of digital plan submissions, processing of paper plans has been discontinued. Surveyors are requested to stop sending paper plans to Technical Services.

In order to have an amended plan properly associated with a disposition, the plan must be processed through the Plan Confirmation Service (PCS) and an ‘amendment form’ must be submitted and processed through the Electronic Disposition System (EDS). Surveyors are encouraged to inform their clients about the digital plan requirements.

Disposition Plan Requirements Updated on Web Site

On November 10, 2006 the Disposition Plan Requirements document was updated and posted on the department web site. The document identifies when sketch and survey plans are to be submitted when applying to use public land. The most notable change is effective April 2, 2007, when Department Reservations (DRS), Gas Co-op pipelines (PLA), and Rural Electrification Association powerlines (REA) will have to be surveyed and monumented with statutory iron posts and marker posts.

Surveyors are encouraged to review the document, which can be found at the web site www.srd.gov.ab.ca/land/m_li_planinfo_req.html
University of Calgary

Dr. Naser El-Sheimy appointed Head of the Department of Geomatics Engineering

I am pleased to announce that Dr. Naser El-Sheimy has been appointed Head of the Department of Geomatics Engineering for a five-year term effective January 1, 2007. Naser’s success in research and teaching, along with his many leadership roles, will undoubtedly serve the Department and the Schulich School of Engineering well during the upcoming years!

I would like to thank Dr. Susan Skone for being acting head for the past several months. She has done an excellent job and is to be commended for her hard work and diligence on many important issues.

Please join me in congratulating Naser on this appointment.

DR. M. ELIZABETH CANNON, PENG, FCAE, FRSC

Geomatics at University of Calgary receives $900,000 in Federal Funding

Western Economic Diversification Canada announced a $900,000 investment for research and development of three new leading-edge Global Navigation Satellite Systems (GNSS) at the University of Calgary’s Schulich School of Engineering.

“Canada’s new government is strongly committed to supporting innovative projects that maintain and strengthen our position as world-class leaders in the science and technology sector,” said Carol Skelton, Minister of National Revenue and Western Economic Diversification Canada. “This project will foster development of a community-based cluster industry which will enable Alberta to attract more international investments and highly-skilled professionals.”

Professor Gérard Lachapelle Receives Fellowship from the Royal Institute of Navigation

Professor Gérard Lachapelle, CRC/iCORE Chair in Wireless Location, was elected Fellow of the Royal Institute of Navigation during the Annual General Meeting of the latter in London in recognition of his fundamental work related to satellite-based navigation. The award was presented by His Royal Highness the Duke of Edinburgh, Patron of the Institute.

University of New Brunswick

Faculty of Engineering Awards Evening

On October 17, the Dean of Engineering, Dr. Dave Coleman, hosted the 6th Annual Engineering Awards Evening. Three GGE students received awards. Alex Snyder received the Sir George E. Foster Scholarship, Erin Grass received the Gottfried Konecny Survey Award, and Ivan Detchev received the Brenda Claire Sharpe Memorial Scholarship. Congratulations Alex, Erin and Ivan.

The Heron’s Arctic Adventure 2006

UNB’s premier research vessel, the CSL Heron, made a successful trip to the Canadian Arctic this year hitching a ride on the side of the CCGS Amundsen, Canada’s 100 metre research icebreaker. The Amundsen left port in Quebec City on August 22nd, 2006 and was expected to return on November 10th, 2006. The trip was divided into two six week legs. Steve Brucker, Ian Church, Jonathan Beaudoin (last four weeks of leg) and John Hughes Clarke (first two weeks of leg) manned the first leg of a journey though the Northwest Passage ending in Kugluktuk, Nunavut. Jason Bartlett, Doug Cartwright and Pim Kuus are currently enjoying the second leg which started in Kugluktuk, went into the Beaufort Sea and they are now returning through the Northwest Passage.

UNB Makes Its Mark at Navigation Conference

The University of New Brunswick was well represented at ION GNSS 2006, this year’s Institute of Navigation global navigation satellite systems meeting, which was held in Fort Worth, Texas, during the last week of September. Four faculty members and seven graduate students attended the meeting, the best-ever turnout for UNB.

A total of nine papers on various topics related to GPS were presented by UNB authors - quite an accomplishment considering the high-powered nature of the conference. “This year’s conference was quite competitive,” said Dr. Todd Walter, the program chair. “We received more than 570 abstracts for 288 presentation slots.”

Letters continued from page 16...

I would like to thank you and the ALSA for the generous donation of $1,250 I have just received as the ALSA scholarship.

The scholarship will help me achieve my educational goals in the field of geomatics.

I also want to express my admiration and appreciation for all other ALSA activities and services that further the high standards of the land surveying profession. Specifically, in my case, the ALSA website and the MSP represent a valuable resource in my studies.

Thank you again!

JIRI NOVAK
NAIT GEOMATICS, 2ND YEAR STUDENT
Adverse Possession Under New Brunswick’s Land Titles Act
by John Jaffey—Toronto

In New Brunswick’s first decision dealing with adverse possession under its six-year-old Land Titles Act, the Court of Queen’s Bench has held that, subject to specific relief for rights of way and rights of access to real property, it is no longer possible to acquire ownership through adverse possession.

The one exception, on which this case was founded, relates to the holders of a valid possessory title already in existence before first registration under the land titles system. In such a case the court may, under ss. 70(1)(a) and 71(c) of the Act, rectify the title register where “it would be unjust not to do so.”

Justice Peter Glennie declined to grant the plaintiffs’ request for rectification, writing, “the plaintiffs were clearly aware and fixed with knowledge of the encroachments they assert since they received the surveyor’s certificate in 1985 at the time they purchased their property. They took no steps for 17 years to address the situation, including asking the owner of the adjacent property to enter into an encroachment agreement.”

He also noted that the Legislature took no specific steps to protect possessory rights which matured prior to land being registered, apart from the possible general rectification of the title where it would be unjust not to do so. (This is in contrast with the legislation in some other provinces. Ontario, for example, provides for possessory interests in s. 44 of its Land Titles Act.)

Accordingly, Justice Glennie opined that the exceptional remedy in ss. 70 and 71 “is not intended to open the floodgates with respect to correcting the title register.” In his view, invokes these sections for a possessory title in existence at the time of first registration “ought to involve a situation where, for example, an encroachment of a manufacturing plant onto adjoining land...might result in a subsequent court application seeking an order to have the building demolished because of the encroachment. It seems to me that fact situation might constitute an unjust situation contemplated by the Land Titles Act if the title register were not corrected.”

Wilbur MacLeod of MacLeod Macdonald & Keenan in St. John acted for the plaintiffs. He told The Lawyers Weekly this is “a landmark decision. Everyone is now on notice that if you have some adverse possession rights, you’d best get the details of that possessory interest on your deed, or you can’t rely on it.”

The plaintiffs, Douglas and Patricia McKinney, acquired their property in 1985, including a backyard fence that encroached about half a metre onto Audrey Brown’s property next door to the west. They never spoke to Brown about the encroachment, and she was apparently unaware of it.

In 2002, Raymond and Doris Tobias purchased Brown’s property. Title was acquired under the new land titles system.

When the Tobiais began rebuilding their house in 2004, they obtained a survey and realized that the McKinney’s fence encroached onto their back yard. When they began to remove the fence, the McKinnneys obtained an interim injunction preventing them from doing so, and commenced this action for a rectification of the Tobias title.

Thomas Drummie, formerly of Clark Drummie (before his recent retirement), and Timothy Kennedy, newly of Low Murchison LLP in Ottawa, acted for the Tobiais.

Kennedy told The Lawyers Weekly this was his last file in New Brunswick before he relocated to Ontario.

He said this decision is not a dramatic change in the law, but it is important for property owners and for the real estate bar in New Brunswick. “The big thing in this case,” said Kennedy, “is that it draws attention to the fact that when land is converted to Land Titles in New Brunswick, no notice is given to adjacent property owners. Because they have no way of knowing that their rights might be affected, it becomes crucial for lawyers to ask clients, who are selling, mortgaging or covering their property into Land Titles, whether they are aware of anything that would affect a neighbour’s adverse possession claim. In this case, the plaintiff’s claim was wiped out by the Land Titles Act.”

“...the [New Brunswick] Land Titles Act essentially wipes out any claim for adverse possession.”

Now practicing real estate law in Ontario, Kennedy was able to compare the two provincial land titles systems. He said, “In Ontario, notice is given to adjacent property owners. The only safeguard in New Brunswick is that the landowner who converts the property must swear a Form 2 that he’s not aware of any adverse interests. It’s up to landowners to safeguard their own interests.

What the judge was saying to the Mckinneys was, If the land was so...
important to you, why did you wait until your neighbours started tearing down your fence to do something?” He concluded, “This decision confirms that in the province of New Brunswick, the Land Titles Act essentially wipes out any claims for adverse possession.”


**Administrative Law**

**REASONABLE APPREHENSION OF BIAS—**

Respondent Appeal Board erred in finding that there was no evidence of bias. A new hearing was required.

Appeal from a decision of the Subdivision and Development Appeal Board of respondent County upholding the issuance of a development permit by the County Development Authority. Appellant owned a lakefront property which backed onto a roadway within the municipal boundaries of a village. In 2003, the owner of the land on the other side of the roadway, which land was within the planning jurisdiction of the County, applied for a development permit in relation to two commercial buildings. The permit was granted, and that decision was not appealed. In 2004, the owner applied for another development permit to make changes to the property. Before appellant’s submissions at the hearing were concluded, a member of the Development Authority told him that she had already made up her mind. She subsequently voted in favour of issuing the permit. The development permit was approved and appellant appealed to the Board. The Board held that there was no evidence suggesting bias on the part of the Development Authority.

**HELD:** Appeal allowed. The *de novo* nature of the hearing before the Board was not a complete answer to any allegation of procedural unfairness arising from bias on the part of the Development Authority. Whether or not a subsequent hearing could cure a breach of fairness in the initial hearing depended upon an assessment of whether fairness could be achieved through the second hearing. The Board was required to, and did, consider the allegation of bias. However, in doing so, the Board misapprehended and erroneously concluded that there was no evidence of bias on the part of the Development Authority. Thus, the Board’s disposition could not stand and a new hearing before the Board was required. If the Board concluded that the proceedings before the Development Authority were tainted by bias or apprehension of bias, the matter was to be returned to a differently constituted panel of the Development Authority for a fresh hearing.

Surveying During the Boom of 2006

What do surveyors do? A quick search finds this description supplied by the U.S. Department of Labor.

“Surveyors and technicians engage in active, sometimes strenuous, work. They often stand for long periods, walk considerable distances, and climb hills with heavy packs of instruments and other equipment. They also can be exposed to all types of weather. Traveling is sometimes part of the job, and land surveyors and technicians may commute long distances, stay away from home overnight, or temporarily relocate near a survey site.”

With the current “Real TV” and “Extreme Sports” fads, it amazes me that the technical schools and universities of this province are not turning away people by the hundreds, who all want to be surveyors. Obviously the general public does not have the awareness of the adventure that can await them in the survey field. Perhaps if this was remedied, the shortage of manpower might also be eliminated. I have had the opportunity of listening to ALs reminiscing on the highlights of their survey careers. As well, I have my own unique memories some of which are captured on film and all of which depict a job that is quite enjoyable.

However, for every reward, there is a price. The economy in Alberta is in a boom. Amidst this boom, life goes on. With working lots of days in the field and missing out on things that one would really like to attend (like three different board meetings, also honorable mention will go to my older two kids whose birthday was the 16th of November... and I missed that too), one sees just how fast life goes by. We have a front row seat for what the Alberta government has coined “The Alberta Advantage.”

May you all have a very merry Christmas and all the best in the New Year.

The Government of Alberta website reports that the Alberta Advantage includes, among other things,

- a strong and vibrant economy
- a young, skilled and productive workforce
- an abundance of natural resources
- and a beautiful natural environment.

Let’s review.

The Strong and Vibrant Economy

My expertise is far from one that can analyze this province’s economy, and give an opinion of variables in the economy, and what they indicate. My approach is much simpler. To prove the strength of the economy, simply try to get a hotel room in Edson, Hinton, or Grande Prairie for a survey crew. Then get rooms for more than one crew. Or try to find manpower. There is more work than people to do the work. Formidable tasks indeed!

A Young, Skilled and Productive Workforce

Again, I am not claiming to be any kind of an expert; however I now notice that I know few older than younger people working in the field when compared to my own age. This increasingly younger workforce emerges from the technical schools and universities with knowledge of how to use the current technologies and look to the older crews and experienced surveyors to pass on the wisdom of how to apply the results that they achieve.

An Abundance of Natural Resources

This is a catalyst as well as the fuel (no pun intended) that seems to be driving this economy. When one looks deep enough into the current economic situation, there is a huge ripple effect taking place in this economy due to oil and gas.

A Beautiful Natural Environment

This is what I see as the icing on the cake. It seems that when speaking to so many land surveyors, there is an underlying love for the outdoors. It is a big draw for many to be far away from anything remotely resembling civilization, and seeing wildlife in a natural surrounding and of course finding that wooden post that you were searching for.

Of course, currently I sit in a hotel room, hundreds of kilometres from home. This scene is repeated thousands of times all over Alberta and I reason that it has occurred thousands, and it will be repeated many more times as years go on and surveyors and their assistants continue to “engage in their active and sometimes strenuous work – often far from home.”

Especially with this Christmas season fast approaching, on behalf of the ASSMT, I wish to take the time to thank those people who are helping to create this Alberta Advantage. The husbands and wives; fathers and mothers; working extra hours and days, sometimes far from home, trying to meet the needs of the clients. They are paying a price for our booming economy. May you all have a very merry Christmas and all the best in the New Year.

Visit us at www.assmt.ab.ca. Looking forward to seeing the membership at Kananaskis May 11 & 12, 2007 for the ASSMT AGM.
Findings and Order of the Discipline Committee
Dated October 2, 2006

Further to a June 20, 2006 hearing of the Discipline Committee of the Alberta Land Surveyors’ Association the following constitutes the findings and order pertaining to a complaint filed by the Practice Review Board (PRB) on March 1, 2006, respecting the conduct of Mr. Allan G. Nielsen, ALS.

Allegations:
The March 1, 2006 complaint addressed the following allegations:
2. There is evidence of unskilled practice.

Findings of Fact
1. Allan G. Nielsen is a member in good standing of the Alberta Land Surveyors’ Association (ALSA) since July 12, 1976.
2. Systematic Practice Review (SPR) Phase 1 commenced in April 1997, and was deemed complete in March 1998.
3. As a result of numerous deficiencies and concerns detected during the regular SPR of Allan G. Nielsen, the Practice Review Board ordered a follow-up review be undertaken.
4. SPR follow-up review was commenced in January 1999, and was deemed complete on April 15, 2003.
5. A discipline hearing was conducted in July 2000, and an order was issued on March 26, 2001, and published in ALS News June 2001 issue.
6. Mr. Nielsen was monitored as a result of the discipline hearing from July 2001 to July 2002. The results of the monitoring were forwarded to the PRB along with six undertakings on January 20, 2003.
7. The six undertakings are condensed by this Discipline Committee as follows:
   (1) Assess survey evidence applicable to all field work with consideration to governing evidence, hierarchy of evidence, sequence of original evidence and secondary evidence.
   (2) Continue to give consideration to the survey instructions and procedures in the current Manual of Standard Practice and amendments thereto.
   (3) Continue to improve and streamline office procedures with reference to comments of the Director of Practice Review, specifically with respect to check sheets, field notes etc.
   (4) Endeavour to complete responses to Practice Review in a timely and orderly fashion.
   (5) Continue to assess all requests for services only for those projects that this firm has the resources and expertise to complete. Any new work outside of our expertise will only be undertaken where outside consultant support or joint venture is available in order to provide expertise. Due diligence is required at all time to ensure that all work is of high quality, and that time for proper quality control and plan checking is as important as the field work.
   (6) To perform all the oilfield survey work and plan processing with skill and professionalism. I will only accept assignments within my capacity to complete within my proficiency. All work to be performed in accordance with professional standards.
9. The results of SPR Phase Two audit were provided to Mr. Nielsen April 29, 2004.
10. A response to the review was prepared by Mr. Nielsen dated June 24, 2004, and faxed to the ALSA on July 29, 2004. A supplementary response was faxed September 14, 2004.
11. Mr. Nielsen’s response of June 24, 2004 indicated for the examined well site plan that monuments shown as placed by the survey were not actually placed at the time of survey.
12. On August 19, 2004, the Director of Practice Review forwarded his response to the PRB and Mr. Nielsen.
13. An analysis prepared by the Director of Practice Review was reviewed by the PRB on September 15, 2004.
15. Allan G. Nielsen, does all of his own field work and calculations. No field work is contracted out.
16. Allan G. Nielsen contracts out drafting for oilfield work and larger projects that require digital drawings. He relies on this contract draftsman to prepare digital files in accordance with Land Titles requirements.
17. At a meeting of September 15, 2004 the PRB directed Mr. Nielsen by subsequent letter to attend a formal hearing of the PRB.
18. October 25, 2004 an analysis of the supplementary response was sent to the PRB.
19. November 10, 2004 an official recorded hearing of the PRB was held.
20. On January 12, 2005 the PRB provided the following requirements:
That the Practitioner be given a six month period to demonstrate major revised procedures within his practice by:
(1) Provide to the Director of Practice of Review, by the seventh day of each month, a written report addressing how he complied with each of the six undertakings dated January 20, 2003.
(2) Provide a separate report to the Director of Practice Review by the seventh day of each month, which shall include but is not limited to:
(a) number of projects undertaken and completed,
(b) job types, (including approximate size)
(c) general locations worked in,
(d) indicating all personnel involved in the survey and
(e) the number of dormant plans registered.
That a follow-up review be conducted no later than August 15, 2005.
21. Mr. Nielsen’s January 2005 work report was received on February 5, 2005. No report on the six undertakings was received.
22. Mr. Nielsen’s February 2005 work report was received on March 7, 2005. No report on the six undertakings was received.
23. In March 14, 2005 the PRB wrote to Mr. Nielsen stating:
(1) That the Practitioner be reminded that the Board’s January 14, 2005 letter indicates he is to provide “a written report addressing how he complied with each of the six undertakings” and that this report should be broken down by each undertaking to show its intent and the actions taken by the practitioner to comply.
(2) That the Practitioner continues reporting on jobs he has done.
(3) That the deadline for submitting each report to the Director of Practice Review is the seventh of each month.
(4) That the Board is disappointed with the format of the reports, and expects future reports will be more structured and comprehensive.
24. Mr. Nielsen’s March report was received April 7th, 2005 with minimal comments on the six undertakings included in the single report.
25. On April 27th, 2005 Mr. Nielsen requested a two-week time extension for the April report, which was subsequently received May 15th, 2005. No comment or report was provided on the six undertakings.
26. The May report was received on June 7, 2005, with no second report or comment with regards to the six undertakings.
27. On June 21, 2005 Mr. Nielsen provided a more comprehensive response to the six written undertakings.
28. On June 15, 2005 SPR conducted an internal audit for the Phase 2 Practice Review follow up.
29. June 16, and 17, 2005 Mr. Nielsen attended the Getting it Right Seminar as requested.
30. Mr. Nielsen’s provided an inadequate June report on July 9, 2005 after prompting from the Director of Practice of Review on July 8, 2005. No comments or report were received with respect to the six undertakings.
31. On August 3, 2005 the Director of Practice Review wrote Mr. Nielsen providing for delinquent reports.
32. On August 4, 2005 further sketchy, inadequate June and July reports were received. No second reports or comments were provided with respect to the six undertakings.
33. On August 17, 2005 the PRB provided further instructions by way of an August 19, 2005 letter to Mr. Nielsen stating:
(1) That the Practitioner revisit the six undertakings and describe to the Practice Review Board how, over the last six months, he has addressed or dealt with the six undertakings;
(2) That the Practitioner advise how he has improved his practice in relation to the six undertakings;
(3) That the Practitioner provide this information in the form of a written, comprehensive, formal and detailed report in the form of a letter (not by e-mail); and
(4) That the Practitioner provides the requested report by September 15, 2005.
34. Mr. Nielsen provided a letter dated September 13, 2005, reporting his progress with each of the six undertakings.
35. On October 19, 2005 the PRB found Mr. Nielsen’s letter of September 13, 2005 met their expectations.
36. On September 14, 2005 the Director of Practice Review provided the follow-up SPR for Phase Two indicating there is a lack of sufficient searching for evidence, and inconsistencies between what is shown on the plan and what is in the field. Encroachments onto rights-of-way were not indicated on the real property reports. Inappropriate evidence (an iron spike) was used on a pipeline right-of-way survey to position a re-established property corner. (1/4 section monument)
37. On October 26, 2005 Mr. Nielsen submitted his initial response to the review.
38. In Mr. Nielsen’s response of October 26, 2005 and the Director of Practice Review’s analysis of this response, there are numerous indications of shortcomings with respect to good survey practices. (See summary following.)
39. On November the 18th, 2005 the Director of Practice Review provided his response analysis and final recommendations to the PRB.
40. Between November 18 and December 13 numerous e-mails by Mr. Nielsen added supplements to his October 26, 2005 initial response.

41. At their December 14, 2005 meeting, the PRB considered the report of the Director of Practice Review’s second phase follow-up review and passed the following motion:

(1) That the practitioner re-submits his November 22, 2005 response.
(2) That each and every item (Part 4 Recommendations #1 to #5 and Points to Be Addressed #1 to #20) be responded to in full. ANY NON RESPONSE IS UN-ACCEPTABLE.
(3) That the Practitioner use the same numbering system used by the Director of Practice Review in his report;
(4) That the Practitioner is reminded that it is critical that he clearly states any current and/or future intentions for each item; and,
(5) That the practitioner submits his new responses on or before January 16, 2006.

42. On January 14, 2006 a secondary response to the follow up review with attached checklists for subdivision, RPR and pipeline right-of-way surveys were submitted to the PRB by Mr. Nielsen.

43. At the February 22, 2006 meeting of the PRB it was decided to forward a complaint to the Registrar.

44. SPR’s second practice review and follow-up review are still open and, at the time of the hearing, are not complete.

**Findings of the Discipline Committee**

Pursuant to the *Land Surveyors Act* and regulations thereunder, the Discipline Committee, as a result of receiving allegations of unskilled practice of surveying by Allan G. Nielsen, ALS and/or Nielsen Land Surveys Ltd., conducted a hearing on June 20, 2006. After receiving evidence presented by the Director of Practice Review, the chairman of the PRB, ALSA transcript documents pertaining to Mr. Nielsen’s second review and follow-up review and testimony from Allan G. Nielsen, ALS, we, the Discipline Committee, hereby report our decision, findings, reasons and order.

1. The Discipline Committee finds Allan G. Nielsen, ALS guilty of the offence of unskilled practice of surveying pursuant to the *Land Surveyors Act* for the following reasons:
   - **Reason 1A:** Mr. Nielsen did not use proper monumentation for his surveys.
   - **Reason 1B:** Mr. Nielsen did not carry out sufficient monument searches.
   - **Reason 1C:** Mr. Nielsen did not show the content of his field survey accurately on his plans or field notes.

2. The Discipline Committee finds Allan G. Nielsen, ALS guilty of the offence of unprofessional conduct pursuant to the *Land Surveyors Act* for the following reasons:
   - **Reason 2A:** Mr. Nielsen did not respond in a professional format or manner and did not respond adequately to repeated requests of the Practice Review Board.
   - **Reason 2B:** Mr. Nielsen continued to let deadlines pass. His inadequate and deficient responses were submitted at the last moment or not at all.
   - **Reason 2C:** Mr. Nielsen did not substantiate his reasons for not fully completing the responses to the Practice Review Reports.

**Order of the Discipline Committee**

We, the Discipline Committee of the Alberta Land Surveyors Association, upon finding Allan G. Nielsen, ALS guilty of unskilled practice of surveying and unprofessional conduct pursuant to the *Land Surveyors Act* and regulations thereto, hereby assess the following penalties:

1. That, Allan G. Nielsen, be sent a letter of reprimand by the Discipline Committee.
2. A fine for the offence of unskilled practice and unprofessional conduct in the amount of $2,000.00 to be paid within 45 days of this Order.
3. Payment of the following costs:
   - (a) Cost of legal fees, court reporter and expenses incurred by the ALSA for the PRB hearing in the amount of $725.81.
   - (b) Cost of legal fees, court reporter and expenses incurred by the ALSA for Discipline Committee hearing in the amount of $8,853.63.
   - (c) For a Total cost to be paid within 45 days of this Order of $9,579.44
4. That Allan G. Nielsen completes the requirements of the Phase Two Practice Review and Phase Two follow-up review by January 15, 2007. Should the response and action be unsatisfactory or not completed to the approval of the PRB, further disciplinary action may be commenced
5. The practice of Allan G. Nielsen, ALS is to be monitored by a senior ALS at Mr. Nielsen’s expense.

Appointment of the Monitor will be by this Discipline Committee.

At a minimum the practice monitoring will consist of the following elements:
   i. Pre-session preparation
   ii. Joint work effort
   iii. Follow-up
   iv. Summary and critique
(a) Monitoring will continue for a period of 12 months, or until such time as all the requirements of Systematic Practice Review 2 and the follow-up review are satisfied and all current projects and plans are completed and registered whichever time is the lesser, where after the Monitor will provide a final report to the PRB.

(b) The Monitor shall provide a progress report on the eighteenth day of every second month starting December 18, 2006.

(c) The Monitor will act as an advisor and counsellor, trouble-shooting, training to strengthen skills, and correct weaknesses in technique. The Monitor will observe Mr. Nielsen in action for the express purpose of improving results, and help Mr. Nielsen to help himself. How often the monitor coaches will depend on the progress of Mr. Nielsen.

(d) The Monitor must coach Mr. Nielsen with particular attention to at least the following items as identified in SPR 2 and the follow-up review:

i Assessing survey evidence applicable to all field work, giving consideration to governing evidence, hierarchy of evidence, sequence of original evidence and secondary evidence.

ii Give consideration to the survey instructions and procedures in the current Manual of Standard Practice and amendments thereto.

iii Improving and streamlining office procedures, specifically with respect to check sheets, field notes etc.

iv Complete the responses to Practice Review in a timely and orderly fashion. The Monitor is to pay particular attention to coaching Mr. Nielsen in preparing adequate, complete, and timely responses. Mr. Nielsen is to use the same numbering system used by the Director of Practice Review in his reports.

v Continue to assess all requests for service, and restrict activities to only for those projects Mr. Nielsen possesses the expertise to complete. Any new work outside of Mr. Nielsen’s expertise will only be undertaken where expert support is available. Due diligence is required at all times to ensure that all work is of high quality, with time for proper quality control and plan checking being as important as the field work.

vi To perform all work and plan processing with skill and professionalism. All work to be performed in accordance with current professional standards and expectations.

6. That Mr. Allan G. Nielsen, ALS no longer operate as a sole practitioner, and furthermore that he be limited to non resource sector surveys unless under the direct supervision of another Alberta Land Surveyor in good standing and experienced in the resource sector

7. That Allan G. Nielsen is hereby directed to close the practice of Nielsen Land Surveys Ltd. by April 30, 2007.

8. Mr. Nielsen shall identify, tabulate and report on all active projects of Nielsen Land Surveys Ltd. along with a scheduled completion date, and monthly progress update on the closing of the practice of Nielsen Land Surveys Ltd. Said monthly report is to be delivered to the ALSA office by the 7th day of every month until all projects and plans are complete.

9. The PRB is to review the report and recommendations provided by the Monitor, and also those submitted by Mr. Nielsen. The PRB may make additional requests or adjustments as may be found necessary to carry out the intent of this order, including the scheduling of another SPR.

10. These findings and order shall be published in ALS News.

This order of the Discipline Committee is hereby issued this 2nd day of October, 2006.

LAWRENCE M. PALS, ALS
ACTING CHAIRMAN, DISCIPLINE COMMITTEE

www.youtube.com has become an internet phenomenon. It allows anyone to upload videos to their website for the world to see. Some videos are serious and some, like the ones below, are not.

A Total Station
www.youtube.com/watch?v=7TGN6tndM

Random video clips and photographs of the Geodesy camp for the 3rd year surveyors.
www.youtube.com/watch?v=ru1JsoCA7lc

We video-taped some land surveyors at Blarney Castle and some lady sneezed.
www.youtube.com/watch?v=gNW7JC4QAjk

Barrett and Chris’s surveying journey
www.youtube.com/watch?v=ukKmE3ubEWg

Kung Fu Wheel
www.youtube.com/watch?v=CA8JFQikF4M

www.netnotes.net
by Brian Munday
Executive Director

www.alsa.ab.ca
1929 – Things Were Looking Up

In 1929, these desultory conditions began to show signs of change. While the Association had been coasting along, business conditions had greatly improved and lack of activity on the part of the members themselves had for the time being become a thing of the past. In his presidential address, Mr. Townsend gave the Annual Meeting of 1929 a remarkably cheerful picture of the state of the provincial economy. “Canada is prosperous,” he said, “as never before in her history, and in Alberta we have been blessed with the lion’s share of that prosperity.” Bank managers, railway presidents and insurance company directors were all predicting an era of unparalleled development, agriculture was thriving, the mining industry was booming, the construction business had reached a new peak of activity and all the land surveyors were busy. There was much to be thankful for and much more to come.

That was at the beginning of the year when the bottom fell out of the stock market and many other human enterprises, and the Great Depression of the Dirty Thirties descended upon the land and - remained for seven lean years that made all previous hard times seem comparatively opulent. But in that happy month of January there were no clouds on the horizon, and the outlook for the surveying profession had never been better.

For one thing, the arrangements for the transfer of the natural resources to the control of the provinces had just about jelled, and it was expected that this long-anticipated event would soon come to pass, and stimulate an increase in land surveying activities. The towns and cities of the province were growing at an accelerating rate, and the provincial government, having decided that a new Town Planning Act was needed, had paid the surveying profession the compliment of selecting one of its members, Mr. Horace Seymour, to draft the most progressive and up-to-date statute of that kind that could be devised. Mr. Seymour, who had been active in the province as a surveyor during the Association’s earlier years, had gone off to foreign parts and had made a name for himself as a town planner at such places as Maracaibo, Venezuela, Toronto, Ontario, and Vancouver, BC, and here he was, back in Alberta, ready to acquaint the members at this annual meeting with what was in store for their province. This development, too, was expected to help put the surveying profession back on its feet.

Mr. Seymour, in his address to the meeting, was inclined to be cagey about the provisions of the new act and he managed to create a certain amount of dismay among the members by telling them that since architects were the only professional men trained in design, they would have a large part to play in the future lay-out of subdivisions in Alberta, and that, of course, would revolutionize the subdivision industry. He also predicted that the intended uses of lots in new subdivisions would have to be indicated in advance and that each subdivision would have to be zoned accordingly at the time of registration. There would be a tentative approval stage and a final approval stage, and subdivisions would have to be laid out to fit the topography and not the section lines. It was evident that the subdivision industry was going to be revolutionized in more ways than one, and when the members were invited to ask questions upon the conclusion of Mr. Seymour’s address, they were almost at a loss for words.

At this meeting the members present were invited to study the anatomy of a 30-inch iron bar which a Calgary member had found and removed from a point at which the plan of survey indicated that a standard iron post had been planted. He wanted to know whether the use of such a post was in accordance with the provisions of the Act and the surveyor’s oath on the plan, and if it was not, should disciplinary action be taken? The meeting discussed this problem at some length, and what finally emerged was a resolution to the effect that the government be requested to institute a system of inspection of surveys. This was the first occasion on which the word “inspection” appeared in the records of the Association and some of the members were not too happy about it. The question was re-opened later in the day, and a further resolution was adopted which asked the Council to consider the advisability of having all monuments established by surveyors officially recorded, regardless of whether or not a plan of survey was to be registered. The Council later held a referendum of the whole membership on this question, which resulted in a majority vote in support of the proposal contained in the resolution.

David Townsend

David Townsend was born at Mount Vernon, Ontario and moved to Calgary in 1908. He was employed with the Canadian Pacific Railway for more than 40 years, retiring as chief surveyor.

Upon his employment with the Canadian Pacific Railway Mr. Townsend obtained other Land Surveyor Commissions: Saskatchewan Land Surveyor # 25 in 1910, Alberta Land Surveyor #58 in 1911 and his Manitoba Commission # 51 in 1914. I noted a reference that Mr.
Townsend was an associate member of the Canadian Society of Civil Engineers, now the Engineering Institute of Canada, however I do not have any information as to which university he attended. I assume it was a university in Eastern Canada, circa 1905.

Mr. Townsend was President of the Alberta Land Surveyors' Association in 1928, 1933 and again in 1937. He also served as President of the Saskatchewan Land Surveyors' Association in 1925 and was also made a Life Member in 1944.

A write-up in the Canadian Pacific Railway staff bulletin June 5, 1943 (material obtained from Mr. R.C. Kennell, Manager, CPR Heritage Services):

One of those who helped survey the Calgary district in the early days, David T. Townsend, Chief Surveyor for the Company's Department of Natural Resources, Calgary, since 1912, retired April 30th after 36 years with the company. Among western towns which Mr. Townsend surveyed were Outlook, Kerrobert, Coronation, Empress, Assiniboia and Shaunavon. After experience with the “Niagara, St. Catherine and Toronto Railway” in 1906 along with obtaining his Commissions as an Ontario Land Surveyor # 383 in 1906 and his Dominion in 1907, he was employed by the Company as a townsite surveyor in Winnipeg. He became Chief Surveyor for the Company in 1912.

The write-up also noted that after 36 years of service, the CPR presented Mr. Townsend with a Gladstone bag and flowers for Mrs. Townsend.

He passed away, at the age of 90 in 1968 and buried in the Union Cemetery in Calgary. His wife, Florence predeceased him, in 1961 and to my knowledge they had one daughter.

J.H. Webb, ALS (Hon. Life), SLS (L.M.) retired

The World of FIG continued from page 24....

In addition to the Council described above FIG operates through 10 technical commissions and three permanent institutions. The permanent institutions are:

- The International Office of the Cadastre and Land Records
- The Multi-lingual Dictionary Board
- The International Institute for the History of Surveying and Measurement

The technical commissions are:

1. Professional Practice and Standards
2. Professional Education
3. Spatial Information Management
4. Hydrography
5. Positioning and Measurement
6. Engineering Surveys
7. Cadastre and Land Management
8. Spatial Planning and Development
9. Valuation and the Management of Real Estate
10. Construction Economics and Management

FIG has a permanent office in Copenhagen which is staffed by a Director, an Office Manager and an assistant. More information on FIG and its various institutions, commissions and publications can be found on the very comprehensive FIG website at www.fig.net.

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