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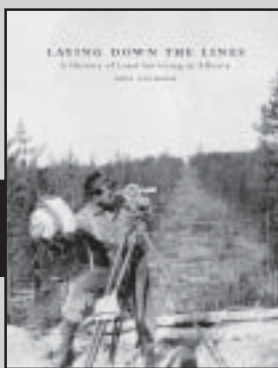
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ON THE COVER

Laying Down the Lines: A History of Land Surveying in Alberta.

Cover photo: Instrumentman working with a transit on John Pierce's survey party subdividing townships north of the 25th Baseline, 1915.

Credit: ALSA, Richards Collection, Edgar Mumford Album.

Credit: Photo of Judy Larmour by Scotty Aitkin.

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president's message

by Al Nelson, ALS

Harbingers of Spring

Association Activity—The past year has been one of challenge for Alberta Land Surveyors that the rest of the universe would gladly consider opportunity. The pace of the economy in Alberta has triggered unprecedented activity in virtually every sector perhaps with the exception of the agricultural community.

Likewise, in the Association, incredible activity has occurred, primarily driven by the wishes of the membership and of the committees. The time and efforts expended by our members who are already stressed to the maximum by client demands is nothing short of remarkable. It, in my personal opinion, clearly demonstrates our members' commitment to the greater public interest. It would be extremely easy to put the money in one's pocket and ride the wave as opposed to conscientiously looking to improve the bigger picture of our interaction with the public and with industry. I can only offer my congratulations and my admiration to our members on their dedication. To those of you who habitually do not participate in this very essential professional obligation, it is time to look in the mirror and quit relying on the hard work and ethical commitment of others. Get involved and contribute. Suffice it to say that it is not only your duty but you may find that there is a distinct opportunity for continued learning and growth. At our meetings, we continue to discuss continuing education. Working within the Association's structure in committee or in an elected position is the very fundamental essence of commitment to continuing education and to serving the public interest. I would seriously ask your consideration for a very good number of reasons:

In this last article... participating in the conducting of Association business has also been very enjoyable as well as educational on yet another level.

- You will assist to alleviate the incredible number of hours put in by a small and repetitive percentage of our members on behalf of all of us.
- You will bring a new and unheard perspective to the debates and discussion.
- You will learn and grow with the rest of us.
- You can help dispel the idea that the Association, in some members' views, is a "them and us" situation. We are all together in our stand even if we do not all agree on every issue.
- If you can't learn something, you can teach the rest of us.

I look forward to full sign up sheets for committees and for the Council slate in Jasper.

In terms of committee and Council activity, the upcoming AGM will be extremely interesting with visiting delegates bringing the perspective of the other provinces to our discussion.

- The Legislation Ad Hoc Committee will be bringing recommendations to the membership on vital issues of governing monumentation and ideas to enhance the protection of the public's boundaries.
- Time permitting, we will hear from the Section 9 Ad Hoc Committee who now has Council approval to conduct a pilot project to test a Boundary Resolution Process.

- Some changes to the Manual of Standard Practice will be presented for debate and approval.
- The Registration Committee is expending herculean effort in considering, assessing, testing and approving new candidates for our profession.
- A considerable number of new members will receive their commissions at our upcoming AGM.
- These members with new educational and training criteria will bring a new culture to our profession and our "Future Committee" is addressing where our profession is now, where it should be going to continue to serve society well and how we should get there. This is essential to continue to attract new candidates and to ensure that we, as a legislated profession, are able to provide essential services.
- There will be long line-ups at the Committee signup sheets.
- New business is always interesting and positive because it provides a forum for our members to give some ideas and direction to Council and staff to carry us forward into another exciting year.
- Public Relations will be working on a new five-year plan. Our initiatives in the past have started to bear fruit. Projects such as Science-In-A-Crate have clearly attracted the attention of grade eight and nine students and Council has committed funds to construct eight new crates in addition to the two initial models. Science Alberta will facilitate and maintain the crates. I believe that this will assist students not only in seeing the practical application of mathematical principles but also in steering them towards an option to enter a very lucrative profession or industry when they graduate or consider post-graduate studies.

A whole new attitude toward interacting with the public is developing. Brian Munday has guided the Association in actively promoting press releases, direct interaction with politicians, proactively liaising with other professionals and generally starting to think and act outside our traditional box. I commend the committee and staff for the progress made in public relations and for the initiatives to continue this course of pursuit of relationships. We can do nothing but gain from this attitude.

Spring—will mean different things for different members. Some in the oil and gas market *may* get a small reprieve. Municipal and land development sector members will be taking a deep breath and getting ready for the onslaught of new demands from clients. Housing sales and new housing starts will demand thousands of real property reports. Construction work scheduled and the staking required will be unprecedented this year. Pipelines are being proposed in all directions and for a multitude of conveyances. Spring will mean some of our snowbird members may fly home to roost in Alberta for the summer, and welcome back to all of them. There might even be a little work for them to do when they return.

Liability—A timely topic with the anticipated scope of construction and other survey work is the issue of liability. Contractors, owners, engineers, local authorities and others involved rely heavily on the skills and expertise of surveyors to lay out their facilities. Time is always of the essence and demands are often unreasonable. Given the clear statistical facts that construction staking remains the highest category of insurance claims and that Alberta will remain the highest region of construction activity, we need to be very realistic and diligent in how we accept assignments, undertake the work, communicate to the client and

control the liability. If our insurance rates continue to rise astronomically, we may find ourselves in a position of unaffordable coverage, mandatory self-insurance or financial ruin. What each of us does affects the other and quite literally becomes a factor across the country. This is a very large issue. It is sometimes difficult to separate the preaching of insurers, agents and claims people from their own self-interest. Singular claims can impact the entire country as is evidenced lately by the rate increases attributable to catastrophic events. Similarly, survey errors can result in huge claims in today's "fast-track" building frenzy. Let's be collectively cognizant of our vulnerability and DO IT RIGHT. Be in control of your work and your schedule.

In this last article that I have the pleasure of offering, I cannot resist the words that seem to fall from the lips or pen of virtually each and every president of this Association at or near the end of the current year. Representing Alberta and our respected membership this past year has been indeed a great pleasure and honor.

Participating in the conducting of Association business has also been very enjoyable as well as educational on yet another level. I would like to thank each and every member of Council for their diligence and commitment. I can advise the membership that they have all come prepared and ready for debate and have thus shown due respect to one another in not wasting valuable time. All decisions were not unanimous and healthy debate was often the order of the day. Not to be excluded are the volunteer committee members and chairpersons. As previously stated, the workload has been astronomical and the effort tireless. These folks are all deserving of your thanks and of your following in their footsteps.

You, the membership, are deserving of my thanks for the trust and opportunity.



councillor's forum

by David Marquardt, ALS

It has been said by one of our more colourful members of this Association that one of the perks, or pains, (depending on how you look at it,) of being on Council, is that at some point in time during your two year stint, the Big Guy is gonna point his finger at you, and let you know it is your turn to volunteer to write an article on some matter or survey issue that you feel you have to get off your chest.

And so with a nod of his head and a knowing look in my direction, President Al informed me at January's Council meeting, my turn is at hand, and Ms. Stecyk has informed me of the deadline. OK, I understand.

Well now, what should I write on or get off my chest? Let's see... what's a hot topic lately...it most certainly isn't the Flames or the Oilers. How about same-sex unions? No, not this time or even in this magazine. Buried facilities? Nah, too technical and too deep a topic for a mere commentary. How about the new standards for public lands dispositions? I think I'll save that for another ALS. Besides, I think the Director of Surveys has that pretty well covered...that and recent issues with section 47 plans. What about unregistered plans? Aww shoot, seems like my esteemed friend and colleague Blaine Benson, ALS has a bit to say about that in his Guardpost article in this issue. As I was perusing the ALSA library in search of an old favorite article that wasn't listed in the search engine, it kind of dawned on me. Why not write something on the Code of Ethics or some instances on the lack of ethics? When I found that article everything made sense. So here she goes!

Would it be a mistake in my understanding that the Alberta Land Surveyors' Code of Ethics, should apply *just* to the individuals with the ALS designation behind their name

... that old *ALS News* article that I was looking for? It's entitled *Respect...*

and perhaps those articling students who will have that designation in the future? What about the companies, the corporations, and the employees working under an ALS's direction... would they benefit if they were to have an adherence to that, or at least an understanding of what this Code of Ethics is all about? I really think so. Lord only knows we are not perfect, but we certainly should give it a good try. In case you have forgotten parts 5 and 6 of our Code of Ethics, here they are:

5. Integrity and Competence

An Alberta land surveyor shall assist in maintaining and improving the integrity and competence of the profession of surveying.

6. Dignity of the Profession

An Alberta land surveyor has a duty to maintain the dignity of the profession through his association with his clients, colleagues and subordinates.

This past Christmas I was invited to a bunch of client Christmas get-togethers, and I even managed to attend a couple. I am not fond of a beer without at first, a hard played hockey game, but I do like to meet up with old friends and socialize a bit. It was one of these that I attended, where I happened to be with a small group of friends, right behind a guy who was a sales and marketing representative for another survey company, who may have had a bit too much Christmas cheer. I am sure you can guess what happened next. After hearing a bit too much negative on our company and a couple other competitors, I turned around and

introduced myself to this fellow, to a fair bit of nervous laughter. It is one thing to joke about our shortcomings amongst ourselves, in a good way...it is quite another and, I would add, in contravention of parts 5 and 6 of the Code of Ethics if it were extended to other key personnel besides land surveyors, to do so in the presence of common clients or anyone else for that matter.

We recently had to discipline a party chief because of his contraventions of some aspects of our company field policy, and rather than face up to the discipline, he decided to go elsewhere, to work for a competitor. I guess that is what some people do these days. In the course of doing so, it appears that this individual may have given our company field crew contact list to his new employer, as within a couple weeks, most of our other crew chiefs began receiving calls on their truck phones and cells and home phones, some during business hours I might add, from this other survey company. Land surveyor's names were mentioned, one of whom I've shared much plan information in the past to both our benefits, and whom I thought to be a decent colleague. I haven't talked to these other land surveyors yet, but rest assured, I will. When you go beyond the Code of Ethics to infringe on privacy issues, where the heck are the ethics in that? Or is this a *new way* of recruiting, where the end justifies the means? In the 80s and early 90s, when work was not so plentiful, it was the guy who was the low bidder and corner cutter that we were cursing for a lack of ethics. Now being 2005 where work is plentiful and experienced technicians, and field crews are not, maybe this is a newer version of the virus.

.....continued on page 10



editor's notes

by Brian Munday, Executive Director

I first met Stan Longson in 1997. I have to admit to being nervous the first time I met him. You see, he and several others were interviewing me for this position I now hold. I guess my nervousness didn't show through too much.

When I had the opportunity to sit down with Stan and really get to talk to him, he told me that he had three things he wanted to accomplish as president that year. He wanted to hire a new executive director. He wanted to hire a new director of practice review. And he wanted to get the Historical and Biographical Committee up and running again. Stan accomplished the first two items fairly early on into his term as president. Lyall and I were both hired in the summer of 1997 and we were both at work here by September of that year. Stan then turned his sights to the Historical and Biographical Committee.

The Historical and Biographical Committee was first established in 1956 and it arose out of the Association's former Biographical Committee. In 1963, the Historical and Biographical Committee's terms of reference expanded to include public relations activities and this continued on, it appears, until 1969. There was no Historical and Biographical Committee by 1971 but, in the late 1970s, the Public Relations Committee and the Historical and Biographical Committee were combined as one. It appears that in 1979 it became known as the Public Relations Committee with historical and biographical matters being just one part of its terms of reference. However, by 1984, the historical and biographical terms of reference within the PR Committee seemed to have died. As far as I can tell, no Association committee or subcommittee had any historical and biographical terms of reference from 1984 up until the time

First...there would be a lot of enthusiasm from Committee members up front but not everyone would stick with it until the end. Second...a woman named Judy Larmour.

that Stan Longson decided that the Association would have an Historical and Biographical Committee again.

Stan and I happened to be in Lethbridge in November 1997 and we started chatting with Bruce Barnett. He happened to mention that his Dad was doing well and that he was working on a history of surveying in the Edmonton area titled *Early Surveys and Settlements in Central Alberta*. Stan and I looked at one another and decided then and there that Doug Barnett would be our choice as the first chairman of the reconstituted Historical and Biographical Committee. We bought Doug a lunch and he agreed to serve as the Committee chairman. Doug chaired the first meeting but, unfortunately, circumstances forced him to step down from the Committee in August 1998.

Bob Baker stepped in to fill the gap as he has done countless times throughout his career and his involvement with the Alberta Land Surveyors' Association. Bob recognized that capturing the history of land surveying and the Association was important and he did not want to see this initiative get stalled. Bob stepped in as chairman and he continues to be chairman of the Historical and Biographical Committee today.

Bob and the rest of the Committee knew that they wanted to capture surveying history but I don't think

any of us knew really how to go about doing that. With a little bit of research, we met historian Michael Payne. We invited him to a Committee meeting and asked him for his thoughts, ideas and suggestions on proceeding with this project. I am sure that there were lots of good things that he said and there was plenty of sage advice. However, I really only remember two things that he said. First, he said there would be a lot of enthusiasm from Committee members up front but not everyone would stick with it until the end. Second, he mentioned a woman named Judy Larmour.

Judy published a booklet on how to conduct oral histories. The Committee decided that this was a person that we needed to talk to as the Committee wanted to capture the stories of the Association's senior members. The Committee asked a number of people to submit proposals for the role of project coordinator for our oral histories and Judy was the one selected to help the Committee. And the Committee sure needed help! We found out quite early that there is a knack to doing oral histories properly. It's not the same thing as two of us sitting in a living room and swapping stories about the old days. Judy patiently guided the Committee through all of its questions and helped us sort through the list of questions we wanted to ask. The Committee, in all honesty, probably didn't do a great job on those first interviews. After all, they are surveyors and not interviewers. Nevertheless, the value of collecting these oral histories really hit home with me when Matt Wuhr died just a few months after Les Frederick had the opportunity to sit down and speak with him and record his story.

The Committee spent a great deal of time trying to collect the oral

histories. It was a project that lasted until well into 2001. It was always difficult trying to coordinate the interviewer's time with the interviewee's time. Still, we have a collection of audio tapes that we didn't have before, thanks to the Historical and Biographical Committee.

I don't recall when the Committee decided that a history book would be the end results of its endeavours but I think that was always in our mind from day one.

On May 31, 2001, the Historical and Biographical Committee received a proposal from Judy Larmour to research and write a book on the history of land surveying in Alberta. Council accepted the proposal in June of that year and for the next three and a half years, Judy has been hard at work digging out stories that none of us ever knew about and telling them to us in a fun and entertaining way.

The Historical and Biographical Committee reviewed each chapter as Judy wrote it. There were discussions and explanations of certain technical points but the Committee was always delighted with the product and amazed at the stories that she uncovered.

As I sit down to write this history of the Historical and Biographical Committee, the book that has become known as *Laying Down the Lines* is about to go to press so that you can buy it at the Association's 96th Annual General Meeting in Jasper this April. It's hard for me to believe that we are so close to having a real book ready for everyone to read and enjoy.

I must commend the Historical and Biographical Committee for its hard work and effort and perseverance over these last number of years. Michael Payne was correct and there has been a turn over in Committee membership over the years. Twenty-six members have served on this Committee since it was reconstituted and they have all made a contribution.

Laying Down the Lines will be launched at the Annual General Meeting this year. Author Judy Larmour will be at the Annual Meeting and you will be able to get your copy of the book signed by her.

Surveyors may be able to lay down the lines but I don't think they will be able to put down this book.

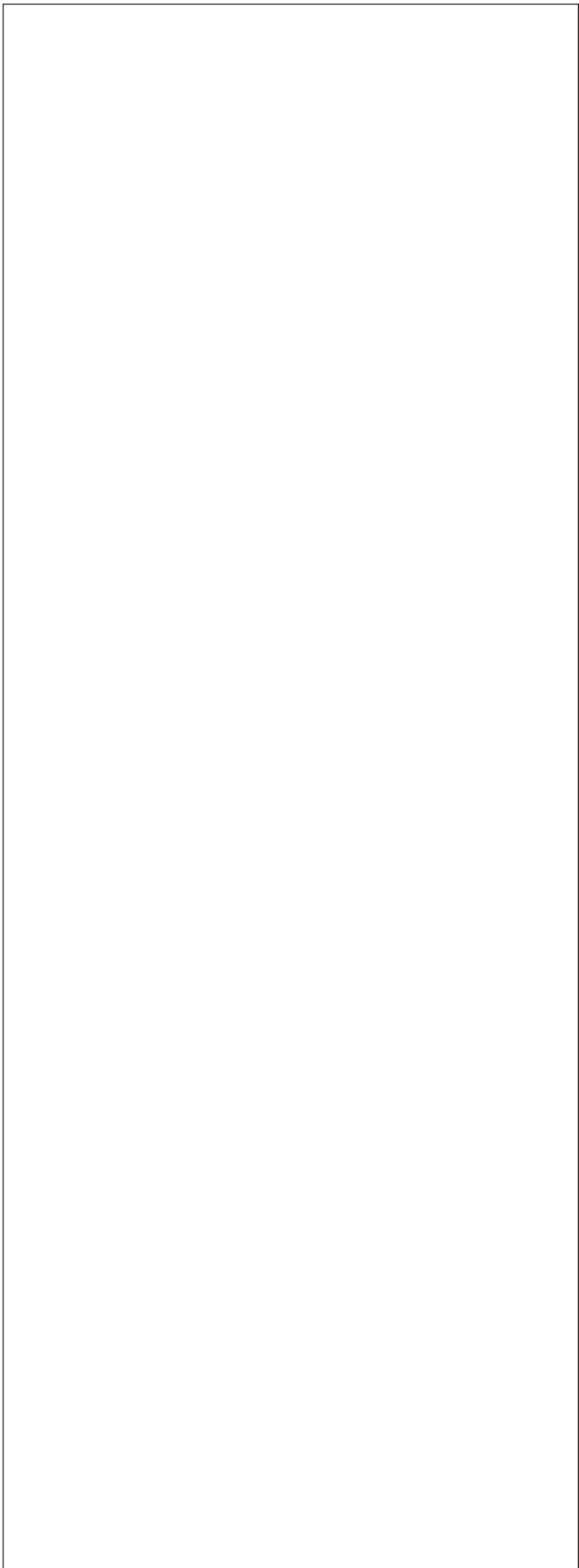
Councillor's Forum continued from Page 7

The two instances I've just related point to an aspect that has become way, way too prevalent in our society...that being a severe lack of respect, specifically in these cases, a lack of respect for your colleagues and your competitors.

Oh yeah... that old *ALS News* article that I was looking for? It's entitled *Respect* and was written by John C. Horn, ALS. It appeared in the January issue of the 1991 *ALS News* and by the time this goes to print, it should be available through the search engine on our website (www.alsa.ab.ca/pdf/an/9101.pdf).

If you haven't read it please do... in all its simple honesty, it is a very worthwhile read.

Gee, I feel a bit better now.





letters

The Day I Got a Hug From Her Honour Lois E. Hole

With the unfortunate passing of the Her Honour Lois E. Hole on Thursday January 6th and reading all about the life of this incredible lady in the *Calgary Herald*, it brought back a few memories of the day I actually got a hug from her.

May the 2nd, Crowne Plaza Hotel, Edmonton...the first day of the 93rd Annual General Meeting of the Alberta Land Surveyors' Association. It wasn't exactly an ordinary day. I missed my alarm that morning getting up in a hotel room in Sherwood Park, and thus I missed a breakfast meeting with a couple land surveyor colleagues. As well, I got to the first day's meeting a little late and had to stand at the back of the room. So as to be inconspicuous, I volunteered as doorman.

But in reality my timing was pretty good. I managed to take in a few speeches before Her Honour was introduced and escorted up the aisle to the front to be with then President Ken Allred and his wife Marge. After introductions and Her Honour's most gracious speech, newly commissioned land surveyors were introduced and given their commissions as well as an added bonus of a hug from this incredible lady.

After the presentations were complete the assembly rose and the vice regal party, was escorted out by President Ken Allred and his wife Marge, with Her Honour taking lots of time to shake hands and hug people and members, in her customary fashion as she left. While she was talking to someone across the aisle at the back of the room, Ken came over to shake my hand and say hi. He mentioned something to me, whereupon I replied that I knew Lois's son, Jim, going back to the days of 1976 when

we played football for the Golden Bears and had a few classes together.

"Well, in that case you have to tell her," he said. And before I could say "Well Ken, I was a bit late, my tie's not straight and my shoes could be better shined..." He had scooted back across the aisle and was whispering in Her Honour's ear and pointing in my direction. Oh Boy. Her look was one of pleasant surprise. She walked up to me, with a huge smile on her face, put her hand on my shoulder and asked me if it was true. "Yes, ma'am, it is," I replied. "Well," she said, "that makes you just like family and that deserves an extra big hug!!"

And it was...from a complete stranger to a complete stranger...but just like the ones my Mom used to give my buddies when I brought them over to the house...a real farm wife's hug. So we chatted for a minute before she had to leave.

Talk about being in the right place at the right time...thank you Ken...and God Bless you Lois Hole. Amen

DAVID N. MARQUARDT, ALS

Robin Berg Fundraiser

The organizing committee of the Robin Berg Fundraiser would like to extend a special thanks for your contribution made towards our fundraising efforts. The effort that the ALSA made to make their membership aware of the situation, and the corresponding overwhelming response, makes us very proud to be involved with such a caring and



dedicated organization. The unselfish nature to which all surveyors rallied around one of their own was inspirational. Please keep up the good work.

The event itself was an enormous success with an excellent selection of silent auction items, a slow paced version of wheelchair basketball, and an appearance by Robin himself. To date, we have raised over \$40,000 and donations are still trickling in.

2004 ROBIN BERG FUNDRAISER COMMITTEE
LOU OGSTON, SHEILA HAMLIN, CHRIS JONES,
CANDACE COWNA, TROY DASHKEWYTC

Technical and Business Advice as Close as Your Keyboard

The Alberta loss control seminars on November 23 and 24, 2004, brought fresh information on the current risks the program is experiencing in construction layouts in Alberta. The seminars in both Edmonton and Calgary had low attendance; however, the presentations received positive feedback. Future seminars will be planned differently to get a better attendance.

One of the main points to be taken from the seminars was the need for more diligent checking of layout procedure and checking the layout notes as well as the relationship of the new layout to existing structures onsite. The seminar package contained the first nine pages of the table of contents of the *Loss Prevention and Practice Management Guide* on the CCLS website www.ccls-ccag.ca. This is also another reminder that the entire guide can be viewed and downloaded from this website.

There is also a link from the ALSA website www.alsa.ab.ca to the CCLS website. Much of the subject matter of the seminars is contained in this 60-page guide.

MONROE KINLOCH, ALS
MEMBER, CCLS PROFESSIONAL
LIABILITY INSURANCE COMMITTEE

Thank You

I would like to express my sincerest gratitude to you and the Council for awarding me the Graduate Studies Scholarship. The notice came as a very welcome surprise and I am honoured to be the first University of Calgary graduate student chosen.

My research is focused on integration of inertial and satellite navigation systems using artificial intelligence. An integrated system will be especially useful for cadastral surveys since urban buildings often block satellite signals, making it difficult to use a stand-alone GPS system. I am intending on finishing this research within the next two years, upon which time I hope to pursue a career in navigation and positioning.

This funding has come at a very good time for me as I am also the proud father of a newborn son. So, along with paying tuition and attending conference, I also have to buy diapers. Nonetheless, I realize that there are others less fortunate, so I have donated \$200 of my scholarship to the Red Cross International Response Fund to help those affected by the tsunamis.

Thanks again for your generous contribution and for your ongoing support of post-secondary education.

CHRIS GOODALL

Note: Mr. Goodall's article on his research is on page 39.

On behalf of the Geomatics Engineering students at the University of Calgary, we would like to sincerely thank you for your attendance at this year's Career Day and for making the day a success.

The students of the department truly appreciate the turnout of industry.

They benefited from being exposed to the broad range of disciplines that the geomatics field offers. It is also so great to see a business community that stands behind the Geomatics Engineering Department and its students. Despite the relatively

small size of the Department, there are few other university career days that can match the consistent industry support that we see from year to year and for this we are grateful.

Thank you again for your support and we hope that you will make future Career Days a continued success.

TRICIA CHRISTIE, ASHLEY LARGE, MINA SALEH

PDC Feedback

There are a couple of items I have been approached about as chairman of the Professional Development Committee. One item is Learn at Lunch with open discussion on topics or issues that are creating concerns with surveyors. Small groups at tables and you discuss a current topic or issue over lunch and maybe come to a conclusion on how to proceed in a common direction.

Another idea is an Online Chat Room where questions or concerns can be posted to an ALSA webpage and surveyors can visit, view questions and post comments in an electronic modern-day world.

We all need open discussion on topics and issues of concern in our profession.

I would like to solicit your response to the two suggestions above

*ROSS WOOLGAR, ALS
CHAIRMAN, PDC (2004-2005)*

Tragedy

It is with great sadness that I report one of our party chiefs was fatally injured as a result of an accident while clearing line for a well site survey.

This unfortunate incident is a grim reminder of the need to be vigilant of the dangers that exist during our daily exercises in the field.

We hope you will inform your personnel of this occurrence, and in doing so, we hope it may prevent any potential accidents in the future.

*HERB KIEL, ALS
ALL WEST SURVEYS LTD.*



nominations for council



S.C. (Stephen)
GREEN



R.H. (Rick)
BEAUMONT



D.H. (Dirk)
VANDENBRINK



T.A. (Tony)
BROWN



V.G. (Victor)
HUT



D.A. (Daniel)
LACHANCE



M.H. (Murray)
YOUNG

For President

Stephen Green, P.Eng, ALS, CLS

- Born in Calgary, Alberta 1955.
- Graduated from Ernest Manning High School, 1973.
- Received Honours Diploma in Surveying Technology from SAIT, 1978.
- Articled to C.H. Weir, ALS from 1978 to 1980 and to W.H. Jones, ALS from 1980 to 1983.
- Graduated B.Sc. in Surveying Engineering from U of C, 1982.
- Received ALS Commission in January 1984.
- Served on SAIT Advisory Committee (1984-1986).
- Received CLS Commission in 1987.
- Member of APEGGA, CIG, IRWA, SPE, AGG.
- Member of the Board of Directors, Calgary Geomatics Cluster (CGC).
- Served on Public Relations Group (1986-87).
- Served on Systems and Procedures Group (1987-88).
- Served on Registration Committee (1988-94), Chairman (1992-94)
- Served on ALSA Council (1995-97).
- Served on U of C - Geomatics Industry Awareness Committee (1996-2002).
- Served on Oil & Gas Ad Hoc Committee (Chairman) (1997-present).

- Served on APEGGA Examining Committee (Experience) (1998-present).
- Served on Standards (1999-2004), Chairman (2000-2002).
- Served on Dispositions Subcommittee, Chairman (2003-2004).
- Served on Ad Hoc Legislation Committee (2000-2004) Chairman (2003-2004).
- Served as ALSA Vice President (2004-2005).
- Representative on CAPP Geomatics Committee since 2003.
- Worked for Stewart, Weir and Co. (1978-79).
- Worked for All-Can Engineering & Surveys (1976) Ltd. (1980-1988).
- President and General Manager for The Cadastral Group Inc. (1988-present).
- Coached Little League Baseball (8 yrs).
- Current president, Crowchild Hockey Association (Calgary).
- Married, wife Janet, one son, Jeffrey.

- Articled to Gordon Olsson, ALS, CLS
- Commissioned as a Canada Lands Surveyor—1979.
- Commissioned as an Alberta Land Surveyor—1984.
- Employed by Natural Resources Canada, Legal Surveys Division since 1975.
- Moved to Edmonton in 1978.
- Served Legal Surveys Division in various managerial roles since 1980.
- National Program Manager—Geomatics for Aboriginal Property Rights Infrastructure since 2003.
- Served ALSA as:
Auditor, 1986, 1987;
Finance Committee Member 1988, 1989, 1993;
Practice Group Member 1989;
Councilor for the ALSA 1991 to 1993;
Practice Review Board Member 1995 to 1998.
- Served the Canadian Institute of Geomatics (CIG) as:
Member in good standing since 1974;
Edmonton Branch Councilor 1986 to 1989;
National Executive Committee Member 1998 to 2002;
- Served NAIT Geomatics Advisory Committee 1996-2000;
- Served on the executive of the Canadian Athletic Club (an elite

For Vice-President

Rick Beaumont, ALS, CLS

- Born in Belleville Ontario on June 8, 1951.
- One-year B.Sc. Guelph University, Guelph Ontario—1971.
- Graduated Algonquin College 3 year Survey Technology Program (Honors Distinction) 1975.

- minor hockey club for young athletes from 13 to 18 years old) from 1994 to 2005.
- 1995 to present—Member of the Canadian Charter for Quality in Geomatics.
- 1978 to present—member of Masonic Fraternity.
- 1988 to present—member of Al Shamal Shrine Temple.

Dirk VandenBrink, ALS, P.Eng.

- Born in 1957 at Regina, Saskatchewan and raised in Rocky Mountain House, Alberta.
- Began surveying as a summer job in 1976 with Snell & Oslund Surveys in Red Deer.
- Graduated from the University of Calgary with a B.Sc. in Surveying Engineering in 1981.
- Articled to Ralph Bunting ALS and received Alberta Land Surveyor commission in 1985.
- Received Professional Engineer status from APEGGA in 1984.
- President of Snell & Oslund Surveys (1979) Ltd. since 1989.
- Active member of ALSA, having served on several committees since 1985.
- Served as a member of the Practice Review Board from 1998 to 2002, including one year as chairman.
- Served on the executive of the Innisfail Minor Hockey Association, 1996 to 2002.
- Active in local boys and girls competitive softball including coach of a girls softball team from 1995 to present.
- Hobbies include hockey, motorcycles, camping and farming.
- Reside near Innisfail with his wife Judy, two sons Chad and Kyle, and one daughter Nicole.

For Council:

Tony Brown, ALS

- Born in Newfoundland 1958.
- Graduate of the College of the North Atlantic, St. John's, NL, 1984.
- Articled to Alvin Barrow, NLS, (1988-1990).

- Received Newfoundland Land Surveyors Commission (1990)
- Articled to Brent Murray, ALS, (1997-2000).
- Received ALS Commission (2000)
- Employed by Usher Canada (1997-2000).
- Employed by HCS Ltd. and Tony A. Brown Surveys Ltd. (2000-2002).
- Employed by Focus (2002-Present).
- Member of the Professional Development Committee (2003-Present).
- Married with 3 children.

Victor Hut, ALS, P.Eng.

- Born in Provost, Alberta. Raised in Calgary.
- Graduated from St. Francis High School.
- Graduated from U of C, with B.Sc. in Surveying Engineering in December 1988.
- Articled to Syd Loeppky, Paul Westersund, and Aziz Dharamshi.
- ALS Commission, 1994.
- Previously served on Vision 2000 and Legislation Committee.
- Served on Registration Committee (1998-2004).
- Served as ALSA representative on Western Canadian Board of Examiners for Land Surveyors (1998-Present). Chaired in 2001-2002 and in 2004-2005.
- Previously employed with McElhanney Geosurveys, The Cadastral Group, Loeppky Matthyssen & Associates, Clark & Associates Surveys, and Challenger Surveys & Services.
- Employed by Midwest Surveys Inc, since 1994.
- Member of APEGGA, IRWA, and CIG.
- Hobbies include: golf, weight training, eating, and spending time with my family.
- Married to Kleopatra, 2 children – Nikolas & Kasandra.

Daniel Lachance, ALS, CLS

- Born in St-Georges, Quebec.
- Graduated from Polyvalente Abenaki in 1978.

- Graduated from College Limoilou in Techniques Géodésiques in 1981.
- Employed by Midwest Surveys 1981-1989.
- Graduated from University of Alberta in Survey Sciences in 1991.
- Employed by Coordinates Surveys 1992-1994.
- Obtained CLS commission in February 1993 .
- Articled to Dwight Wiberg, ALS.
- Obtained ALS commission in November 1994.
- Employed by All West Surveys 1994 - present.
- Member of the Standard Committee 1995-1998.
- Member of the Discipline Committee 2003-present.
- Member of the CIG since 1990.
- President of the Bonnie Doon Community League 1998-2002.
- President of Association des Scouts Francophone d' Edmonton 2002-present.
- Hobbies include hunting, skiing and producing maple syrup.
- Reside in Edmonton with Norma and two kids; Denis 13 and Nicole 12.

Murray Young, ALS

- Born in Lacombe, Alberta on November 3rd, 1952.
- Graduated from Lacombe Composite High in 1969.
- Attended SAIT from 1971 to 1974.
- Articled to Don Grant, ALS from 1974 to 1977.
- Received ALS Commission in 1977.
- President of Bemoco Land Surveying Ltd.
- Served on Standards Committee and Convention & Social Committee.
- Served on the Practice Review Board.
- Married to Karen for 30 years with grown children Jenn & John.
- Actively involved with golf, curling & skiing.



association notes

New Members



D.R. (Don)
HANSON



J. (Jeremy)
ZETTEL



R.G. (Robert)
KING



C.M. (Connie)
HANRAHAN



P.L. (Patrick)
MARSHALL



R.A. (Robert)
PINKERTON

#733 HANSON, Donald R.

Don Hanson was born in Lloydminster, Alberta on January 24, 1952. He attended Lloydminster Comprehensive High School and went on to receive a survey diploma from NAIT in 1974.

Articles were served under James Sweeney, ALS from November 2000 to February 5, 2003 when he became an affiliate member. He also holds commissions as a Canada Lands Surveyor and a Saskatchewan Land Surveyor and also served on the Discipline Committee of the SLSA.

Don received his commission as an Alberta Land Surveyor on January 17, 2005.

Surveying experience includes working for Stewart, Weir & Co. Ltd. from 1974 to 1983; SexSmith Can-Alta in 1984; Can-Am Surveys Ltd. in 1985; Interprovincial Surveys Ltd. from 1985 to 2000; and McElhanney Land Surveys (Alta.) from 2000 to the present.

Don enjoys farming (horses and cattle), hockey, golf and gardening. He is married to Frankie and they have two children, Mark and Robyn.

#734 ZETTEL, Jeremy T.

Jeremy Zettel was born in Kitchener, Ontario on August 24, 1973. He graduated from Stratford Central

Secondary School in 1991 and went on to receive a diploma in survey technology from Fanshawe College and a B.Sc. (honours) in Geomatics from the University of Toronto in 1999.

Articles were served under Paul Stoliker, ALS from March 2001 until receiving his commission as an Alberta Land Surveyor on January 24, 2005.

Jeremy has served on the ALSA Standards Committee since 2003. He is also a volunteer trip leader with the Alpine Club of Canada.

Surveying experience includes municipal development, small subdivision and condominium plans.

Jeremy's other interests include back country skiing, rock and ice climbing, mountaineering and mountain biking.

Jeremy and his fiancée Stephanie Jardine reside in Deadman's Flats, Alberta.

#735 KING, Robert G.

Robert Gordon King was born in Estevan, Saskatchewan on February 21, 1979. He graduated from Lloydminster Comprehensive High School in 1997 and from the University of Calgary in 2001 with a B.Sc. in Geomatics Engineering.

Articles were served under James Sweeney, ALS from June 2001 to

January 2005. Commission as an Alberta Land Surveyor was received on January 28, 2005.

Robert is presently in the SLSA's articling process and is also an engineer-in-training with APEGGA. He is employed with McElhanney Land Surveys (Alta.) Ltd. and has been since 2001. He also worked for McElhanney during the summers from 1999 to 2000.

Golfing, football, softball and bowling are some of the leisure activities that Robert enjoys.

Robert and Wendy King reside in Lloydminster, Alberta with their daughter Meghan.

#736 HANRAHAN, Connie M.

Constance Maureen Hanrahan was born in Newfoundland on April 4, 1967. She graduated from Pearce Regional High School of Salt Pond, Newfoundland in 1984 and went on to receive a B.Sc. in Geography from the Memorial University of Newfoundland in 1989. She also graduated from the University of New Brunswick with a B.Sc. in Surveying Engineering in 1993.

Ross Woolgar, ALS served as Connie's principal from 1998 to 2004. Commission as Alberta Land Surveyor was received on January 31, 2005.

Connie holds a designation as a planner and is presently a member of the ALSA Professional Development Committee.

Survey experience includes dimensional control surveying with the Hibernia GBS Project and construction, engineering, oilfield and legal surveying with Challenger Geomatics Ltd. and Westacott Consulting Limited. She is presently employed at the Northern Alberta Institute of Technology and Theriault Consulting Ltd.

Connie and her partner Wayne reside in Edmonton.

#737 MARSHALL, Patrick L.A.

Patrick Lawrence Albert Marshall was born in Westville, Nova Scotia on January 20, 1977. He graduated from Westville High School in 1995, from the College of Geographic Sciences in 1977 as a geomatics

engineering technologist and from the University of New Brunswick in 2002 with a degree in Geomatics Engineering.

Articles were served under Brian Wetter, ALS from April 2002 to February 2005. He received his commission as an Alberta Land Surveyor on February 15, 2005.

Patrick presently serves on the ALSA Professional Development Committee.

Survey experience includes working as a draftsman, party chief and project manager with Walker Newby, which is now IBIWN Surveys Inc., from 1997 to present.

Patrick also enjoys golf, hockey and tennis.

Patrick and Karen Marshall reside in Calgary, Alberta.

#738 PINKERTON, Robert A.

Robert Andrew Pinkerton was born in Vancouver, BC. on April 9, 1978. He graduated from Lord Beaverbrook High School in 1996 and went on to receive a B.Sc. in Geomatics Engineering from the University of Calgary in 2002.

Articles were served under Mark Kocher, ALS from June 2002 until he received his commission on February 16, 2005. Robert is also an engineer-in-training with APEGGA.

Robert's survey experience is mostly oilfield He has worked with Fugro/SESL Geomatics Ltd. and is presently employed with Millennium Geomatics Ltd. in Calgary.

Fencing and hiking are a couple of Robert's other activities.

Farley Mckenzie

May 17, 1960 - January 6, 2005

2005 starts off poorly with the passing of Farley Mckenzie.

Farley will be missed as a loving husband, a proud father, a loyal friend, a trusted and valued co-worker, and a friendly competitor. The outpouring of support from the industry has been heartwarming for family and friends. We will all miss Farley's steadfast pursuit of perfection in whatever role he was in: father, friend, salesman, support person, or poker player.

Farley is survived by his wife Maureen, his daughter Madison and son Callum, along with many friends.

Farley left most things in a better way than he found them, and will be remembered with a smile by anybody who knew him.

I am proud to have called him a friend.

RANDY HUDSON



Changes to the Register

AGP Geomatics Ltd.—mailing address should be 18920 - 98 Avenue, Edmonton T5T 5K2

AMEC Land Surveys Limited—fax number should be (780) 449-0663.

Bruce Barnett, ALS—e-mail address is brucebarnett@mgcl.net.

Bryan Bates, ALS has taken employment with Can-Am Geomatics BC as operations manager. His new address is 9900 - 100 Avenue, Suite 200, Fort St. John, BC V1J 5S7; Tel: (250) 787-7171; Fax: (250) 787-2323; e-mail remains unchanged.

Tony Brown, ALS has relocated to the Edmonton office of Focus Surveys Inc.

Charles Chiasson, ALS—direct e-mail address is charlesc@douglassurveys.com.

Buster Davison, ALS (Ret.)—new residential address is 43 Bosun Run, Halifax, NS B3M 4W3; Tel: (902) 453-0993; e-mail: busterdavison@ns.sympatico.ca.

Bruce Drake, ALS—direct e-mail is bdrake@palssurveys.com.

Focus Surveys Inc. has closed its Fort McMurray branch office as of December 31, 2004. Tony Brown is now with Focus' Edmonton office.

Charles Godard, ALS is with Caltech Surveys Ltd. in Calgary effective February 11th. His direct e-mail address is charles.godard@caltechsurveys.com; direct phone number is (403) 716-2338.

IBI Geomatics Inc. (P223) is a new surveyor's corporation effective February 16, 2005 under the supervision, direction and control of John Byrne, ALS. Contact information is: 104-5 Jasper Avenue, Suite 1050, Edmonton T5J 3N4; Tel: (780) 428-4000; Fax: (780) 426-3256; e-mail: jbryne@ibigroup.com; Website: www.ibigroup.com.

Syd Loeppky, ALS has become the Vice-President of Beiramar Development Corporation effective November 1, 2004. New contact

information is: 550 - 11 Avenue SW, Suite 703, Calgary T2R 1M7; Tel: (403) 243-7225; Fax: (403) 243-7290; e-mail address is sloepky@beiramar.com

Midwest Surveys Inc.—Grande Prairie address should read 11402A - 100 Street. Other information is unchanged.

Morrison Land Surveys Ltd.—phone number is (403) 804-7421.

Precision Geomatics Inc.—fax number is (780) 486-9435.

Brad Sawchuk, ALS has taken employment with Focus Surveys Inc. in Calgary. as of December 31, 2004. His direct e-mail address is brad.sawchuk@focus.ca.

Schlachter & Associates Ltd.—phone number should be (306) 525-6879.

Stantec Geomatics Ltd.—Edmonton mailing address should be 10160 - 112 Street, Suite 200 T5K 2L6.

Norman Suvan, ALS (Ret.)—new residential mailing address is 10306 - 138 Street, Edmonton T5N 2J3

Allan Theriault, ALS has been reinstated as an active member as of January 11, 2005 (#562).

Theriault Consulting Ltd. (P224) is a new surveyors' corporation effective February 22, 2005 under the supervision, direction and control of Allan Theriault, ALS. Contact information is: 400 Buchart Drive, Edmonton T6R 1P8; Tel: (780) 430-7637; Fax: (780) 430-4569; e-mail: ather@telusplanet.net.

Peter Walker, ALS has taken over the Calgary branch office of Precision Geomatics Inc. as of February 14, 2005. His new mailing address is 707 - 10 Avenue SW, Suite 304 T2R 0B3; Tel: (403) 266-6647 or 1-877-266-6649; Fax: (403) 266-6847.

Vision Geomatics Inc. is an official surveyor's corporation as of January 6, 2005 under permit #P222. Jason Paziuk is the ALS assuming supervision, direction and control.

*net
notes*



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Steinecke Maciura LeBlanc

www.sml-law.com

Practicing Professional Regulation and Discipline. Check out the newsletters page

Point of Beginning Message Boards

www.i-boards.com/bnp/pob/default.asp

One contributor recently posted the following message: Does your state's professional association measure up? "State professional associations should follow Alberta Canada's lead on web sites that promote the land surveying profession check out their site and tell me what you think?"

Torrens in the Twenty-First Century

www.lexisnexis.com.au/nz/products/catalog/browse/Property&Land/Torrens.asp

This book provides a unique and valuable "snap-shot" of the Torrens system moving into the new millennium, and an enduring source of authoritative commentary and analysis for land lawyers, teachers and students.

Vintage Calculators

www.vintagecalculators.com

A celebration of old calculators showing the evolution from mechanical calculator to pocket electronic calculator.

BC Association Changes Name

Effective January 21, 2005, the Corporation of Land Surveyors of the Province of British Columbia has changed its name to the Association of British Columbia Land Surveyors. The Association e-mail has changed to abcls@telus.net. All other contact information remains the same.

The New Boundary Resolution Process.

Editor's Note: On January 27, 2005, the Council of the Alberta Land Surveyors' Association approved the Boundary Resolution Process as a pilot project with a budget of \$10,000 for the 2005-2006 fiscal year.

What is the overall intent of the recommendation?

For several years the Alberta Land Surveyors' Association has been attempting to develop a system for resolving boundary problems in the Province.

The Section 9 of the Surveys Act Ad Hoc Committee (the "Committee") is recommending a process at this time that will show leadership in protecting the public use and enjoyment of land by assisting Alberta Land Surveyors to find solutions to boundary problems.

Section 9 of the Surveys Act has been used very rarely to resolve boundary problems. A number of reasons have been offered for this limited application of a powerful tool. It may be that the limited scope of Section 9 is a hindrance, or it may be that Alberta Land Surveyors have not been aggressive enough in pursuing this remedy. Alternately it may be due to the limited number of parties that are eligible to bring problems forward. A number of theories exist, and have been discussed at length by the Committee. The Committee is aware that some of these boundary problems are being compounded over time by the completion of subsequent related surveys.

Therefore, the Committee decided to bring forward a process that will allow the ALSA to learn more about the nature of the problems, the solutions for these, and ultimately if it is necessary to amend the Surveys Act or other statutes. At the same time, this process should assist in solving many of the existing problems currently lying dormant. The Committee is not prepared to recom-

mend legislative changes until a better understanding is formed.

The process that is proposed has two components: firstly mediation, and secondly a boundary panel.

The mediation facility would be established by the ALSA to assist two or more active Alberta Land Surveyors to resolve differences of professional opinion. It is intended that this facility be used only when the affected Alberta Land Surveyors cannot agree on solutions through direct discussions.

If mediation does not occur, fails or is not applicable, the matter will be forwarded to a boundary panel.

The Committee anticipates that some Alberta Land Surveyors will refuse to participate in mediation. On the other hand mediation may not result in a solution, or be applicable to the problem in the first place. If mediation does not occur, fails or is not applicable, the matter will be forwarded to a boundary panel.

The Boundary Panel will consist of experienced Alberta Land Surveyors and may include a public member, all appointed by Council of the Alberta Land Surveyors' Association. This panel will have no legislated powers at this time but will be responsible to investigate circumstances and recommend solutions. The Boundary Panel may decide that Section 9 of the Surveys Act should be applied in certain cases (based on an updated intent and application document that has been developed by the Committee), in others it may suggest alternatives such as court order or resurvey. If Section 9 is proposed for a particular case, the panel must bring a recommendation to Council of the ALSA for further action in accordance with the Surveys Act.

What is the problem to be addressed?

The problem is that boundary uncertainties or alleged errors in surveys exist in Alberta and that there is no clearly defined process to resolve them. As a result, there are many unresolved boundary uncertainties or alleged errors in surveys lying dormant.

At the 2004 annual general meeting, the Director of Surveys stated that his office is contacted 6-12 times by surveyors looking for help or additional information in any given year.

How does the recommendation solve the problem?

This recommendation establishes a process to help Alberta Land Surveyors resolve boundary uncertainties or alleged errors in surveys.

The Section 9 Ad Hoc Committee is aware that other jurisdictions have procedures to deal with boundary uncertainty issues. Ken Allred's 2001 paper to Council, reviewed by the Committee, identified similar processes in other jurisdictions. At the 2004 annual general meeting, Dr. Mike Barry spoke of the South African experience and Francois Dion spoke about bornage in Quebec.

What is the genesis for the recommendation?

At the 2000 AGM, under new business, the membership recommended that Council consider establishing a committee charged with preparing a white paper for presentation to the Government of Alberta with respect to establishing a statutory boundary tribunal to provide an avenue to resolve boundary uncertainties and disputes as an alternative to resorting to the court process.

Following the 2000 AGM, then vice-president Ken Allred was asked

In the end, the Statutory Boundary Tribunal Committee passed a motion that the Committee recommend to Council that Section 9 in principle, is suitable for dealing with boundary uncertainties as a result of survey errors.

to do some research on this issue and prepare a paper. In early 2001, Mr. Allred submitted his paper to the ALSA Council. He concluded that the current Section 9 of the Surveys Act is likely the only process for the resolution of boundary type problems outside the court system. He went on to say that it is clear that the breadth of this remedy was severely limited in the discussions that led up to the passing of the new Surveys Act. "It is also clear that 'survey errors' are only a minor cause of boundary uncertainties and the provisions of Section 9 of the Surveys Act do not extend far enough to resolve the majority of boundary problems."

In the 2001-2002 Association year, Council established a Statutory Boundary Tribunal committee. The Committee was asked to analyze Mr. Allred's report, conduct additional research (research court cases, discipline files, speak with Land Titles and the Director of Surveys), and identify options for change including revisions to the Land Titles Act and the Surveys Act.

In December 2001, Mike Michaud, the Director of Surveys, and Tim Grusie, from Land Titles, had a meeting with Council. The Director of Surveys had written a letter to

Council on October 19, 2001 that the "need to develop a process for dealing with boundary problems is paramount." Council passed a motion requesting that the Executive Committee develop a process for dealing with boundary problems.

The Statutory Boundary Tribunal Committee struggled; it had a difficult time focusing on what exactly the issues were and how significant the issues were. In the end, the Statutory Boundary Tribunal Committee passed a motion that the Committee recommend to Council that Section 9 in principle, is suitable for dealing with boundary uncertainties as a result of survey errors. The Executive Committee also struggled with the issue. With all of its regular discussions in advance of a Council meeting, it was impossible to focus on identifying the scope of the issue and then developing a process.

In September 2002, Council disbanded the Statutory Boundary Tribunal and removed the action item from the Executive Committee's terms of reference. Council established the Section 9 of the Surveys Act Ad Hoc Committee (Council motion 2002.09.010) with the following specific terms of reference:

At the 2004 AGM, the concept of the Boundary Resolution Process was put to the membership in a straw vote. There was overwhelming support for the concept.

How is the recommendation in the public interest?

At its October 1st and 2nd, 2003 strategic planning session, Council identified "resolving boundary uncertainties" as its top priority and consistent with the mandate to protect the public interest.

This recommendation by the Ad Hoc Committee establishes a process to help Alberta Land Surveyors resolve boundary uncertainties. These uncertainties have an adverse effect on land owners now and in the future, and can present significant impediments to the use and enjoyment of land. Moreover, failure to resolve boundary uncertainties may lead to a compounding of the seriousness and expense of resolution in the future. A practical process for resolution of uncertainties will be of direct benefit to land owners and the public.

The proposed process in this recommendation should mean that boundary uncertainties will be resolved quicker. It means that the more serious boundary uncertainty or alleged error in survey cases will have been reviewed by a group of the Alberta Land Surveyors' peers who may be able to recommend a method of resolving the matter.

Boundary Resolution Process

What is the Boundary Resolution Process?

The Boundary Resolution Process has been developed to assist Alberta Land Surveyors to address boundary uncertainties and alleged errors in surveys that have been identified through their daily activities. There are two components to the Boundary Resolution Process. First, if the involved Alberta Land Surveyors cannot informally resolve the situa-

tion themselves, the Alberta Land Surveyors' Association may assist with mediation. Second, if mediation has failed or does not apply, there is a referral from the Executive Director to the Boundary Panel who would convene to determine if the boundary uncertainty is best resolved by Section 9 of the Surveys Act or some other means.

For the purposes of this document the following definitions shall apply:

An alleged error in survey exists when a corner or boundary of property of record on a plan registered in a Land Titles Office or the Metis Settlements Land Registry has been formally brought into question by an Alberta Land Surveyor.

Boundary uncertainty occurs when the opinions of two or

more Alberta Land Surveyors are in conflict as to the position of a corner or boundary of property whether the Alberta Land Surveyors are active or not.

When is the Boundary Resolution Process Initiated?

The Boundary Resolution Process may be initiated when:

- there is a boundary uncertainty in a survey to which the Surveys Act applies and which is represented by a plan of record in the Land Titles Office or the Metis Settlements Land Registry, or
- there is a boundary uncertainty as a result of re-establishing the position of a lost governing monument of a previous survey of record in the Land Titles Office or the Metis Settlements Land Registry, or
- there is a boundary uncertainty as a result of placing a monument (or computing a coordinate) to govern a boundary shown on a plan of record in the Land Titles Office or the Metis Settlements Land Registry, or
- there is a boundary uncertainty as a result of an alleged error in a measurement made to show the position of a monument, placed to govern a boundary shown on a plan of record in the Land Titles Office or Metis Settlements Land Registry, relative to an existing boundary, and
- there is a boundary uncertainty of a magnitude, which is in excess of the accepted limits of accuracy prevailing at the date of survey.
- the Boundary Resolution Process does not apply to natural boundaries.

PART I

What is the first step in the Boundary Resolution Process?

The first step in the Boundary Resolution Process is for the involved Alberta Land Surveyors to communi-

The mediator does not render an opinion as to who is right, where the boundary is, or whether there has been professional misconduct.

cate with one another to try to resolve the situation before the initiation of any formal process.

If there is a continuing difference of opinion, the Alberta Land Surveyors' Association may assist with mediation.

The intent is to mediate a resolution to a boundary uncertainty or an alleged error in survey.

What is Mediation?

Mediation is a process of dispute resolution where a mediator or trained negotiator assists parties to a dispute, who have each agreed to mediate, in negotiating a settlement. The process takes place on a confidential, without prejudice basis and is entirely voluntary. A mediator is usually chosen who has experience with, and an understanding of the area of dispute. Settlements can often be reached within a few hours when mediation is used, saving much time and money (excerpt from the Alberta Arbitration and Mediation Society - www.aams.ab.ca). The mediator does not render an opinion as to who is right, where the boundary is, or whether there has been professional misconduct.

When would mediation apply?

- When there is a boundary uncertainty.
- When the Alberta Land Surveyors involved are still active or retired or honorary life members or former members and agree to the mediation.

Who can request mediation?

- Mediation is between two or more Alberta Land Surveyors that have identified a boundary uncertainty. However, anyone knowing of that boundary uncertainty being any affected land owner, any Alberta Land Surveyor, any Council of a

municipality, the Director of Surveys, a registrar to a Land Titles Office or the Metis Settlements Land Registry may request mediation as well.

Where is the request for mediation sent?

- The request for mediation is sent to the Alberta Land Surveyors' Association office.
- The Executive Director of the ALSA shall take the lead on the file. Because of concerns regarding conflict with the discipline process, the Registrar shall not be responsible for the file. The Executive Director shall not file a complaint on a file brought forward for mediation.

Who can mediate?

- The mediator could be an Alberta Land Surveyor and/or a member of the Alberta Arbitration and Mediation Society..
- The mediator must be impartial and independent with no prior involvement in the dispute. If a bias or perception of bias develops at some point during the mediation, either the mediator or one of the parties may terminate the mediation.
- Mediation can be conducted with either one or a number of mediators. A panel of two or more mediators is generally utilized where the dispute is more complex, involving a number of areas of expertise, or where the dispute involves more than two parties. Where more than one mediator is utilized, it is important to ensure that the mediators can work together effectively. (excerpt from the website of the Alberta Arbitration and Mediation Society - www.aams.ab.ca)

What are the Association costs?

- Mediator fees and expenses.
- Administrative costs.

Who selects the mediator?

- The Executive Director or any other party involved can put forward the name, or names, of possible mediators.
- Parties must unanimously agree to the mediator.

What if mediation does work?

For the mediation process to work, it must end in a formal written agreement ratified by the practitioners and an undertaking to resolve all issues for affected parties. There shall be documented confirmation, in general terms, of the outcome of the mediation submitted to the Executive Director and the parties. The Executive Director will be responsible to follow up with the parties on the outcome. If the agreed upon outcome has not occurred within a reasonable amount of time, the case will be directed to Part II of the Boundary Resolution Process.

What if mediation does not work or does not apply?

The Executive Director must refer the matter to the Boundary Panel.

PART II

What is the intent of the Boundary Panel?

To determine if a boundary uncertainty is best resolved through section 9 of the Surveys Act or some other means.

When would the Boundary Panel convene?

The Boundary Panel would convene when mediation has failed, does not apply, or there is a referral from the Executive Director. If one or more parties do not participate the Bound-

The Boundary Panel would convene when mediation has failed, does not apply, or there is a referral from the Executive Director.

ary Panel may still convene. If there is an outstanding complaint against any of the parties relative to the matter in question, the Panel shall not deliberate on the issue.

Who is on the Boundary Panel?

Council shall appoint, by motion, members of the Boundary Panel from which it shall appoint a chairman and/or one or more vice-chairmen. The Panel shall have at least six members, one of whom may be a public member and the others shall be Alberta Land Surveyors. Three members shall constitute a quorum of the Panel. The term of appointment for Panel members is five years.

Appointments to be made to ensure a balance of expertise in areas such as urban land development, resource industries, general practice, RPR/construction, control surveying/GPS. Appointments to be made to ensure a reasonable geographic balance.

What are the terms of reference of the Boundary Panel?

1. Parties involved in the boundary uncertainty or alleged error in survey shall provide all of their research, field notes, and any other documentation to the Panel in advance of the meeting. The Panel may do any investigation that it deems necessary.
2. The Panel shall encourage a resolution that best ensures that a boundary uncertainty or alleged error in survey is resolved and may recommend solution by Section 9 or some other means. The Panel may ask for additional survey work to be performed by the surveyors involved.
3. The Boundary Panel may recommend how the Alberta Land

Surveyor(s) may resolve the boundary uncertainty or alleged survey error but not express an opinion on where the boundary is.

4. If the Boundary Panel recommends a Section 9, it shall make such recommendation to Council so as to present the case advocating a Section 9 to the Director of Surveys on behalf of Council without providing Council with names, facts, or specific information.
5. Any sitting of the Boundary Panel may be recorded. The extent of the record keeping of the Boundary Panel would be determined by the Chairman
6. Subsequent to convening of the Boundary Panel, the Chairman shall prepare a written report of the findings of fact along with any recommendations made by the panel and keep the report on record for subsequent follow-up.
7. Land owners, the Council of a Municipality, the Council of the Alberta Land Surveyors' Association or a Registrar of a Land Titles Office or the Metis Settlements Land Registry shall retain their right to request a Section 9 Board of Investigation directly to the Director of Surveys.
8. The Panel shall not award damages or costs.

What are the Association costs?

- The Association would be responsible for the expenses of the Panel members, including the public member.
- The Association would be responsible for providing a means of keeping accurate records.
- Administrative costs.



spr director's message

by Lyall Pratt, ALS

SPR Phase 3

We are now about a year into Phase 3 of Practice Review. As with Phase 2, it is my intention to try and maintain approximately a five year spread between an initial Phase 2 review and an initial Phase 3 review. If there were one or more follow up reviews in Phase 2 or a supplementary review, the spread between the last follow-up review in Phase 2 or the last supplementary review may be less than the five years as the five year spacing would be based on the initial Phase 2 review. So if it has been five years since your Phase 2 review, you will be hearing from me soon about scheduling a Phase 3 review.

The framework document approved by council for Phase 3 on August 28, 2003 is on the ALSA website at www.alsa.ab.ca/pdf/framework3.pdf.

Use of the Term "Surveyor"

Under Section 4 (1) of the Land Surveyors Act the exclusive use of the name Alberta Land Surveyor, surveyor or land surveyor are spelled out. It says:

4(1) No person except a practitioner shall

(a) use the name "Alberta land surveyor," "surveyor" or "land surveyor or any abbreviation of them either alone or in combination with any other word,

(b) use the initials "ALS" either alone or in combination with any other word, initial or abbreviation, or

(c) use any title, name, description, abbreviation, letter or symbol representing the name "Alberta land surveyor," "surveyor" or "land surveyor" that represents expressly or by implication that the person is an

...I think Alberta land surveyors should stop referring publicly to their field staff as surveyors.

Alberta land surveyor, surveyor's corporation or surveyor's partnership.

Field staff, the public and even practitioners that I have spoken with over the years often refer to their field staff as their field surveyors. Is this misleading and contrary to the Land Surveyors Act? We may not be able to ever change the public perception of a field crew as surveyors, but I think Alberta Land Surveyors should stop referring publicly to their field staff as surveyors. Call them survey technologists, field crew, or perhaps articulated pupils, but avoid the terminology surveyor unless you are speaking of an Alberta Land Surveyor.

Right of Ways & Natural Boundaries

There are many certificates of title which describe a parcel of land as, for example, the NE ¼ of Sec. 18, Twp. 41, Rge. 20, W4M, excepting therewith Lake No. 14 as shown on a plan of survey of the said township signed at Ottawa on the 26th of June, 1918.

Lakes like this especially in central Alberta are generally shallow and the water has often receded. In some cases, the water has dried up completely, and there is no actual defined boundary of these lake beds.

If a pipeline right-of-way survey were to cross through a section of the dried up portion of Lake 14, the surveyor should obtain the field notes from the Director of Surveys, (soon to be available through SPIN) plot the position of the bank of the lake as

shown on the title and separate out that area of the right-of-way which falls within the lake as dictated by the plotted boundary. For right-of-way purposes, the boundary of the parcel is that which is described in the certificate of title. Seldom if ever would a right-of-way be constructed through an existing lake. If, however, the right-of-way were to cross an existing natural boundary of a lake, river or stream, ties should also be shown to the current bank at the time of survey as this is the riparian boundary.

If this quarter section or at least the portion within the dried up lake were to be surveyed for subdivision purposes the natural boundary should be resurveyed in its current position if in fact it still exists. If the lake has completely dried up, the ownership of the former bed and shore has to be determined and the Land Titles Office will require applicable consents, transfers or perhaps even a judge's order might be necessary.

The owner of the NE 18 (riparian owner) has a legitimate claim to any land obtained by accretion which was covered by the waters of Lake 14 that have now receded. However, until he/she makes this claim and has the certificate of title amended, as per Section 89 of the Land Titles Act, the boundary for title purposes remains in the position as surveyed originally and as described in the certificate of title. SUR-12 of the Land Titles Office Procedures Manual deals with amending a title due to changes in a natural boundary. Obviously it is a good idea to show the current location of the natural boundary and the one determined in 1918 when making application to amend the description due to a change in a natural boundary.

Case Study No. 23: Delayed Posting

This is the twenty-third in a series of articles featuring problems or issues commonly encountered in Systematic Practice Review. The purpose of these articles is purely educational, so no names or identifying legal descriptions are included. Opinions expressed are those of the author.

The Issue

Legislation authorizing the use of delayed posting came into force in December 1975. During the period of 1995-1998, the Director of Surveys Office had limited involvement with delayed posting surveys. In 1999, after receiving several inquiries from land surveyors, the Director of Surveys Office started to track the registration of the form required by Section 47 (3) (b) of the Surveys Act. Letters were sent to every land surveyor who failed to either file the required form within the one year time frame, or request a deadline extension. Copies of these letters were also sent to the Director of Practice Review. I am amazed at the number of letters. Since the start of Phase 2 of Practice Review we have made a point of discussing the delayed posting issue with all members during the course of a review. As recently reported to the liaison committee meeting, the number of surveyors neglecting to either register the required form or request an extension of time has gone up. This may be due to the increased use of delayed posting, but it also points to very poor tracking systems by some of the membership.

History

Since delayed posting legislation first came into effect in December 1975,

approximately 2,870 plans have been registered under the legislation. This would include the 405 (a high) registered in 2002 and the 2 (a low) registered in 1984 and again in 1985.

Timelines

December 1975: Delayed posting legislation comes into effect. A fee is to be collected for the establishment of additional Alberta survey control markers. The fee is eventually established in the Survey Control Regulations as \$200 per hectare. The Survey Control Regulations (AR 74/76), sections 3 to 9 inclusive, spell out the requirements relative to delayed posting.

1980: Through RSA 1980, the delayed posting section became section 37 of the Surveys Act.

June 9, 1988: On June 9, 1988 the current Surveys Act was proclaimed. Section 43 of the Act dealt with the delayed posting provisions. To this point, only about 117 delayed posting plans had been registered in the province over the approximately 13 years of legislation allowing it. Also effective June 9, 1988, surveyors are required to deposit a bond to ensure satisfactory completion of the posting requirements.

July 14, 1995: The bonding requirement is removed after seven years, and the Director of Surveys Office no longer processes delayed posting plans. It should be noted that posting extension requests are still processed through the Director of Surveys Office.

December 10, 1997: The Director of Surveys sends a letter to the chairman of the Practice Review Board after a review of what has been happening

with delayed posting since their office was last involved. The Practice Review Board directs the Director of Practice Review to discuss delayed posting issues with practitioners during the course of a Phase 2 practice review.

November 5, 1999: The Director of Surveys Office reports that of 1,732 subdivision plans registered in 1997, 166 were delayed posting surveys, and that of 220 condominium plans registered in 1997, 18 were delayed posting surveys. This would be a total of 184 delayed posting surveys in 1997. Only 141 of these (76.6%) registered the required form within the one year time frame. Because the rate of non-compliance was 23.4% it was decided to review all delayed posting surveys since July 14, 1995 and establish a continuous monitoring system. Letters were sent to all non-compliant surveyors and copies of the letters are sent to the Director of Practice Review. With the repeal of the Survey Regulations in 1999, the delayed posting monumentation certificate is moved into the Forms Regulation pursuant to the Land Titles Act.

2000: Through RSA 2000, Section 43 of the Surveys Act becomes Section 47.

May 4, 2002: MSP Part C, Section 5.7 is revised to allow delayed posting surveys at distances of greater than two kilometres from Alberta Survey Control.

March 2003: Issue of non-monumented survey plans is written up on page 38 of the March 2003 issue of *ALS News*. Results of the review of 2001 registrations are detailed.

April 9, 2003: Practice Review Board publishes Interpretation Bulletin 7-2003 dealing with non-monumented survey plans.

June 2004: PRB Guardpost article by Dwight Wiberg, ALS on the matter is published in the June 2004 issue of *ALS News*.

December 2004: The issue of delayed posting surveys and the continued non-compliance by land surveyors in registering the required form or requesting a time extension is again discussed at the liaison meeting. New statistical information provided indicating substantial non-compliance is still an issue.

Non-Compliance

On the surface, it appears to me that many members are using the Director of Surveys letters as their tracking systems for delayed posting surveys. To these members I would say: "it is *your* duty to complete these surveys and finalize registration within the time frames allowed by law, or seek an extension before the time has expired." It is extremely simple these days to schedule items even years in advance, why not track your own deadlines?

One solution proposed at the liaison meeting was to re-introduce legislation requiring bonding, so that members have a financial commitment to see the survey completed. From my perspective, this would be a shame simply because some members can not seem to track deadlines. I do not understand. What is the problem? Why must others (the Director of Surveys Office in this case) remind land surveyors of their legal responsibilities?

Rates of Non-compliance

From 1997 to 2001, the percentage of delayed posting surveys where the surveyor did not either register the required form or request a time extension averaged about 25%. So one out of every four delayed posting surveys was non-compliant over this

five year period. In fact, the latest statistics indicate that 42.5% and 34.1% were non-compliant in 2002 and 2003 respectively. There has been very little change in the percentages of non-compliance and, in fact, the number seems to be increasing. So surveyors appear to not be getting the message. Why? As noted earlier, the number of delayed posting surveys peaked in 2002 at 405, but the number of non-compliant surveys twelve months after registration also peaked at 172.

Coordinate Amendments

SUR-8 of the Land Titles Office Procedures Manual now makes it clear that Section 92 of the Land Titles Act for clerical corrections does not include corrections to the table of coordinates on delayed posting plans where the correction would have the effect of altering a boundary. In general, coordinate amendments are treated as a plan correction requiring owner's consents or judge's order.

Message

Section 47(3) of the Surveys act says:

47(3) A surveyor who submits for registration a plan pursuant to subsection (1) shall, within 1 year from its registration or within a longer period of time specified by the Director, (a) place the monuments required by section 45 (1) in accordance with the survey control markers and coordinates shown on the plan, and (b) file with the Registrar proof under oath, in the form prescribed by regulations under the Land Titles Act, of having done so.

Within one year of the date of registration, land surveyors have two tasks to complete according to the law. Place the required monuments, and file proof of having done so with the Land Titles Office. These are the final two steps in the registration of a delayed posting survey. These are not

onerous duties, so why can't a large percentage of our membership comply with this legal requirement?

I fully expect that unless we soon see nearly full compliance with the law, there will be a movement towards re-introducing the bonding requirement for delayed posting surveys. While in many regards this may be counter-productive, it would put a financial obligation on land surveyors to comply with the legislation. A financial penalty may be the only effective incentive there is to comply with the requirements of the law. What a shame. I still get copied on each letter, so I know who the members are that do not currently meet the requirements.

We keep hearing that education is the answer, but obviously some of you are not getting the message. We have been talking about this issue for five years now, and the problem seems to be getting worse—not better. For 2005, resolve to track all delayed posting surveys and either register the required form within the twelve month period or request an extension before the expiration of twelve months after registration. How hard can this be?

Upcoming Seminars

Getting It Right

March 10 and 11, 2005
Edmonton

Exam Preparation

March 12, 2005—Red Deer

Land Use in Resource Development

April 2005—Calgary

Leadership

April 2005—AGM



guardpost

by Blaine Benson, ALS

The end of my first year on the PRB is approaching. Having attended five meetings, I am only now beginning to feel familiar with the process and comfortable with the responsibility of being a member of the PRB.

Reflecting on the meetings thus far, two recurring themes come to mind. One is the amount of indifference by a few practitioners to comply with deadlines imposed by the Board. In some cases, missed deadlines were even self-imposed. Although these practitioners are few and far between, the amount of time and energy taken by the Board to appropriately deal with them is significant. At meetings when these reviews are on the agenda, I find constant mental reminders of the PRB's educational mandate are necessary. Without this context, the temptation to wash one's hands of a problem and refer the file to discipline would be beyond control.

That being said, there were numerous files presented to the Board that were refreshing to receive. It wasn't that issues weren't uncovered in these reviews, but that the response was provided in a timely fashion, even if an extension had been granted. Additionally, all points were addressed in the spirit of the process, namely as an educational process. These practitioners recognize the benefits Practice Review can bring. They appreciate the feedback and make the changes necessary to improve their practice.

The second recurring theme observed over the past year has been the issue of dormant plans. In all reviews, the practitioner is asked if they have any dormant plans. This question causes many of us who practice in the oil and gas sector to squirm. I know I did when the DPR asked the question during a recent Phase 3 visit to our firm.

This topic is one that is often discussed, but in my opinion we are not any closer to an answer. Using the search function on the ALSA website resulted in 22 hits when "dormant plans" was entered. Councillor's Forum, SPR Corner, *Council Report*, and general articles have all contained opinions on dormant plans.

In SPR Corner Case Study No. 11, contained in the March 2002 edition of *ALS News*, the DPR defines a dormant plan as any survey, the plan of which was required to be registered in the Land Titles Office but does not get registered within the required time frames. Toward the end of the case study, the DPR notes that some practitioners have established a policy of registering a monument plan if a signature is not provided after a reasonable length of time.

In my opinion, this is an excellent idea. But as a practitioner, I have always hesitated in converting a pipeline plan to a monument plan, especially when EUB records indicate a pipeline has been installed and is operating. I think this action can be justified only when an effort has been made to obtain the required signature. Therein lies my hesitation. Have I made a reasonable effort to obtain the signature? In many cases, I would say no.

In our practice, which I presume is not unlike many others, legal plans, together with the appropriate form, are sent to the client. A cover letter describes what is required on their behalf. We also send out reminder letters if no response has been received after a period of approximately six months. We even attach EUB data including the licence number of the operating pipeline together with an EUB plot showing the pipeline route.

But have we done enough? Have we earned the right to convert the unreturned pipeline plans to monu-

ment plans? In my case, I believe one more step is required. A concerted effort to educate our clients in the importance of registering plans. Perhaps it is a lunch and learn session at the client's office where engineers, land agents, and administrators are given a tutorial on the plan registration process. Whatever this next step is, I believe it will only be successful if you are able to convince your client to "buy in" to the plan registration process. We all fear the unknown, and our clients are no different. Signing the consent to register form scares them because they do not understand the extent of liability their signature will bring on them.

In the *Council Report* of a February 27, 2003 Council meeting, a report is given on the action of Council in response to a motion from the 2002 AGM to get involved with the dormant plan issue. It is reported that Council has asked the Professional Development Committee to develop an educational program on the issue of dormant plans. I would suggest the PDC develop an educational program for our clients—a program that is designed to be presented by a practitioner to his client in a face-to-face discussion. Perhaps it is in the form of a brochure, but I hesitate with this idea because it would be too easy to simply mail a dozen copies to each client and then sit back and wait for legal plans to be returned by the box full, which I believe would be wishful thinking.

For my last thought on dormant plans, consider the result of the last of 22 hits on the ALSA website search feature. Clicking on the last match brings up the "Alberta Land Surveyors' Association Application for Retired Membership." There are twelve questions to be answered on the form. Question number six reads:

.....continued on page 42



pdc corner

by Courtney Tripp, Affiliate Member

Professional Development for Kids

In his last *ALS News* message, President Al Nelson called upon Alberta Land Surveyors to become visible in the schools. His message coincided with the beginning of our province's centennial celebration – a perfect opportunity to promote the profession.

Alberta's wealth is undeniably land-based and land surveying has been integral to the development of our economy. Surveyors were among the first white people to see the abundance and contemplate the potential and, although surveying has developed from wrestling with red river carts and bugs to tinkering with

web-based, geo-referenced databases—and bugs—our public profile has remained understatedly low-key. The orderly development and peaceful enjoyment of land is a hard sell compared to cowboys and Indians, speculators and oil barons. None of us minds our lack of notoriety. In fact, we avoid even the appearance of impropriety and shun controversy.

Now, however, Albertans from Indian Cabins to Onefour are taking advantage of the centennial to celebrate their accomplishments and mark their presence in history and, to respond to the president and oblige the public, Alberta Land Surveyors must do the same. Let's make a point of advertising the surveying life to young Albertans through the educational system.

We could take our fascination with geography to children in elementary schools. We could take our penchant for the outdoor life to teens. We could take our wonder for the workings of math and law to young adults. Each of us has his and her reasons for choosing this career and it is in each of us to share that with our young citizens.

Instead of approaching this with the sense of reserve and humility that characterizes the land surveyor, let's step into it with enthusiasm for our profession and for the future of our province. The schools need surveyors to inform and to inspire students and the profession needs the minds and bodies to do the work that Alberta will need done in the next century.



public relations

by Scott Partridge, ALS — Chair, Public Relations Committee

Last October, I had the pleasure of attending a career day at a Calgary area high school. Together with a representative of the Geomatics Engineering Department at the University of Calgary, we spent the day talking to students who were looking for both information and inspiration about possible careers. The inquisitiveness of the students surprised me—not because the questions were read from a prepared script (many were)—but because the depth and scope of the questions from some demonstrated that they were looking hard at the future rushing towards them and they were seriously preparing to make decisions affecting that future. Many students stopped to visit with us during the day. Of those, some spent considerable time learning about the Geomatics Engineering program and opportunities in land surveying.

While answering their questions, I was struck by the notion about how many other career days are likely scheduled at how many other high schools throughout Alberta every year. On occasion, a member of the Association has been asked to make a short presentation to a high school math class about land surveying. Our own Dick Bassil has done a number of these. However, the target audiences have been relatively small and the level of interest sometimes questionable. Perhaps redirecting our considerable energy at the high school career day is a better option.

Part of the mandate of the Public Relations Committee includes the promotion of land surveying as a career choice to students in high schools and post-secondary institutions.

Our efforts to communicate with youth both directly and indirectly, to encourage them to ask questions, to encourage them to consider a path that will lead to a rewarding career as

a professional land surveyor, to nurture a sense of wonder at the very things that led us to this career choice — those efforts have been somewhat scattered until recently.

Over the last three years, a number of initiatives have been taken by the Public Relations Committee to reach out to youths and young adults. Among these initiatives are some of the real success stories that the committee has achieved. I will highlight some of them here:

Science Alberta Foundation ‘Made to Measure’ Crates

In the December 2003 issue of the *ALS News*, Jay Abbey reported on the work of the Association together with the Science Alberta Foundation to construct two crates of resource materials for Grade 8 students. Based upon the math curriculum at the junior high school level, the crates contain a number of hands-on activities that give students the chance to play the role of a land surveyor as they explore and learn new math concepts. Assisting with the learning process, these crates provide a solid stepping stone to students considering an academic path in high school that will lead to university and perhaps to land surveying as a career.

Science Alberta Foundation Chief Development Officer Kathleen Kloefer wrote about the outstanding success of the Made to Measure crates in the September 2004 issue of the *ALS News*. She noted that the crates had a 95% usage rate in the first year alone with 828 participants. Student and teacher evaluations of the crate were consistently high.

Last fall, the Association was approached by Science Alberta Foundation to sponsor an additional eight Made to Measure crates. With the unanimous approval of Council, these new crates are expected to be ready by the end of March this year.

The Public Relations Committee has asked Science Alberta to provide one of the crates for our AGM in April so attendees can see first hand the results of these efforts. Perhaps in the near future, our membership will include land surveyors that were inspired by these crates.

First Year Students BBQ at the University of Calgary

With the dedication and effort of Dr. Robert Radovanovic, the Public Relations Committee started hosting a barbeque for first and second year engineering students in 2003. The intent was to raise awareness of the students about the geomatics engineering option in general, and specifically the Association and land surveying as a career choice. Perhaps in small part to this effort, enrollment in geomatics engineering has been increasing with the number of third and fourth year students in the cadastral stream at an all-time high.

Scouts Canada

Members of the Committee have been involved with Scouts Canada to provide land surveyor directed activities at their provincial Jamboree. In 2003, I volunteered at the Jamboree held in the summer at Camp Impeesa, southwest of Pincher Creek. In one week, several hundred participants learned about the role of the land surveyor in Alberta and got the opportunity to use handheld GPS receivers to navigate to six hidden caches. This summer, the activity is being offered again at Jamboree 2005 (July 17 to 23). The program has been expanded to twenty-eight caches,, one of which will be the wooden post and pits at the N ¼ of Sec 11, Twp 5, Rge 3, W5M at the north limit of the camp. Additionally, we will have some high-end survey-

.....continued on page 34

ing equipment on display. Early registrations for the event show the GPS activity is proving to be to be a popular choice with participants with approximately 400 youths expected to take part. To the credit of the Association and a number of individual members, 14 Etrex GPS handheld receivers have been donated to Scouts Canada.

Trig-Alberta

Following the example of the successful 'TrigStar' high school mathematics competition in the United States, the Public Relations Committee has recently formed a working group to establish a similar program for high school students in Alberta sponsored by the Association. Preliminary discussions with the Math-

ematics Council of the Alberta Teachers Association (MCATA) shows strong support for the initiative. It is anticipated that the group will have the basic structure of the competition in place by next fall with the first contest to be held in the early spring of 2006. Watch your regular weekly mail-outs for further news of the competition as it develops.

ALSA Student Memberships

At the suggestion of the Geomatics Engineering Liaison Committee, a pilot project inviting student memberships in the Association was implemented this past year. The intent is to promote the profession of land surveying and our Association more proactively to any students considering with an interest in geomatics. The membership is open to all students, specifically at the high school and post-secondary level. They receive a

copy of the *ALS News* and emails from the Association. The pilot project has been a resounding success with approximately one hundred memberships to date, including students from Colombia and Scotland. A bylaw amendment is being presented to members at the AGM to officially incorporate the student membership category.

All of the successes noted here are due to the dedication and effort of the Public Relations Committee and individual members of the Association taking the initiative to commit to working with youth and young adults as they make their choices in life. These youth and young adults are the future members of our Association. The guidance and direction that we can provide is a responsibility to which we can all contribute. Even at a local high school career fair.



Upshur Land Dispute Over

February 12, 2005

GILMER, Texas A two-year court battle over who owns land and mineral rights to thousands of acres in East Texas is over.

The end came with agreement by two men who launched the battle not to appeal a judge's ruling. The ruling left rights to the Upshur County land with the present owners.

In return, a group of mineral rights holders agreed to drop a countersuit against East Texas rancher W.L. Dixon and former land surveyor Barton McDonald. The countersuit accused the two of bad faith in beginning the challenge.

In papers filed with the state in August 2003, the two men argued the entire land survey should be moved about two miles. They said current maps didn't match the original surveyor's 1838 field notes.

That would have left land that would revert to state ownership, with mineral production values going to public education. Some proceeds, however, would have gone to the two men as a finder's fee.

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Preserves' Surveyor Was Unlicensed

February 9, 2005

by Steve Patterson, Staff Reporter

For ten years, Cook County taxpayers have paid for the Forest Preserve District to have a full-time surveyor on staff.

But for all ten years, Daniel Donnelly was working without a state surveyor's license, as required.

When licensed surveys were needed, district officials admitted Tuesday, taxpayers paid outside firms to provide those services.

Donnelly's role with the district came under fire as county commissioners ultimately approved his \$48,089 salary, and approved giving him \$30,000 in new equipment.

But because Donnelly didn't get his Illinois surveyor's license until December, none of his work can be certified as legal, officials said.

Commissioner Larry Suffredin called such an oversight "a serious issue." Commissioner Mike Quigley asked "if his functions are so important," Donnelly's lack of a license "begs the question" of why he was hired for the job.

Donnelly, licensed in Wisconsin, was hired as the district's "chief of the survey party," though Commissioner Tony Peraica said "he could be licensed in Zimbabwe" and it wouldn't matter.

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Liquor License Requests Denied

February 12, 2005

KALISPELL - Seven people who sought separate liquor licenses at the same address on the western edge of town have come up short - exactly 158 feet short - in getting state approval.

The state Department of Revenue rejected all seven requests this week after a land survey found the address falls just within Kalispell's five-mile "doughnut area" around the city limits, where only a limited number of liquor licenses are allowed.

The seven people who applied for the licenses originally said they intended to open what they characterized as a wine college and "high-end" liquor-tasting room at the site. But one of the applicants said Thursday that the plans at that location had already been abandoned because of other issues, including the availability and expense of well water.

Some state and local regulators were skeptical of the applicants' motives in seeking the liquor licenses, suggesting they may have been simply trying to take advantage of a loophole that could allow them to resell the permits later at an incredible profit.

Liquor licenses sold in Flathead County outside of a five-mile radius of the city limits cost only about \$600. But within the five-mile radius of Kalispell, liquor licenses have been resold for \$350,000 to \$400,000 because the number permitted by the state is tightly controlled.

The site of the proposed wine college and tasting room was thought to be just over five miles outside of the city's western limits, but on an edge of town that is growing rapidly and where annexation is being considered.

But Neil Peterson, administrator of the Department of Revenue's Customer Service Division, said the license rejections were based on a new survey commissioned by the Montana Department of Justice last fall.

"They hired a surveyor who used the radial survey method and found that as of March 8, at the time the applications were submitted, the distance (of the proposed site) from the city was 4.97 miles," Peterson said.

One of the applicants, Darren "Rick" Breckenridge, said the ruling means little because the applicants had already asked their attorney to withdraw the applications.

Peterson, however, said the department had never received any such request.

"The hearings officer wouldn't have issued the order had they made a request to withdraw the applications. That would be news to me," Peterson said. "We did not receive a request."

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education news

University of Calgary

Career Day Success

The annual Beef & Bun reception hosted by the Alberta Land Surveyors' Association and the Saskatchewan Land Surveyors' Association was a tremendous success again this year. Many fourth-year students already had jobs or at least offers but many second-year students were there just to find out what a career in land surveying is all about.

The next day, ALSA Public Relations Committee members Damian Gillis, Scott Partridge and Jarl Nome worked the Association booth at career day and answered more questions. All went well except for the fire alarm and evacuation that morning. It was interesting to see so many land survey booths at career day and fewer "hi-tech" booths than in past years.

Bo Huang Appointed Guest Professor

Dr. Bo Huang has been appointed guest professor of the State Key Laboratory of Information Engineering in Surveying, Mapping, Remote Sensing, Wuhan University, China. This laboratory is one of the two national laboratories in the area of GIS/GPS/Remote Sensing in China.

University of New Brunswick

A \$7.3-million project that will help Brazil develop a national geospatial framework was officially launched at the University of New Brunswick in Fredericton on Tuesday, January 18. Among other benefits, this network will assist with land reform in Brazil.

Andy Scott, MP for Fredericton and Regional Minister for New Brunswick, on behalf of Aileen Carroll, Minister of International Co-

operation, announced that the Canadian International Development Agency (CIDA) will provide \$2.6 million to UNBF over four years in support of the framework project in Brazil. UNB's contribution is \$191,174, other Canadian partners are contributing \$387,538 and the Brazilian partners are contributing \$4,161,020.

"At the core of this project is geospatial information," said Marcelo Santos, a professor of geodesy and geomatics engineering at UNBF, who heads the project team. "Geospatial information is any type of information that has a position associated with it.

"Obtained via satellite technology, geospatial information enables you to precisely identify the location of any natural or artificial physical characteristic on Earth."

The four-year project will make geospatial information—which is important for mapping, natural resource management, and safety—widely available in Brazil to all levels of government, industry, business, and private citizens.

"In Brazil, land reform is a very important issue," said Dr. Santos. "The country's current land registry is irregular. Moving to a land registry based on geospatial information will help to solve conflict in a place where land conflict becomes real conflict."

A national geospatial framework, based on satellite technology, will unify the co-ordinate systems in Brazil and provide the foundation for a system which can clearly and accurately identify and demarcate land holdings.

"The framework is an essential element to support the long-term needs of land reform and resource development," explained Dr. Santos. "Physical security—including the physical demarcation of property

boundaries—legal recognition, and public registration are all elements of land ownership that provide citizens with the tools to actively participate in Brazil's social and economic development."

He added that the availability of geospatial information could prevent tragedies such as the one that occurred in the Brazilian state of Sao Paulo in 1984. Inaccurate information about the location of a gas pipeline led to its rupture during excavation. The resulting explosion left 93 people dead and 2,500 homeless.

The UNB-led project will enhance the capacity of Brazilian institutions to develop, implement and maintain a national geospatial framework for the benefit of all its citizens. "In Canada, we have unique experience with developing and implementing North America's national spatial reference systems," explains Dr. Santos.

"Canada co-ordinated the redefinition of North American data from the antiquated 1927 system to a modern, satellite-based navigation and position system."

The numerous project partners in Brazil include the Brazilian Institute of Geography and Statistics, the National Institute of Colonization and Land Reform, several state-based land reform institutes, the National Foundation for Indigenous Peoples, five universities, the Brazilian Society of Cartographers, the National Association of Airborne Surveying Companies, and companies in the oil and gas and forestry industries.

In addition to UNBF's department of geodesy and geomatics engineering, the Canadian partners are Natural Resources Canada, UNBF's Centre for Property Studies, Service New Brunswick, and three private sector companies based in Fredericton: WaterMark Industries, Trainor Surveys, and Optex.

Navigation System Integration Using Artificial Intelligence

by Chris Goodall, Graduate Studies Scholarship Recipient
MSc Candidate, Geomatics Engineering, University of Calgary

First and foremost, I would like to thank the Association for their generous contribution towards my continued education in graduate studies at the University of Calgary. Scholarships such as yours have made it more attractive for students to pursue a higher level of education within Alberta. The notice came as a very welcome surprise and I am honoured to be the first University of Calgary graduate student chosen to receive this award.

I am currently working towards my Masters of Science degree in the Department of Geomatics Engineering at the University of Calgary. Geomatics is a diverse and emerging engineering field that not only benefits Alberta and Canada's economy, but is uniting nations worldwide in attempts of developing better mapping systems. The University of Calgary boasts the leading geomatics department in Canada, and one of the best in the world.

My research will build on aspects from several geomatics disciplines such as satellite positioning systems, inertial navigation systems, and advanced filtering. Furthermore, it will involve implementation of knowledge from other engineering disciplines such as signal processing and artificial intelligence. With this broad knowledge base, I will address problems within the integrated navigation field using a multi-disciplinary approach.

Specifically, my research is within the field of integrated mobile multi-sensor navigation systems for improved coverage and reliability. The main objective will be to design, develop and test artificial intelligence algorithms for integrating different navigation sensors, with emphasis on satellite and inertial systems. These systems will be applicable to a wide variety of navigation applications, but

will be especially useful for cadastral surveys since urban buildings often block satellite signals, making it difficult and time consuming to use a stand-alone system.

Today, most navigation systems rely on the Global Positioning System (GPS) as a primary source of navigational information. Although GPS is capable of providing precise positioning information to users anywhere on the planet, it can only provide this information when a direct line of sight to four or more satellites is available. Another navigation system in widespread use is the Inertial Navigation System (INS). This system uses onboard inertial sensors, such as accelerometers and angular rate sensors, to provide the navigation state variables (position, velocity, and attitude) of a moving platform. When compared to GPS, INS is self-contained and independent of external signals. The problem, however, is that INS suffers from time-dependent growth of systematic errors which quickly exceed the accuracy specifications of many trajectory determination applications. Frequent updating is therefore needed to control these errors.

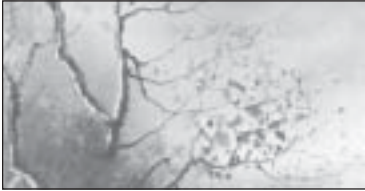
An INS/GPS integrated system overcomes each of these shortcomings and offers several advantages over the stand-alone systems. The precise positioning information from GPS can be used to provide frequent updates to the INS, while the GPS signal losses can be compensated for in real-time by using the short term accuracy of the INS derived position and velocity. Current implementations of such integrated systems have been investigated using a Kalman filter approach. This technique has been implemented with success, but Kalman filtering depends on a set of measurements and a proper dynamics model to estimate the state variables.

The final state estimates thus depend on the quality of the initial measurements and models being applied; however, such a priori knowledge is almost never available in reality. Furthermore, the need to re-design the Kalman filter algorithms for proper operation on new platforms or different systems is very costly. Thus, an adaptable, model-less, and system independent algorithm is highly desirable.

My research will focus on implementing artificial intelligence in order to adaptively integrate real-time INS/GPS state estimates that have previously been integrated in a model dependent form. This integrated system will be able to learn from its past errors, adapt to its application, and make better future estimates. It will do this by using a parallel processing architecture, with neural networks, fuzzy inference systems, and a Kalman Filter. A neural-Kalman system is currently being developed and tested using real and simulated data. Once complete, an expert knowledge module will be added to the system through fuzzy rules, thus creating a parallel processing hybrid architecture. By using this type of architecture, the best estimates can be developed based on the situation and the platform being used. From surveys in urban areas to those in densely wooded forests, this adaptive INS/GPS integrated system will benefit a wide range of cadastral surveying applications, without being limited in model or platform.

This research is being done in unison with my supervisor Dr. Naser El-Sheimy and with help from other members of the Mobile Multi-Sensor research group. Dr. El-Sheimy has been involved with mobile mapping systems for over a decade now. He is currently a Canadian Research Chair in Mobile Multi-Sensor Geomatics Systems and the leader of the Mobile Multi-sensor research group. Although the focus of the group is

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a moment of silence

Carl Norman Hanson, ALS — April 20, 1916-October 27, 2004



A Professional Surveyor's Lifetime

Carl Norman Hanson, ALS, was a professional engineer and land surveyor dedicated to the field aspects of conducting survey projects throughout western and northern Canada. He was born in North Battleford, Saskatchewan on April 20, 1916, the only child of John and Frieda Hanson. They operated a small mixed farm in the Rabbit Lake area where Norman grew up and attended school. He showed a strong aptitude for learning at an early age, skipping four years of school and going from Grade 6 directly to Grade 11.

His father passed away when Norman was 19 years old. Not wishing to continue working the farm, he moved with his mother to Edmonton, Alberta. In 1943, he joined the navy and was stationed in Victoria, British Columbia. Until 1946, he was a leading seaman on board naval ships plying the western coastal waters of north and central America. Upon returning to Edmonton, Norman worked for an oil company while building his own two-storey house and taking the engineering course at the University of Alberta. The house on 76 Avenue, east of 109 Street, was on the outskirts of the city at that time, but did have the advantage of a streetcar going past the front.

While working on survey projects in the New Westminister area of BC, Norman would have plan copies made at a local print shop where Anna Drake worked. They were married on August 15, 1953. They had two sons; Carl Erik and John Oscar were born in the 1960s. Both boys worked alongside their father on survey projects at various times.

Norman received his degree in civil engineering in 1950. He continued his education in the field of sur-

veying and obtained commissions as an Alberta Land Surveyor on February 8, 1955 (#212), a Dominion (Canada) Land Surveyor in 1956, and a Saskatchewan Land Surveyor in 1958.

Norman worked for Canadian Engineering Surveys in the 1950s and early 1960s. About 1964, he joined UMA Engineering Ltd (known as Underwood McLellan & Associates at the time), to assist Doug Hornby, ALS, P.Eng, in the operation of their new Edmonton branch. He continued with UMA until his retirement in the 1990s.

Norman was most happy when in the field; searching for survey evidence, planting posts and putting in the physical effort required for a good, accurate legal or construction survey. He enjoyed working with John Anderson Thomson, P.Eng., CLS, SLS, renowned surveyor and mining engineer in Yellowknife, NWT. Many mining claims and subdivision surveys were done in places such as Norman Wells, Pine Point and Rankin Inlet and areas in between. His mining claim and oilfield survey projects often involved the difficulties of working in deep snow, in -50° weather, travel by float plane or nodwell, fighting off the mosquitoes and black flies, living in tents, taking star observation for bearing and location control—all part of getting the job done!

He also worked on pipeline surveys along the Interprovincial Pipelines Ltd. transmission system through the prairie provinces. Since Edmonton was his base of operations, many of the subdivision and rights-of-way surveys for clients in that region were prepared under Norman's direction and the legal plans of survey bear his signature.

His career spanned a period when significant technical changes swept over the survey industry. He willingly

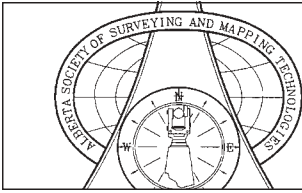
adapted to these changes in computation instruments (slide rule, hand-operated, then electric adding machines, log tables of trig functions, Curta hand-held calculators for field use, HP 45s, Wang computers, IBM XTs, to the current Pentium PCs, are but samples). Similarly, new field measurement instruments were also put to use, from plane table to transits and chains, tellurometers, separate EDMs, total stations and GPS instruments. It involved a lifetime of continuous learning to be able maintain the standards of the survey profession.

Over the years, Norman attended many ALSA and SLSA annual general and regional meetings. He also participated in other affairs of the associations as time permitted.

Many of those who worked with or knew Norman will still envisage him in a new subdivision area, with his favourite truck; canopy door open and tailgate down; shovels, lath, sledge hammer and legal survey posts laid out for ready use; tripods with prisms set up at required locations; and assistants carrying out their tasks or waiting for further instructions. He could be operating the total station, making copious notes in the field book or perhaps searching for legal survey evidence or pounding in the iron legal survey post that so many others would depend upon to identify their property boundary far into the future.

Carl Norman Hanson passed away on October 27, 2004, at the age of 88 years. He was interred in the Mount Pleasant Cemetery Field of Honour in Edmonton, Alberta.

R.E. (BOB) MAYNE, ALS



assmt notes

by Mike Spencer, CST – ASSMT Councillor

As you read this article, both the Alberta Land Surveyors' Association and the Alberta Society of Surveying and Mapping Technologists will be busily working behind the scenes to ensure a successful annual general meeting. The land surveyors prepare for their 96th annual event, while we at the ASSMT look forward to our 33rd AGM, April 29th and 30th, at the North Hill Inn in Red Deer.

An annual gathering of an organization serves many purposes, not least of which is the opportunity to have some fun with and get to know others with common interests. In addition, through inviting speakers and service providers, we can both keep in touch with our roots and become informed of technological advances in our industry. Finally, and very importantly, it allows membership the opportunity to have a forum for their views and opinions. It is vital that both ALSA and ASSMT members take advantage of the chance to have their voices heard at their respective AGMs.

For its part, the ALSA has done a terrific job of getting participation from its geomatics professionals at their annual meeting. They have done this by providing a very well-organized event that everyone looks forward to attending. The ASSMT historically has put on much smaller annual events. Smaller but not lacking in quality. Council has in the last several years put on some very successful AGMs featuring golf tournaments and hiking expeditions. Presentation topics have included wind power, 3D laser scanning, irrigation in Southern Alberta, LIDAR and GIS. Moreover, those who have attended have been given every opportunity to engage debate with not only the speakers and service providers in attendance but

also with the ASSMT Council and members at large.

The 2004–2005 ASSMT Council has been working quietly to review where the Society has failed, where it has succeeded and how it can improve in the coming years. We would like the help of our membership and others in the geomatics industry at our annual general meeting in Red Deer to review new directions we plan to set via our business plan. Among the important issues to be discussed will be how the ASSMT plans to take advantage of newly formed alliances with NAIT, SAIT, Olds College and Lethbridge College and how we can better accommodate the mapping technologies within the Society.

The ASSMT would like to wish the Alberta Land Surveyors' Association an enjoyable and productive

AGM in Jasper and encourage attendance at our own AGM in Red Deer the following week. You can get information by checking out our new and improved website, www.assmt.ab.ca or by emailing our Executive Assistant, Cat Gramolini (catpause@telusplanet.net).

On a final sad note, Council, on behalf of the Society, would like to pay tribute to Farley Mckenzie who passed away suddenly on January 6, 2005 as a result of a car accident near Edmonton. Farley was a good friend to the ASSMT, serving as our president between 2000 and 2002, and was well known throughout the geomatics industry having worked for several local survey supply companies. Farley will be remembered by all that passed his way. Deepest sympathy goes out to his family from all of us at the ASSMT.

Guardpost continued from Page 29

“Are there any dormant plans? Yes or No. If yes, please explain arrangements to register them or otherwise resolve them.” If nothing else, when my time to retire approaches, I will hopefully have a burning desire to leave my business associates with little or no baggage. Perhaps then I will finally feel the sense of urgency to once and for all deal with my dormant plans. If I could only fast forward that urgency to today.

Navigation System Integration ... continued from Page 39

within integrated navigation systems (with special emphasis on GPS/INS integration), the group is also involved in projects such as GPS and photogrammetry integration, direct georeferencing of LIDAR and airborne sensors, the development of MEMS-based systems for next generation navigation and oil and gas drilling applications, a grizzly bear tracking and monitoring system, and a real-time forest fire monitoring and management system. With diversity such as this within a small research group, it is easy to understand why geomatics is an emerging field.



history

This is the sixth in a series of articles on the history of the ALSA and its members. The ALSA is publishing a book on the history of land surveying in Alberta in time for the 2005 AGM.

1917–1918 ALSA Becomes a Landowner

Probably one of the reasons for the economy measures was the fact that some of the Association's investments had begun to turn sour. Payments on the mortgages in which the surplus funds of the organization had been invested were falling behind, and the amount overdue on principal and interest was growing each year. In 1917, the Association had to foreclose on one mortgage and thus became the owner of a farm west of Edmonton. For several years after 1917, these property investments were a continual source of trouble to the Council and, in the long run, proved to be definitely unprofitable.

During the later war years, both the land surveying business and the general economy of the province appear to have been at a low ebb. The 1917 and 1918 meetings were poorly attended and the proceedings, judging from the minutes, were sadly lacking in interest and enterprise. At the 1917 meeting, no papers were presented and the only novel feature of the meeting was the adoption of a by-law to provide for the recognition of non-active membership. The 1918 meeting was almost equally dull. The only relief from routine business was afforded by the presence of Mr. Louis Fontaine, an old-time Dominion Land Surveyor who had become an ALS in 1912, who apparently travelled all the way to Edmonton from Levis, Quebec, for the purpose of promoting the use of what was alleged to be a more permanent type of survey post which he had designed. This invention consisted of a solid iron bar which had an enlarged point in the shape of a double cone. After this bar was driven into the ground, a hollow piece of pipe, split at the lower end for part of its length was fitted to the top of the bar and driven down around it. When the pipe came into contact with the cone-shaped end of the bar, the

split end of the pipe would spread open and form an anchor, making it impossible for anything less than a steam-hoist to extract the post. It was claimed that this post was being successfully used in Manitoba and Quebec.

The meeting appointed a committee of three members to make a practical trial of Mr. Fontaine's post and report to the next annual meeting. A year later, the committee reported that "the post had been tried under varying conditions, but it proved to have the disadvantages of being expensive, cumbersome to carry in quantities, difficult to drive in frost and even in hard dry ground, and not so difficult to pull up as one might think. It might be useful on some occasions, but your committee does not think it could be recommended for general use."

In 1918, the Council had become somewhat exercised over the prospective sphere of activity of mine surveyors, for whom qualification standards had recently been laid down by the provincial Mines Branch, and of the professional engineers, who were then organizing a provincial association and trying to get a professional act passed by the Legislature. Two committees were appointed to make further inquiries and report to the annual meeting. It was ascertained that mine surveyors had no authority to carry out legal surveys, and that Alberta Land Surveyors could become qualified as mine surveyors by passing an examination based upon a correspondence course provided by the Calgary Institute of Technology. This seemed to satisfy everybody, but there was less equanimity over the proposed professional engineers act. There was a lengthy discussion of the committee's report at the 1919 meeting which resulted in the adoption of a long-winded resolution criticizing a number of features of the

act which were thought to infringe upon the rights and functions of the land surveyor. This resolution authorized the Council to engage legal counsel and take whatever action might be appropriate to protect the rights of the surveying profession, but the professional engineers shortly afterwards withdrew their proposed act and the problem thus disappeared for the time being.

Louis E. Fontaine

Louis E. Fontaine died in Quebec on June 20, 1932. Mr. Fontaine was one of the best-known members of his profession and had a distinguished career as a surveyor and government official.

Born on October 3rd, 1868, Mr. Fontaine was employed in his younger days on the staff of the House of Commons. In 1887 he was articled to D.C. Morency, PLS, DLS, and was commissioned as a PLS in 1891; and in the following year he received his commission as a Dominion Land Surveyor. In 1911, he was commissioned as an Alberta Land Surveyor. For some time he was engaged on surveys in the province of Quebec, and during this period he made exploratory traverses of many of the rivers entering the St. Lawrence east of the Saguenay.

In 1893, he was employed on the Alaska boundary and in 1898 as assistant on Dominion Land Surveys. In 1900, he was appointed as chief of party on Dominion Land Surveys, and was engaged in succeeding years on outline surveys and other important work until his appointment as inspector of surveys in 1908. His inspectorate was distinguished by careful and accurate examination of the surveys under his control and his fairness both to the government which he represented and to the contractor.

Latterly he was in charge of the Land Classification Surveys of the Topographical Survey of Canada.

Mr. Fontaine was several times a member of the Council of the Dominion Land Surveyors' Association and was only prevented by failing health from accepting the presidency. In recognition of his life-long interest in that Association he was made an honorary member in 1930.

Perhaps Mr. Fontaine's most dominant characteristic was the high standard that he set for himself in his professional work and in his duties as a government official, and he lost no opportunity of impressing that high conception of responsibility upon his employees and associates. In personal contacts he was a delightful companion, and exemplified throughout his life the bearing and manner of a gentleman of the old school.

CANADIAN SURVEYOR, JULY 1932

Lambertus Heuperman

Mr. L.F. Heuperman came to Edmonton from Holland in 1903 or 1904 and settled there. He worked for Driscoll & Knight doing survey work and, when his brother F. J. Heuperman arrived, got him a job with the same company. After their partnership with A.P. Patrick broke up he went to the United States and worked on roads and highways. He passed away in 1962 in Salem, Oregon.

L.F. Heuperman was married and had one daughter, Mrs. Justine Lambert, who was living in Santa Barbara, California. She sent the following brief summary of her father's life:

"Lambertus Heuperman arrived in Edmonton from Amsterdam somewhere in the early 1900s. He was in his twenties at the time. He became a Dominion Land Surveyor and as he often had to stay in small towns where there was no public lodging, he boarded either with farm families (and most of Canada was country at that time) or with a family in town. He worked in the heat of summer but since he was a very fastidious man, he found that the multiplicity of flies in the late summer, especially on the

farms, was hard to bear. He used to recall that the insects were frequently fished out of the cream or the applesauce when the family was eating. However, aside from this, he enjoyed his work.

In a year or so, he joined a firm of engineers in Edmonton and he was with this firm until he and his wife decided to move to Phoenix, Arizona on account of Mrs. Heuperman's health. Mr. Heuperman found the Arizona sun trying and the glare was almost unbearable to his delicate eyes.

Mr. and Mrs. Heuperman moved to Marshfield (now Coos Bay) Oregon where Mr. Heuperman held the position of City Engineer until some time around 1915. World War I had started and Mr. Heuperman joined the Canadian Expeditionary Forces for the duration.

After the war, Mr. and Mrs. Heuperman lived in Montesno, Washington, where Mr. Heuperman was Assistant County Engineer. He was then employed by the State Highway Department and he and his wife lived in Salem Oregon. While there, Mr. Heuperman aided in developing an excellent Oregon State Highway system.

After his retirement from the Oregon State Highway Department because of his having reached retirement age, Mr. Heuperman was retained by the Idaho State Highway Department as a consultant for a few years and he and Mrs. Heuperman moved to Boise, Idaho.

When he finally did retire, Mr. Heuperman moved to Yachats, a little town on the Oregon Coast.

Mr. Heuperman was also a distinguished geologist and an excellent photographer. When he worked for the State Highway Department in Oregon, he made a huge relief map which required much painstaking labor and research."

Frederick Justinus Heuperman

F.J. Heuperman came to Canada from Amsterdam, Holland in 1906. He settled first in Edmonton with his

brother L.F. Heuperman. Both brothers took up land surveying and it is believed they worked for Driscoll & Knight and were articulated to that company. During this time he attended evening courses taking mathematics and English.

About 1909, he and L.F. Heuperman moved to Calgary and went into partnership with A.P. Patrick. It is assumed he continued his articles with Patrick as he did not get his DLS until March 13, 1911 and his ALS until May 11, 1911. The partnership was dissolved in 1912 and he went to work for the Canadian Western Natural Gas Company.

During the period from 1909 until 1912, it is believed they worked on subdivisions in and around Calgary and did township work whenever they could get a contract. One subdivision they did in Calgary is at the end of Nose Hill which is now Thorncliff. Also some sketches show work around Roundhill, Carbon, Kneehill Creek, Cayley, Strathmore and Rosedale. They also surveyed the first gas line from Bow Island to Calgary, that is how he became interested in and acquainted with the Gas Co.

After joining the Gas Co. he continued his education by home study. He took an engineering course from the International Correspondence School and an accounting course from Alexander Hamilton. He was accepted into the Professional Engineers of Alberta on January 1st, 1931. He also joined the Engineering Institute of Canada and was secretary for the Calgary Branch.

He was also a member of the Calgary Rotary Club. His hobby was painting and some of his work is in the Glenbow museum. He worked for the Gas Co. until he passed away in 1946 at which time he was General Manager.

Mr. F.J. Heuperman married Anne Elizabeth Stephens in 1912. They had one daughter Eileen Marion Heuperman, who married future ALS Theodore O. Neumann in 1942.