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# ALS News

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## About the Cover

The cover photo is of Alex Stewart, A.L.S., D.L.S. and his crew on the Alaska-Canada boundary survey in 1909. Hard Work and Rum on pages 16 and 17 is a story of Mr. Stewart’s surveying career.

## ALS News

Editor, G.K. Alired; Assistant Editor, R. Robinson; Advertising and Production, S. Stecyk. Deadline dates for submission of material to ensure printing are as follows: Winter Issue - December 15; Spring Issue - March 1; Summer Issue - June 15; Fall Issue - September 15. Opinions expressed by the editor or individual writers are not necessarily endorsed by the Council of the Alberta Land Surveyors’ Association. Articles may be reprinted with due credit given to the source and with permission of individual writers or where no writer is indicated, with the permission of the Editor. Published by the Alberta Land Surveyors’ Association for circulation to the Association Membership. Address all correspondence care of: Alberta Land Surveyors’ Association 14403 - 115 Avenue Edmonton, Alberta T5N 3B8 Phone: 403/452-7662
President's Message

THE CHALLENGE OF CHANGE

Some time ago, I had the opportunity to have an informal discussion with a professor from a Japanese university. We talked about the difference in management styles between Japan and North America. I told him that in the past, North American business has thrived by having strong leaders who made rapid decisions and implemented change with a minimum of facts and often on intuition. As a result, we don’t have the patience needed for prolonged discussion and consultation.

He had a ready answer. He admitted that it does take the Japanese a long time to discuss proposals with all involved parties, to obtain the commitment of all those affected and finally to plan all the details of the decision or change. But, he said, the pay-off occurs after the final decision is made. Implementation is smooth and swift.

I was impressed by his answer. How often do we introduce or promote some new initiative only later to find roadblocks put in our way. Perhaps we could have had those responsible for allocating resources contribute to the decision. Perhaps we didn’t anticipate the far reaching effect of the decision. It may have involved others whom we had never realized would be affected. In the rush to get results, we often overlook the necessity to do the required groundwork. As a result, implementation is often delayed or even shelved.

This doesn’t mean we need to move slower. Far from it! In fact, many of our decisions are made in haste because we have done nothing or very little and time has run out. What it does mean is that we have to spend more time in doing the groundwork before decisions are made. Council and committee chairmen have an obligation to ensure that consultation, planning and commitment underly all decisions. As individual members, we also have an obligation. We need to understand all the issues. We need to ensure that our associates in other professions and our clients are aware of issues that affect them. If there are concerns, make sure the committee involved is aware of them. Perhaps arrange for your associates or clients to get involved in the process. Make sure that they understand the reasons for the change. Present your views at regional or committee meetings or talk to a committee chairman or a member of Council. Informed and free communication, before final decisions are made, helps ensure that implementation is smooth and quick.

In the years ahead, the Alberta Land Surveyors’ Association will continue to go through an evolution of change. We are just in the infancy of developing and maintaining standards for our profession, an integrated survey profession is on the horizon, our relationship with the universities and government is changing and the list goes on. I believe that our ability to manage these changes will be the most significant factor in ensuring that our profession continues to provide a major and useful service to society.

BEST WISHES FOR A HAPPY NEW YEAR!

G.E. Olsson, A.L.S.
President

als news winter, 1989
WHO TAKES THE RISK?

The real estate transaction in today's consumer society is a good example of how risk is passed down the line.

Home purchasers not having the cash, shop around for a lender who will risk the funds of their shareholders for the benefit of the purchaser.

The mortgage lender in turn, needs some protection. They do credit checks, appraisals, and register their interest against the title by way of a formal mortgage document. In several of these areas, they do not have the personnel or the expertise to adequately protect themselves against the risk and hence, engage professionals such as lawyers to assume a portion of the risk by requesting a legal opinion as to marketability of title.

Determination of marketability of title consists of two separate exercises, determination of quality of title - the province of the lawyer and determination of extent of title - the province of the surveyor. The lawyer, in determining marketability relies on (passes the risk on to) the surveyor in determining extent of title. Under a Torrens system, part of the risk in determining chain of title is also assumed by the Registrar pursuant to the provisions of the Land Titles Act. Based on the surveyor's professional opinion as to extent of title and the Registrar's certificate of title and numerous other checks, the lawyer is in a position to advise on marketability of title.

In all of this risk-passing each party in turn assumes part of the risk in consideration of a fee for their respective professional services. If the fee is not acceptable, then the party requesting the service must decide whether to pay the fee or assume the risk themselves. For instance, if the survey fee is not acceptable, the lawyer must determine whether he will assume the risk or qualify his opinion "subject to survey". The mortgage lender in turn, will then have to make a decision whether to accept the qualified opinion and accept the risk or whether to accept the mortgage only subject to an acceptable survey. The final decision then rests with the purchasers to either provide the survey or assume the entire risk themselves.

This process is as it should be. The ultimate benefit of a proper survey or other professional service goes to the consumer. If he is not prepared to pay a legitimate and reasonable fee for the service, he should take the risk himself. Why should a surveyor, lawyer or lender compromise their principles and jeopardize their financial stability and assume the risk for a consumer who is cutting corners. You can bet your boots that if there is a problem caused by lack of research or whatever, you will soon find out who takes the risk!

G.K. Allred, A.L.S.
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There is not any particular issue I would like to address, however, I will put forward to the membership at large some of my general thoughts of my two year term on Council for the Alberta Land Surveyors’ Association.

First, I would like to thank those who elected me. It is a great opportunity to serve on Council - the knowledge gained has been tremendous and it is rewarding to put back into the Association and surveying in general since the field of surveying has given me such an enjoyable career.

I have seen so much happen in the last two years with the Association. Much has been accomplished by a dedicated group yet, there is still much to be done. To this end, I would recommend others get involved with the affairs of their Association as participation is one way to ensure long lasting success. Newly inducted members should not hesitate to become involved as the Association can benefit from fresh new ideas.

The Association officers have undergone considerable change in the last year. We have doubled our staff and increased our budget three fold due to the increased responsibility of the Professional Audit Branch. Iron post sales are in place and the Finance Committee has taken the necessary steps to ensure accountability will be in order.

The Executive Director has done an excellent job managing the affairs of the Association. Ken’s recent involvement in the past election serves as a good example to our members how we should all strive to become involved, not only in our Association, but beyond as well. Involvement with clubs, politics, toastmasters and the like all serve to broaden our frame of reference and increase our knowledge - both very useful endeavours so that we may always be able to have ever increasing positive input to our Association.

The foremost duty and responsibility of a professional association is to protect the public interest and as a Council of such a professional organization this is one of our main goals. In order to serve the public interest we must also have a well run association with a satisfied membership. This becomes a delicate balance to satisfy both and is something for the membership to ponder. In order to satisfy this balance, standards were implemented and must be adhered to by the membership. Not all standards may be in regulation form, but they nevertheless must be recognized and observed by the members. The Manual of Good Practice should be taken seriously by the membership and seen as a way to upgrade our professional practice.

It is with anticipation that I look towards realizing even more goals than those already attained by the present Council. It is a privilege and honor to be a participating member of the Alberta Land Surveyors’ Association.

Tony Melton, A.L.S.
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Letter's

The document (Explanation of Property Line Survey - ALS News Fall, 1988) was furnished to the Professional Land Surveyors of Oregon, Inc., in about 1961 by the County Surveyor of Columbia County, Oregon, and was assumed at that time to be his own work. It was published as a portion of a brochure for handout to the public by PLSO for a number of years. Now the true author is in doubt.

In my position as Executive Secretary of PLSO, I receive publications from nearly all of the land surveyors' organizations which publish them. ALS News is by far the finest publication to cross my desk. It contains the most significant and most well-written articles and has the best balance of advertising to text of all the surveying-oriented publications I have seen.

I was the originator of The Oregon Surveyor, which later, under more competent editorship, was awarded the honour of top such publication in the U.S. by the American Congress on Surveying & Mapping.

BERT MASON JR.
EXECUTIVE SECRETARY, PLSO

Please accept my sincere thanks for all the Alberta Land Surveyors’ Association, as a group and individually, did to make my retirement a most memorable affair. The “rock” you presented to me rests in a place of honour were I can see it regularly, and as I do so, recall my survey days. I must confess, as someone who, for many years, was concerned about the loss of stations, I occasionally wonder if there is a missing brass cap somewhere in the Calgary network as I look at the brass cap imbedded in the “rock”! If there is, that’s Bill Martin’s problem now! As you probably know, Bill took over as City Land Surveyor in early September and is now doing a good job clearing up the mess I left behind. He is a good man, and I am sure he will bring new and needed expertise to the position. I feel I am leaving the Legal Survey Section in good and capable hands.

I have enjoyed my career as a surveyor, by far the largest part of which has been in Alberta — the corner of the world which is now my home and will remain so. We live in a very wonderful country. I have lived in many places and have seen nothing more beautiful than our foothills and Rockies and this is where we intend to stay. I plan to keep in touch with ALS happenings, so I'll be seeing you all frequently.

Once again, a very sincere “thank you” — not just for the farewells and the “rock”, but for all the friendship and cooperation I have received from so many of you throughout the years. I hope each one of you can look back with equal satisfaction as you run your final traverses and work out your last closures.

Very best wishes to all.

K. PAWSON, A.L.S.
Association Notes

Continuing Education

January 25
Introduction to Law - U of A Extension

January 30 - March 6
Urban Change & Conflict - Athabasca University (Television Series)

February 2 - March 23
History of Calgary - U of C

February 14-15
Principles of Urban Design - U of A Extension

February 22
Introduction to the Legal System
- U of A Extension

February 28 - March 3
Total Station to Data Collector - NAIT

March 2 & 9
Environmental Ethics - U of C

March 6 - April 17
Survey Calc. III - SAIT

March 7 - April 19
Autocad Drafting - NAIT

March 15
Critiquing Subdivision Plans
- U of A Extension

April 8
Making a Will - U of C Law School

April 13
Making a Will - Bow Valley Square, Calgary

April 19
ALSA Seminar - Westin Hotel, Calgary

April 29
Buying and Selling a House - U of C Law School

May 4
Buying and Selling a House - Bow Valley Square, Calgary

May 25-26
Precise Engineering & Industrial Surveys - U of C

June 12-14
Principles of Navigation - U of C

June 15-16
Principles of Hydrography - U of C

Council Elects Honorary Life Members

The Council of the Alberta Land Surveyors' Association recently announced the election of eight long time members as Honorary Life Members.

The new Honorary Life Members are Jack Hill, Buck Olsen, Ted Rippon, Dave Usher, George Walker, Charley Weir, Bill Wolley-Dod and Wally Youngs. All of these gentlemen have served on Council and as president of the Association and have been members in excess of 35 years.

Council Adopts Policy on Entry onto Private Lands

In response to numerous concerns expressed to the ALSA office, Council recently adopted the following policy on entering private property to supplement the rights granted by Section 16 of the Surveys Act.

"Alberta land surveyors or their authorized assistants may enter upon private property for any purpose in connection with a survey provided that a reasonable attempt has been made to advise the owner/lessee beforehand to explain the work to be performed. If the owner/lessee has not been contacted after a reasonable attempt has been made, the work may proceed. If any damage is done, the owner must be notified."

In passing this policy, Council is specifically advising members that they have an obligation to make a reasonable attempt to contact land owners prior to entering onto private land. If any damage is done to the property, they must notify the owner.

"If you don't interfere when you observe injustice, you are part of the injustice."

June Callwood

Surveyors' Diary

February 2
ALSA Council Meeting

February 8
The Survey — What Danger Lurks Within (or without)
- Palliser Hotel, Calgary

February 24
Last Date for Receipt of Nominations for Council

March 2
ALSA Council Meeting

April 3-7
ALSA/ACBE Examinations

April 6
ALSA Council Meeting

April 19
ALSA Seminar - Westin Hotel, Calgary

April 19-21
ALSA Seminar - Westin Hotel, Calgary

June 6-9
CISM Convention - Halifax
Subdivision Approval Application Fees
Ministerial Order 645/88

For your information, effective January 1, 1989, the subdivision approval application fees have been amended as follows:

1. For an application for subdivision approval to be made to:
   a) a regional planning commission, or
   b) the Minister,
   the fee is $30.00 plus $15.00 per lot proposed to be created, excluding those parcels proposed on the plan as reserve parcels or public utility parcels.

2. For an endorsement of an instrument by:
   a) a regional planning commission,
   b) the Chairman of the Alberta Planning Board, or
   c) the Minister,
   the fee is $30.00 per lot to be registered.

This office would appreciate that your membership be informed of the above, thereby avoiding any unnecessary delays respecting the processing of applications for subdivision.

MARK A. LAWRENCE, SUPERVISOR
Subdivision Support Unit, Planning Branch
Alberta Municipal Affairs

Permit Stamps

Concern has been expressed both in Council and meetings of the Practice Review Board regarding the practice of some firms using a computerized version of the permit stamp on plans instead of using the actual rubber stamp issued by the Association.

Obviously, there are advantages to a computerized stamp; they don’t wear out, they don’t smudge, and they consistently look much more professional. The issue at this stage is not what looks better, but rather what is required by the ALSA bylaws.

Part 8 of the ALSA bylaws (sections 87-91) requires that “the permit stamp...shall be a rubber stamp” and “The Registrar is the only person entitled to issue a stamp” and “The permit stamp...is owned by the Association”. Section 90 states that “A surveyor’s corporation...shall not use a stamp...except the stamp issued to it by the Registrar.”

All sections of the bylaws of the ALSA clearly require the use of the rubber permit stamp issued by the ALSA. Until these bylaws are amended, that is the law and members are expected to abide by that law which was duly passed by vote of the membership in 1980. If members feel the bylaw is out of date, then a motion to prepare an amendment should be placed before the AGM. In the interim, the use of computerized stamps must be discontinued – and no computerized signatures either!

G.K. ALLRED, A.L.S.

MARK YOUR CALENDAR!

Meet Your
M.L.A.
Dinner

Monday
March 13, 1989

Tower on the Park
9715 - 110 Street
(one block west of the Legislative Building)

(more details to follow)

McCuaig Moves On


Rob reports that he has enjoyed the challenges presented by his recent government position and trusts that he has contributed to the Ministry’s evolving land information development. He strongly believes in the role of the surveyor/mapper in the emerging technology of GIS and the partnership in enterprise concept which involves a synergy between the government, academic and private sectors. With his land management experience gained through increasingly responsible positions in the public and private sector, Rob expects to continue to work with those individuals who have realized the value of the systematic capture of land related data.
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   - C. Murray Fraser,

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N.S. Lawyer Found Negligent for Failing to Advise that Clients Get Survey Done

by DEAN JOBB

Special to Lawyers Weekly

HALIFAX — Lawyers certifying title for a buyer in a property transaction must advise their clients to get a survey or a building location certificate before closing the deal, the appeal division of the Nova Scotia Supreme Court has ruled.

In a decision that reaffirms the practice that has prevailed in the province for at least 15 years, Nova Scotia’s highest court has found a Halifax lawyer negligent for failing to do either: Ravina and A & R Properties Ltd. v. Kanigsberg, Dordon, Stern & Freeman et al.

Chief Justice Lorne Clarke of the appeal division rules Alan J. Stern, a lawyer with 21 years experience, was negligent when he acted for Amadeo Ravina in the 1983 purchase of a building that turned out to be sitting partly on land owned by Canadian National Railways.

Mr. Stern, now of the firm Blois Nickerson, acted for both Mr. Ravina and the seller in the transaction and advised Mr. Ravina he had good title to the property, which sold for $30,000. After renovations and improvements that gave the property an appraised value in excess of $100,000, Mr. Ravina applied for a mortgage. The mortgage company insisted on a building location certificate, which showed that the boundary line of the adjacent railway passed through the centre of the building.

Mr. Ravina sued, but his action was dismissed at trial by Chief Justice Constance Glube of the Supreme Court’s trial division, who found that Mr. Ravina had failed to prove he was not the owner of the portion of the property in question.

The appeal court, taking the rare step of overturning the trial judge’s findings of fact, ruled Mr. Ravina has proven both lack of ownership and negligence and sent the case back to the trial level for assessment of damages.

"In all purchases of property, solicitors must advise their clients of the advisability of obtaining a survey or survey certificate," Mary O. Hebb, the Halifax lawyer who acted for Mr. Ravina on appeal, told The Lawyers Weekly. "The solicitor is not a surveyor," she added. "We examine a paper title and there may be things on the ground that the solicitor may not be aware of."

Mr. Stern’s title search gave no indication of the railway’s encroachment onto the property Mr. Ravina was buying, but Chief Justice Clarke said an “objective assessment” of the information available to the lawyer suggested there was not enough land to meet the description. "In my opinion it was negligent of Stern to fail to convey that doubt to Ravina," wrote Chief Justice Clarke. "He should have recommended that Mr. Ravina cause an on-site examination of the land by survey or whatever other course Ravina determined. "Whether Ravina accepted the advice and did anything or nothing with it would not have been the concern of Stern."

As authority of the proposition that lawyers must advise clients to get a survey, Chief Justice Clarke pointed to a 1971 Nova Scotia appeal court ruling Marwood v Charter Credit Corp. (1971), 2 N.S.R. (2d) 743. In Marwood, Mr. Justice Thomas Coffin held that "solicitors should always advise them [purchasers] in advance on this matter and make it clear that the certificate of title which will be issued is at all times subject to a survey." "I find it difficult to conclude that making certificates subject to survey or discussing the matter of the location of land with a client is a newly discovered practice," wrote Chief Justice Clark.

Two lawyers, William E. Kelleher, and W. Mark Penfound, testified at trial that it is the practice of Nova Scotia lawyers to advise purchasers to get a survey. A third lawyer, Paul Murphy, gave the opinion that Mr. Stern had met the standard of a reasonable and diligent solicitor.

Ravina and A & R Properties Ltd. v Stern
77 N.S.R. 2d p. 406-412

This is the case reprinted from the Lawyers Weekly and is interesting not only by the fact that the lawyer did not obtain an up-to-date survey but also because of the incongruity between the old plan he did rely on and the actual situation on the ground.

Facts: A & R properties Ltd., through the owner Mr. Ravina, purchased a property known as 1137 Bedford Highway in Halifax County, Nova Scotia. He referred the matter to his solicitor, Mr. Stern, to handle the transaction. Stern acted for both the purchaser and the vendor. He relied on a 1959 "Plan of Property" obtained from his files. The plan showed a grocery store and a garage, the garage encroaching slightly onto a neighbouring property and the grocery store appearing visually to be close to the property line. The plan prepared by a "Provincial Land Surveyor" was a mere sketch plan even though it was entered in the local registry office and related to the centre line of tracks of the Canadian National Railway and to the centre line of a highway to Halifax. It was referenced to three iron bars although it is not clear what they represent. The property is not referenced to any other specific lot or surveyed boundaries. It appears to be bounded by the lands of "S. Thomas" and "Hubley" which may have been a common

Sometime subsequent to the purchase of the property, Ravina applied for a mortgage and was required to obtain a building location certificate. The certificate obtained showed the building to be located approximately one third on the railway right-of-way, which resulted in this action.

Issues: The issues in this action relate firstly to whether Ravina in fact did not own the lands purportedly conveyed to him and secondly as to the alleged negligence of Stern in handling the real estate transaction and not advising Ravina to obtain a survey of the land being purchased.

Held: The Nova Scotia Supreme Court Appeal Division found that based on the evidence presented, it was clear that Ravina did not get the land he bargained for and that the only question remaining was with regard to whether Stern was negligent in the performance of his professional duties.

In arriving at a decision on the second question, the Court reviewed the procedures of Stern on the transaction in question. It found that Stern has relied only on the 1959 plan plus some freehand drawings of a 1929 subdivision plan, a metes and bounds description of lands which were purported to be contained within two lots shown on the subdivision plan, and the 1959 plan which apparently surveyed the land described by metes and bounds.

Despite the fact that the information available to Stern was 25 years old and showed a minor encroachment, his professional opinion was that Mr. Ravina acquired good title and that "on the basis of what I had in the file, I didn't consider that I should recommend that a surveyor be hired." and "I wasn't aware that there was any problem and the buildings appeared to be well within the boundaries of the property that I was dealing with, and there was no mortgage requirement for a survey to be done."

In reaching their decision the Court relied on the opinions of three practicing lawyers called as expert witnesses who stated "a solicitor acting for a purchaser in Nova Scotia had a duty to advise that purchaser to obtain a survey" and "We, as solicitors, only give an opinion as to the quality of title not to the extent of title as this is within the realm of the surveying profession." and further "They must be advised to seek the services of a professional surveyor to determine the true extent of the property."

The Court concluded that the practice of obtaining surveys was not a recent phenomena in Nova Scotia and referred to the 1971 case of Marwood v Charter Credit Corporation (1971), 2 NSR 2d 743, where it was stated that "It may well be that purchasers do not always wish to go to the expense of making a survey, but as a matter of practice it is my view that solicitors should always advise them in advance of this matter and make it clear that the certificate of title which will be issued is at all times subject to a survey."

In concluding that the solicitor Stern was negligent, the Court held that "The negligence consists of his failure to either advise his client to obtain a survey or to have made it clear to his client that he was certifying the title subject to survey."

G.K. ALLRED, A.L.S.
Relationship With Government Subject of Council Workshop

A half day Council workshop was held on November 30, 1988 to discuss the role of the Alberta Land Surveyors' Association in relationship to government and the public. Also in attendance were several past presidents of the Association.

Two basic questions were presented:
1. How can the Association develop standards of practice and/or regulations which have the support of government and the public?
2. How can the Association gain government support for Association concerns and have this support reflected in government legislation and policies?

There was general agreement that the relationship between the Association, the Land Information Systems Division of Alberta, Forestry, Lands and Wildlife (LISD) and the Land Title Offices has changed over the past several years. Several reasons were cited. Council and Association committees had greater government participation in the past. Through this, surveyors in the Land Titles Office and LISD became cognizant of the concerns of surveyor in private practice. Similarly, surveyors in private practice were made aware of government concerns. In fact, until 1977, the office of Secretary Treasurer of the Association was held by government employees on a part time basis. If consensus and mutual support was obtained, the Director of Surveys was often successful in steering proposed policy and programs through the bureaucracy. Many other factors are either evidence of, or a result of, the drifting apart of these groups. The Association has not had a member in the Land Titles Office since 1977. LISD has expanded its role into land information, mapping, and control surveys and Alberta land surveyors have not kept up. Funding cutbacks, changing of priorities by government and changing personalities in government and the Association have all contributed to a deterioration in mutual support of Association and government activities and objectives.

Returning to the old regime does not seem to be possible. In fact, it may not even be acceptable in view of the perceived public policy that professions should be more responsible for their own affairs.

With regard to the two questions, general agreement was reached on the following:
1. Development of Standards of Practice
   Those affected directly or indirectly by the standards should be consulted and their agreement and support should be obtained if at all possible before the standards are adopted. In particular, support of government and other professions was mentioned being very desirable. If support of one or more groups is not obtained, the decision to proceed must be carefully considered. In this regard, a set methodology (normal established procedure) was seen as a good way to ensure that all those affected are consulted.

In general, standards of practice should not be in regulation form. If it is necessary that they be, it is very desirable that the need be recognized and promoted by other groups.

Care must be taken to ensure that standards are not perceived to be self serving. The need for standards in relationship to the public’s need, the client’s need, and the need of the profession must be weighed in relationship to the cost to the public and to the client.

2. Input to Legislation and Government Policy
   Again, the support of others is seen as a major requirement. The Association must, at all levels, work with government departments, other Associations and other groups to determine common objectives and to obtain consensus and support.

   The need for government programs, amendments to legislation (or lobbies against) must be well researched and documented. Submissions should, if possible, carry the support of other groups.

   Continuity of committee members particularly those dealing with government departments is desirable. Political action committees have been implemented in some other provinces.

   Meetings with M.L.A.s as sponsored by the Association the last few years is positive and can be used as a forum to express Association concerns. Annual joint meetings with the Alberta Cabinet should also be considered for significant matters.

In summary, the workshop was useful in that it consolidated the views of Council and other participants in the workshop. Hopefully it will lead to more success in obtaining the support of government and others in the future.

G.E. OLSSON, A.L.S.

Errors and Omissions
Offsets Require Independent Checks

A surveyor staked a basement from a 1.2 metre offset and forgot to add the offset when setting the basement stakes. The house was proposed to be set back further than existing houses due to the proposed addition of a front drive garage and hence, the error was not obvious until the foundation was constructed and the builder was lining in the garage pad.

It is significant that the job was the all too usual, rush job and only two front block corner pins were used as evidence. No monuments were used or established at the rear of the property and no check-measurements were made to fences or other occupation limits.

The estimated cost of rectification is $20,000.

Prompt Reporting of Claims Essential

A survey firm renewed their insurance at year end reporting that they had not been advised of any claims. A problem, however, had come up and because of its apparent minor nature, had not been brought to the attention of the managing partner. An action, however, resulted and was disallowed by the insurer because it had not been reported prior to the expiry of the policy.

G.K. ALLRED, A.L.S.
Hard Work and Rum

This article was written and published in the Edmontonian in September, 1965 and is reprinted as is. Please read it in that context. A.G. Stewart passed away in 1976 at the age of 90.

He's climbed some of the most rugged mountain ranges in northern Canada, swung an axe until "my callouses were two inches thick" and lived in a canvas tent on the shore of Great Slave Lake when the mercury shivered at 60 below.

He's taken part in some of the most significant land surveys in western and northern Canada. In a career spanning nearly half-a-century, he's played a major role in bringing order to a frontier country. And, in the process, he's built a legend in his profession for his ability, his resourcefulness and his drive.

Surprisingly, Alexander George Stewart, senior partner in the Edmonton firm of Stewart, Weir, Stewart and Watson, scoffs at his colorful past. "I don't see anything exciting about my life. I have enjoyed it — every minute — but I don't see where I've done anything worthy of note," he argues. "My life has been an endless round of hard work. If you want to give me credit for something, give it to me for having worked hard all my life." But his modesty can't overshadow his credentials and achievements.

The 78 year old, Ottawa born, surveyor participated in the historic survey of the Alaska-Canada boundary from 1908 to 1911 as a member of the staff of the International Boundary Commission.

It was three years of backbreaking work in wild, mountainous country. Torrential rivers and insects were major problems. ("The water was cold as the devil. We wore gumboots that came up to our hips and they were intended to keep the water out. But, as a matter of fact, we would fill them with water the first thing in the morning in order that it would get warm from our bodies and serve as insulation. We also had good rum rations which helped a great deal. I really think that is what got us through!")

Mr. Stewart recalls some of the hard work and unusual aspects of this survey:

"The survey line had to be 20 feet wide. Some of the trees we had to cut were six feet in diameter. We used double-bit axes and seven foot crosscut saws.

We worked 10 hours a day, seven days a week. About every 10 days I would call a 'wash day', when the men would wash and mend their clothing.

Markers had to be placed every three miles in solid rock. We couldn't find much solid rock, so we had to pack cement, gravel and water up the mountains and build six foot square aprons for the monuments. Each monument weighed 56 pounds, was conical in shape and stood about 2½ feet high. It was made of heavy bronze, with 'Canada' marked on one side and 'United States' on the other.

There was an epidemic of smallpox on the Porcupine River. I was at Lower Rampart House and was instructed to vaccinate an Indian camp, about 25 miles down river, where 75 to 100 persons were living. When I got there, the Indians — a very primitive bunch — ran into the bush. I waited a couple of days, then went into the camp early one morning and caught them in their tents. On the way back on a river boat, one of the passengers in my cabin was an illegitimate son of General Stonewall Jackson of the United States, who was being taken back to the States on a charge of murder. He was a very pleasant person."

Mr. Stewart began practice in Edmonton in 1912 as an
Climbing Party: Left to Right - J.D. Craig, Daddy Eaton, Bob Smith, A.G. Stewart, Benno Alexander, Ginger Turner

engineer and surveyor under the name of Pringle and Stewart, in association with the late J.F. Pringle (who was later to become vice-president of the CNR). In that same year, he undertook the original subdivision survey of the Peace River Country, covering about 20 townships. ("I walked in twice from Edmonton, and both trips were pretty tough. One trip was in the winter and we slept under the sleighs.")

He served as a district engineer with the provincial government from 1914 to 1916 then went overseas with the Canadian Railway Troops. ("We built a tremendous amount of railways; much of it under fire.") Mr. Stewart was chief surveyor with the provincial land titles office in Edmonton from 1920 to 1936. In 1931 he took a leave of absence and staked claims in the Great Bear Lake area for an Edmonton group, comprising Cy Becker, H.A. Dyde and others. ("This was a year after Gilbert LaBine staked his original claim.")

From 1936 to 1944 he was engaged in mine surveys and development work in the Northwest Territories. He worked for the Americans on the Canol project at Fort Simpson. Mr. Stewart went into practice by himself in 1944, took in two partners in 1951 (his son, John, and C.H. Weir) and another — Reginald Watson — this year (1965).

An honorary life member of the Alberta Land Surveyors' Association (an honor conferred upon him in 1959), he was a member of the Edmonton Interim Development Appeal Board from 1934 to 1962. ("I've watched this city grow from a small agricultural city into a metropolis muscled by industry.") The able and hearty surveyor has no plans to retire, although "I'm leaving most of the work to my partners. I believe I've earned the right to take it a little easier."

His firm played a key role in oil and gas development in the province. It has done the location and legal survey of thousands of miles of pipelines, oil and gas distribution lines and power transmission lines (such firms as Northland Utilities, Northwestern Utilities, Federated Pipe Lines, Calgary Power) and about 4,000 wellsites. An active community worker (Edmonton Chamber of Commerce, Alberta and Northwest Chamber of Mines), Mr. Stewart is a man of strong views. On Mayor Hawrelak: "He's doing a wonderful job. He has a great deal of talent and he works for the city,

A MAN WITH HUMOUR

"I was flunky to the assistant city engineer in Ottawa in 1905. He was a very profane man, and I got quite a basic education in 'effective speaking'."

"My second experience was up at a corundum mine at Craigmont, north of Kingston. I spent a summer there. It was pretty rugged. There were a few hillbilly families around and at one time I remember there were four unmarried mothers in one little home. But I didn't get any basic education there, I can tell you!"

although some people on council are trying to obstruct him." Critics of Canada's rectangular system of survey: "I have little time for them. Our system is one of the best in the world." The proposed Coliseum: "It was Roper's Monstrosity. It would have been insanity to put a building of that magnitude in the centre of the city. We are facing a big enough traffic problem, without making it completely hopeless. That's what the downtown proposal would have created — a traffic monster. I'm not against a coliseum, but not in the heart of Edmonton." The Crescent form of subdivision: "I think we have too many in Edmonton. Some planners seem to have them on the brain. They are costly and a devil to get around).

RON HAYTER

Triangulation Point Up Iskoot River
The column Guardpost is intended to be a regular series of articles by the Chairman or members of the Practice Review Board to relate matters to the membership which they deem important. The PRB, through their study of the practices of land surveyors in general or perhaps with specific regard to insurance claims or other matters, have occasion to preview problems which can and often do grow with time or neglect. The purpose of this column is therefore, to inform the membership of practices which they may wish to "guard" against.

The proficiency of a surveyor is most frequently rated by the manner in which he marks those boundaries which he is engaged to delineate. In the eye of the public, the capability to be able to readily, visually determine property boundaries or other lines marked by the surveyor is the criteria by which he is measured. While the mathematical position of a monument is of considerable importance to the surveyor, it is often less so to those users that follow. Accuracy is taken for granted. They just want to be able to find it.

The importance of well placed monuments cannot be over emphasized. Equally, so must the preservation of monuments be stressed, especially to those in authority and the public at large. The meticulous placement of a monument becomes somewhat redundant if the first equipment operator is allowed to carelessly destroy it. Similarly, if it is removed for a fence post.

The cost of replacing a missing monument is normally several times that of placing it in the first instance. The often seemingly high fees for a survey are invariably related to the necessity of replacing monuments of previous surveys which were destroyed by someone’s carelessness. Combined with this is the weakening of the cadastral survey fabric each time an original monument is destroyed. The foregoing is not sufficiently recognized or understood by either the public, legislators or in some cases, even many surveyors.

Is there a manner in which this matter can be appropriately and efficiently addressed? I suggest there are possibly several.

Firstly, there must be a recognized and meaningful shared responsibility between the land surveyor and all levels of government. The self-serving attitude of a great number of surveyors towards the re-establishment of missing monuments and filing of plans accordingly must change. Letting economics dictate the quality of the survey is nonsense.

All levels of government must appreciate the necessity of maintaining a strong survey fabric. All construction contracts, building permits, etc. should have a clause in them relating to the preservation of survey monuments and the responsibility for replacing any that are destroyed. Demonstrated cases of monument destruction must be followed up and the offending parties brought to account. This should apply equally to municipal and government contracts, along with private industry. We know this can be effective, from experience.

Secondly, the general public must recognize that the position of their boundary markers is in the nature of an improvement relating to their property. In the initial stages, this may only be a $400 to $500 item, however, when the corners are missing and replacement is attached to the cost of preparing a "Real Property Report" the value may suddenly become considerably greater.

Should the above be considered a valid argument, then it follows that a property is incomplete without the corners being in existence, as, in effect, the extent of title cannot be physically verified. This of course, would then transfer the onus for a "Real Property Report" from the purchaser to the vendor which is where it really should be. Why should anyone even consider buying a piece of property where the owner cannot demonstrate the extent of title as being adequate. Obviously, the lending institutions want that assurance even for a mortgage. I believe the maintenance of the survey fabric would be enhanced somewhat if the foregoing was to become commonplace.

Thirdly, I suggest there should be a method of reimbursement considered for the re-establishment of primary survey evidence, which would include initial subdivision plans at the time of carrying out secondary surveys. This could be funded from the profits that are generated through the Land Titles Office. Certainly, as the legislation to preserve or protect survey monuments is the responsibility of the legislators then so should some of the cost for the failure to properly enforce this be borne there.

In conclusion, however, unless we as surveyors take some leadership, with cooperation and support from government and industry, we will continue on our path to further degradation of our survey fabric. There is no doubt that the ball is largely in our court. My experience on the Practice Review Board has indicated that while a great number of surveyors are truly interested in the preservation of the cadastral fabric and perform in a responsible fashion, there are still those that do not. It would appear to be an ongoing educational matter.

Hugh Impey, A.L.S.
Descriptive Plans

Since the proclamation of section 83.1 of the Land Titles Act (descriptive plans) on March 25, 1988, the Land Titles Offices have had the opportunity to discuss the use of descriptive plans with several Alberta land surveyors. It was apparent through the discussions that there had been a lack of information regarding the history leading to the proclamation of descriptive plans and the benefits to be derived from such plans. We have therefore, prepared the following outline to clarify any misunderstandings.

History: While a plan of survey has always been the primary and preferred method of creating new parcels, the Land Titles Offices traditionally have had the discretion to allow the creation of new parcels by metes and bounds description. This discretion is exercised in circumstances where the requirement for a plan of survey is considered to be unwarranted, based upon a consideration of several factors such as the location of the land, the complexity of the parcel, the costs associated with a plan of survey, etc.

During the mid-70's, the Edmonton Land Titles Office attempted to establish and enforce arbitrary rules which required a plan of survey, in most cases, of new parcel creation. The adverse public reaction to these strict rules resulted in a directive from the Deputy Attorney General reverting in effect to the previous policy of allowing subdivision by description in a variety of circumstances.

Over the next few years, our office had the opportunity to discuss the concept of descriptive plans with other Western Canadian jurisdictions where legislation for similar type plans already existed. The positive response from these jurisdictions together with the benefits that we foresaw in replacing metes and bounds descriptions with descriptive plans, led to the passage of an amendment to the Land Titles Act (section 83.1) in 1982.

As the Alberta Land Surveyors' Association opposed the amendment, the former Attorney General made the section "subject to regulations" with the idea that a compromise solution would be worked out with the Association. Negotiations to develop acceptable regulations broke down as the Association wanted firm rules to be administered under the direction of a surveyor in the Land Titles Offices and the Land Titles Offices wanted to retain some discretion to preserve the ability to be sensitive to the needs of the public. Consequently, section 83.1 remained unproclaimed.

In 1983 at the request of the ALSA, the Associate Minister of Public Lands and Wildlife established a Surveys Act Committee comprised of two representatives each from the Land Titles Office, the Alberta Bureau of Surveying and Mapping, the Alberta Land Surveyors' Association, plus two surveyors from the private sector as consultants to review and update the Surveys Act and the plan sections of the Land Titles Act. The concept of descriptive plans was reviewed and adopted and a section similar to the unproclaimed section 83.1 was included in the committee's final report in 1984.

After the Surveys Act Committee's report was made public, the Alberta Land Surveyors' Association once again objected to the provision allowing descriptive plans.

The idea of descriptive plans had been virtually laid to rest until the spring of 1987 when the ALSA submitted a formal brief to the Government of Alberta recommending once again that all new parcels be created only by way of survey. The Attorney General advised the Association that he did not think it was practical to require surveys in all cases and having had the issue of descriptive plans brought to his attention, requested more information about them.

At approximately the same time, representatives from other groups such as the Alberta Association of Municipal Districts and Counties, and the Alberta Planning Board representing subdivision approving authorities, made submissions to the Government of Alberta. The AAMD&C by resolution, requested the government to reject any proposal that would require all subdivisions to be effected by a plan of survey, while the Alberta Planning Board fully supported the concept of descriptive plans. The culmination of all these activities resulted in the proclamation of section 83.1 (descriptive plans) on March 25, 1988.

Benefits: There has never been any suggestion that the Registrar would regard a descriptive plan as being of equal merit to a plan of survey conducted on the ground. However, there are several advantages that a descriptive plan has in a Land Titles system. Some of the advantages we foresee are:
- a picture is easier to understand than a worded description,
- concise legal descriptions result in less chance for error in reproducing worded descriptions in titles and documents (simple Parcel 1, Plan X rather than many lines of words),
- less costly than a plan of survey when circumstances do not warrant the expense of a survey,
- easier to enter and access a simple plan description in a computerized system.

In addition, because of the requirement to have a descriptive plan for a new parcel prepared by an Alberta land surveyor, surveyors will have an opportunity to give professional advice to their clients on the relative merits of creating a new parcel in this manner as opposed to subdivision by plan of survey. Through this process, the public will have better information on which to base their decisions in this particular area.

We do not think anyone involved in real property conveyancing would dispute the premise that a plan of survey prepared under the supervision of a qualified land surveyor is a necessary and desirable method of subdividing land. The certainty of boundary definition achieved is of prime importance in any land conveyancing system. But we also feel, as do many others in the conveyancing industry, that there is still a need to allow an inexpensive method of describing new parcels in certain situations.

We look forward to the use of descriptive plans as an effective tool that will be more beneficial than metes and bounds descriptions and we trust that by working together with surveyors, their use will be kept within acceptable bounds. AL GARTKE & MARV SCHOENLEBER ALBERTA LAND TITLES OFFICE
Speaker's Bureau in Full Swing

The ALSA Speaker's Bureau was given a trial run in December when a local company of downhole surveyors and directional drillers requested a presentation on the survey system to round out a four day seminar.

Vic Wolchansky, A.L.S., N.S.L.S., C.L.S. gave a two hour presentation on the survey system in the four western provinces, and the NWT, to a group of fourteen. With the assistance of transparencies, he was able to present the variations in the survey system clearly for his audience.

Alberta land surveyors interested in getting involved as speakers are encouraged to contact the ALSA office or Stan Hutchinson. A library of transparencies and videos is being built up to supplement speakers on various topics. An ALSA brochure on the Speaker's Bureau will be printed and distributed to members and interested groups in the near future.

The End of the Line

When survey days are over
And retirement's come at last,
No doubt you'll oft remember
The good times of the past.

Those early days as rodman
With axe and thin steel chain,
Tacking notes with freezing fingers,
Or soaked with mud and rain.

Mosquito bites and blackflies,
Bush food - and sometimes beer,
Traverse lines that ran forever -
With camp way back up rear.

The burning days of summer,
The dizzy, crazy heat,
The plains that rolled on westward,
The forests, cool and sweet.

The snowfields wide and silent -
Where you were was just a guess,
Beyond the laid out townships,
Before the G.P.S.

The endless pairs of star shots,
The "quads" that never close,
The guy who knocked the transit
And earned a bloody nose!

Last measurement and angle -
You took one sunny day,
That closed without a wangle
You'd earned your bloody pay!

The warm glow of your campfire
Same magic, moonlit night,
As you joke with friends around you
Surveying seems - just right.

You'll recall such times and others
As your life takes on new trends -
And you'll record some new adventures
Before your field book ends.
Estate Planning  

by BRUCE CHILDS, C.A.

Bruce Childs, C.A. is the partner in charge of the Personal Financial Planning Group in the Edmonton office of Thorne Ernst & Whinney, chartered accountants.

Estate planning is a subject that many people prefer to avoid for as long as possible - probably due to its connotations with dying.

Planning an estate is necessary to ensure that your family affairs are in order and that upon death, your assets are distributed in accordance with your wishes. A properly planned estate will also result in the minimizing of income taxes. Planning your estate at an early date requires you to objectively analyze your financial position and determine the income-earning potential of your assets. This is required in order to ensure that the basic needs of your spouse and children and other potential beneficiaries will be looked after; not only in the event of your death, but also in the case of your disability. This exercise will have to be done sooner or later. There are two things in this life that none of us can escape - death and taxes. Either you prepare your estate plan before you die or your executor or family must do it after you die.

An earlier article pointed out that estate planning is one segment of a total personal financial plan. The following steps are required:

(a) the preparation of a statement of net worth showing your assets and liabilities;

(b) an analysis of your life insurance coverage showing the funds that would be available to your estate after your death;

(c) a projection of the cash requirements of your family in the event that you are no longer able to work either through death or disability;

(d) the preparation of a will which clearly outlines your wishes as to the handling of your estate; and

(e) a review of the foregoing to determine if there are ways of minimizing any income taxes arising upon death.

Once the foregoing information has been assembled, you will be able to assess whether you have accumulated sufficient assets to provide for your family. If you have not, then a plan needs to be developed to cover the shortfall in the short term. This can be accomplished, for example, by the acquisition of additional life insurance and/or disability insurance. A longer term plan should also be developed to ensure the growth and accumulation of assets sufficient to cover the needs of your family. This can be done through a planned approach to the investment of available funds.

Once you have accumulated sufficient assets to cover your needs, you may want to consider an estate freeze. An estate freeze is a procedure taken whereby you virtually freeze the present value of your estate assets so that any future increase in value attributes to your beneficiaries and becomes ultimately taxable in their hands.

Upon the death of an individual he or she is deemed, for income tax purposes, to have disposed of their assets immediately preceding their death. This, of course, gives rise to capital gains or losses to the deceased in their final income tax return. Since we are all now entitled to the lifetime capital gains exemption of $100,000, we will want to ensure that as much of this exemption as remains available, is fully utilized upon death. We also will want to ensure that as far as possible, the tax on such gains in excess of $100,000 will be deferred as long as possible or perhaps be eliminated.

An estate freeze can assist in this regard. For example, if you have two children and you presently have investments with potential capital gains of $100,000, you plan an estate freeze now and these gains would be exempt from tax upon your death through the utilization of your capital gains exemption. If your investments grow between the present and the date of your death to a point where there is a capital gain of $300,000, the total capital gains exemption applicable to these assets would amount to $300,000 since you and your heirs would each be able to utilize a $100,000 exemption.

At this point, it is important to remember that assets transferred between spouses upon death do not attract income taxes and so normally you would not include your spouse in an estate freeze. Normally, an estate is frozen through the use of a trust or a holding company. While an estate freeze is not a complicated arrangement, it should be carried out by a qualified professional to ensure it complies with various legal and income tax requirements.

Keep in mind that none of us are indestructible and that it is never too soon to plan your estate to ensure the well being of your family.
Chartered Arbitrators Gain New Public Image

Edmonton lawyer, Bill Geddes, hopes a new designation of Chartered Arbitrator will elevate the image of people trained to settle disputes.

Geddes recently completed a two year term as president of the Arbitrators’ Institute of Canada. At the annual convention in Montreal, the institute appointed a committee to develop a system for implementing a new designation.

Geddes says arbitrators are not yet a profession “because you cannot limit who is an arbitrator”. But he expects the C.Arb. designation “will indicate who is an experienced arbitrator”.

To earn that badge, an arbitrator does not need any specified formal education. But he or she must complete a 13-week course with an examination, a mock arbitration and a three-person tribunal. The designation has been recognized by the Federal Trade Marks Act.

The Arbitrators Institute of Canada was created about 15 years ago as a non-profit organization. Geddes says it is “dedicated to alternate forms of dispute resolution including arbitration, mediation, conciliation”.

The institute, with about 150 members in Alberta, conducts courses and seminars and promotes the education of arbitrators.

Geddes estimates that he has handled 25 to 30 civil arbitrations of such disputes as “a garage built too high on a lot, and a house built on the wrong lot”.

Ron Chalmers
Edmonton Journal Staff Writer

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als news winter, 1989
Director of Surveys Concerns

Deficiencies in Survey Control Ties

A number of registered survey plans have recently been found to be deficient in regards to survey control ties. This deficiency involved both an insufficient number of ties and incomplete or inferior ties.

Every survey that meets the requirements of either Sections 2 or 4 of Survey Regulation 150/88 (Surveys Act) should be integrated with or connected to survey control. Whenever integration with survey control is required, in accordance with the provisions of section 2, the method to be used and number of ties to be performed would depend on the following factors: (a) proximity to and number of available survey control markers, (b) error of closure, and (c) integration of previous surveys.

Additional information on this matter is available from an article titled “Integrated Land Surveys” by Mr. T.W. Hudema, A.L.S. published in the Summer, 1987 issue of ALS News.

It should be noted that if an exemption is required from any of the provisions of the Survey Regulation, a request should be made in writing to the Director of Surveys prior to completion of the survey (Section 18 - Survey Regulation).

Examination of Condominium Plans: We have found that some uncertainty still exists as to whether condominium plans require the Director of Surveys examination and approval prior to registration under the Land Titles Act. A letter, dated January 22, 1987 from the Director of Surveys to all Alberta land surveyors, indicated that site survey plans pursuant to the Condominium Property Act would be examined. However, this service was modified to include only those plans involving re-establishments or establishments of previously unposted corners. In other words, condominium plans indicating all found monuments at the site corners and having no involvement with re-establishments should be sent directly to the Land Titles Office for registration.

Dormant Plans: Over the years, a number of survey plans were sent to the Director of Surveys for examination and approval but were never filed at the appropriate Land Titles Office. The Land Survey Branch is conducting a project to inventory and deal with these dormant plans.

Through preliminary investigations, we estimate approximately 1,300 plans are affected. These include plans that were examined, sent back for correction but never returned to our office or plans that were approved but never filed at Land Titles.

After all dormant plans are compiled, letters will be prepared and sent to the appropriate land surveyors and their firms at the time of the survey (if available). We will be requesting that they either see their plan through approval and registration as per the original intent or prepare a re-establishment/establishment of monuments plan. In certain cases where all monumentation was removed, a letter of explanation should be forwarded to the Director of Surveys.

We would appreciate the full cooperation of all members and respective firms so that survey monuments established or re-established will become public record.

R.F. BAKER, A.L.S.
DIRECTOR OF SURVEYS

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Survey Plans Submitted with Well License Applications

The Energy Resources Conservation Board (ERCB) and the Land Conservation and Reclamation Council (LCRC) of Alberta Environment is requesting the assistance of the ALSA in emphasizing the importance of providing sufficient detail regarding surface topography and surface improvements adjacent to wellsites. Section 2.020, subsections 3 and 3.1 of the Oil and Gas Conservation Regulations outline the minimum information required on wells plans. The ERCB refers potentially sensitive locations to the LCRC for review prior to licensing. This usually includes an on-site inspection and recommendations regarding the location and construction. In some cases, a location may not be acceptable as surveyed. An example of this would be low, wet ground adjacent to water bodies, or where there is an extreme elevation difference across the lease and access road or in close proximity to them. The survey plan submitted with the well license application is the principal information source used for deciding whether a referral should be made.

Land surveyors are encouraged to provide any additional details they feel are appropriate and should not be limited to the specifics of the regulations. This would apply to both the wells site and access road. Details which include drainage patterns, valley and coulee breaks, beaver dams, muskeg or wet areas and flood plains, etc. are very much appreciated. This information is usually very good for the quarter section on which the well is located, however, little or no information is provided on the adjacent quarter section, particularly for long access roads or where a well is situated close to section lines. We believe this additional information will benefit the industry as well, in providing it with an opportunity to judge the suitability of a location prior to filing a well license application. With the current emphasis on environmental impacts from wells sites and access roads and the resultant increase in landowners concerns respecting them, we invite your active participation to allow for the early identification of potential conflicts and resolution of problems. This is not to suggest that your members become practicing landmen, but rather to assist in the overall process of selecting an appropriate wellsite location.

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Following the proclamation of the new Surveys Act, the Association assumed responsibility for the sale of iron posts and marker posts. Cash flow from post sales will be used to fund the activities of the Professional Audit Branch.

The PAB has acquired a full line of field equipment and has hired a Senior Survey Technologist in the person of Paul Methuen, who commenced his duties on November 1, 1988. Paul is a NAIT honours graduate and has had several years of geophysical and legal survey field experience. He came to the Association from the LSD where he worked for over four years in plan examination and municipal computations.

It has been brought to the attention of the Practice Review Board that plans of well locations in unsurveyed territory have not been submitted to the office of the Director of Surveys for approval in some instances. Surveyors are reminded of the provisions of Section 9(1)(e) of the Survey Regulation, which requires that a plan be submitted to the Director for approval within ninety days of completion of the survey. The PRB plans to monitor the submission of wellsite plans in the future.

Field inspections carried out throughout the province have revealed certain deficiencies. Many statutory iron posts found have not been marked with permit number, registration number or, in the case of right of way surveys, the initial letters of the name of the operating company. Furthermore, a few posts placed in re-establishment of section and quarter-section corners have not been inscribed with section, township and range designation or "1/4", as the case may be. Practitioners should ensure that their field personnel are attending to the proper marking of posts.

There appears to be a lack of adequate searching for secondary evidence in many instances, particularly on surveys for pipeline right of ways. Thorough digging will often uncover old rotted fence post butts which are usually far better evidence of the original position of a corner than is mechanical re-establishment.

More attention should be paid to the hierarchy of evidence. Plans which appear to show an excessive number of mechanical re-establishments will be subjected to close scrutiny in the field by the PAB.

Examples of inadequate research in preparing for a survey have also been encountered. One recently inspected right of way plan had missed two road plans and two right of way plans which would have assisted in the re-establishment of a section corner. Surveyors should review the provisions of Chapter 5-1 of the Manual of Good Practice on a regular basis.

A trend seems to have developed to maintain straight lines for miles, often ignoring possessory evidence on the ground. Good practice would indicate that a re-established corner should be placed on the "road allowance" side of a fence corner rather than on a straight line and up to one metre inside the field, even if small deflections are introduced.

A number of inquiries have been received from surveyors regarding the preparation of Real Property Reports for acreage parcels or quarter sections. The question was addressed during the symposium held on April 20, 1988 and the consensus was that a different method of reporting should be adopted in these situations. A surveyor is not required to quarter a section or retrace the boundaries of a large acreage parcel in connection with the preparation of an RPR.

It is not unusual for two or three telephone calls a week to be received in the Association office from distressed home owners complaining about someone digging up their lawns and/or leaving a mess. While digging is necessary to properly complete a survey, every effort should be made to contact the affected owners. Such practices leave a black mark on the survey firm involved and on the profession in general.

W.A. WOLLEY-DOD, A.L.S. INSPECTOR OF SURVEYS

"The only things worth learning are the things you learn after you know it all."

U.S. President Harry S. Truman
Good Morning Alberta Land Surveyors

A few bombs dropped on the ALSA office since my last blurb in the Fall issue of ALS News. Surveyors were upset that there was a shortage of iron posts (and rightly so). Apparently, Transportation didn’t anticipate how quickly the supply would be depleted because of the new posting requirements which came into effect when the new Surveys Act was passed. Some general comments were: “Say what?” (a few times), “Maybe I should run over to Saskatchewan and use some of their pins.” and “I’ll just register the plan and mark on it — posts not available.”

After all that was over and the new posts finally arrived, a manufacturing problem was discovered. The manufacturer didn’t anticipate that if a shorter (cheaper) bolt, which incidentally, was shorter than the crimp at the top of the pin, that all the bolts would fall out with the handling of a bundle. This resulted in another delay because the problem had to be corrected.

If all of the above wasn’t enough — the ALSA office was advised of an increase in the price of the posts after a good number of orders had already been filled. This resulted in a good deal of time spent on the phone advising members who had already placed orders that they were going to be invoiced at the new price. Some surveyors were having a good day — some were not.

One incident that happened while I was away in November was where a surveyor phoned up and ordered 200 iron posts. Apparently he was asked if he was sure he wanted 200 and he assured us that he did (please note that the word “bundles” never came up in the conversation). When I got back I questioned the order but was assured that he wanted 200. Lo and behold, I get a call relating the fact that the surveyor had the pins delivered to an employee’s driveway. I can’t imagine the look on the guy’s face when he got home and there were 200 bundles of iron posts on his driveway (I don’t imagine his wife was too happy either and I won’t even guess what the neighbours thought). Anyway as things turned out the surveyor only wanted 20 bundles (200 pins). Luckily for us, two other surveying companies in Medicine Hat bought the remainder of the posts (180 bundles). Many thanks to Midwest Surveys & Services Ltd. of Medicine Hat who took the bulk of the order. I don’t expect to hear from them for a long time.

January to May is really hectic around the office mostly due to preparation for the Annual General Meeting. Committees will try to wind up their terms of reference for 1988-89, invoices for annual fees have gone out, a new register has to be compiled and printed, plus another issue of ALS News has to go out to the membership before the AGM. I don’t know whether the membership has noticed but there have been some slight design changes in ALS News. Any comments, suggestions or criticism would be welcome.

Wishing you all the best in 1989.

SHARON STECYK

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Video Surveying

Alex Hittel, Chairman of the Board for the Calgary based company Nortech Surveys (Canada) Inc., has introduced a new system to the field of surveying. This Airborne Video Reconnaissance System combines a GPS receiver and antenna, video camera and recorder with annotation and a pilot's navigation display. The system mounts in a Bell helicopter with the GPS antenna fitted on the helicopter's tail fin and the video camera housed in a specially designed pod between the skids.

The positioning is acquired through the Norstar 1000 GPS receiver (developed by Nortech). The NS1000 is a C/A code, multi-channel, self-contained receiver which acquires signals from the "NAVSTAR" satellite based positioning system. Through on-board software, the receiver is capable of producing coordinates dynamically in either UTM or MTM projections (NAD83 or NAD27 Datum), at an update rate of 1 second.

Accuracy for a stand alone operation is from 10 to 25 metres in all three components. This may be increased from 2 to 5 metres when used in differential mode by incorporating a second receiver on a known location, thus eliminating the major error sources including atmospheric and satellite orbital errors.

High resolution video imagery is achieved using a Panasonic Digital D5000 video camera. The modular design of the D5000 enables the utilization of a wide variety of componentry for specialized applications. Enhancement of the high quality video capture is furthered through features including "Auto Iris" and "Strobe Effect Shutter".

The imagery is recorded on a Panasonic AG2400 Professional VHS Video Recorder and displayed on a Panasonic CT500 color monitor. The monitor enables real time quality control of the video imagery being recorded.

Nortech's unique Video Annotation Systems (VAS) annotates positional information computed by the NS1000 onto the video film. General information to be annotated, such as client name, date, line number etc., is input via an onboard laptop at the start of each mission.

To increase the versatility of the system an audio track is incorporated into the video which allows a commentary to complement the video imagery.

The onboard laptop computer also performs two other functions. First, the synchronizing of the video time with GPS time, which enables the correlation of the video imagery and annotated positions. Second, to relay the navigational information from the NS1000 to the pilot via an analog instrument display, which permits accurate navigation of the vehicle.

The final product is available immediately the field operation is finished. The video tape has the complete information necessary to begin analysis, planning or design of the intended project. If desired, photographic "stills" may be produced either for areas of interest or of a complete line as in strip photography. By flying a grid pattern, with overlapping video coverage, mosaics may also be compiled for a more indepth study over large areas.

Applications of this system are many and widely varied including use in geophysical, oil field, utilities, forestry, fish and wildlife, land use and environmental fields of endeavour. The use of infra-red photography is another option for specialized applications such as pipeline leaks, hot spots from forest fires or even wildlife counts.

This system has been successful in several projects in both Northern Alberta and the United States. The many inherent benefits derived through use of this system will only increase its value as a cost effective land information acquisition tool.

BRIAN CUTTING, P.ENG.
NORTECH SURVEYS (CANADA) INC.
CISM Happenings

The Edmonton Branch of the Canadian Institute of Surveying and Mapping held an evening meeting at the Royal Canadian Legion, Strathcona Branch on Wednesday, September 28, 1988.

The meeting’s theme was Geographic Information Systems. Mr. Ted Smith (Fimtech) gave an excellent presentation on the difficulties of establishing a microcomputer based information system for a large multi-disciplined engineering project in Egypt. Mr. Dale Rhyason (City of Edmonton) gave a most entertaining talk on the geographic information system used in Edmonton. An open forum on G.I.S. followed.

A second Branch evening meeting was held Tuesday, November 8, 1988 at the same location. The guest speaker was Mr. Hugh O’Donnell, ADM for the Canada Centre for Surveying, Mapping and Remote Sensing. He outlined the new structure and goals of the federal surveying and mapping organization and highlighted programs affecting the Canadian industry.

The following day, the Edmonton CISM along with Land Information Services Division and the Alberta Land Surveyors’ Association, sponsored a very successful one day seminar on NAD ‘83 in the Edmonton Convention Centre. Approximately 135 delegates attended to hear 15 speakers give presentations on the impact of the new North American Datum. Thanks to all those ALSA members who participated.

The next Branch meeting will be held at the Marco Polo Restaurant, Wednesday, January 25, 1988. Mr. Gerard Raymond will speak about the Association of Canada Land Surveyors and other major changes their organization is undergoing.

Mr. Bruce Fletcher of the Land Information Services Division will speak on the subject of the Parcel Mapping Program. This should be of interest to all ALSA members. For more information, please call Mr. Janis Simanovskis at 427-6279.

STAN HUTCHINSON, A.L.S.
Changes Proposed in the Canada Lands Surveys Examination Regulations

The Board of Examiners for Canada Lands Surveyors is currently working on changes to the CLS Examination Regulations. These changes are required to upgrade the expertise of surveyors working in the CLS jurisdictions.

Over the past several years, surveys required on Canada Lands have increased significantly. The increase results from the large number of Native Land Claims (specific, comprehensive and entitlement) that have been negotiated or are in the process of negotiation. It is expected that within the next decade up to $100 million in survey work will be performed for specific and comprehensive land claims alone. In addition, some Indian Bands are seeking self-government status. Other Indian Bands have improved their financial condition and are making important investments in their lands. All these changes require more surveys. The Native population has increased significantly, resulting from changes to the Indian Act. This fact, together with monetary compensation resulting from entitlement claim settlements is helping to promote economic development on Indian lands. The net result of all this activity is the fact the area of Native lands in Canada will more than double from what it is today.

The Surveyor General has up to now, relied on contracting many surveys on Indian Lands and other Canada Lands to non-CLS provincial land surveyors. They, in turn, have relied greatly on Legal Surveys Division (LSD) for step-by-step guidance in doing these surveys. Therefore, surveys have been done on a project by project basis rather than as part of a national framework. This approach has, over the years, had a serious negative impact on the Canada Lands Survey Systems across Canada. The Surveyor General is now faced with the necessity to revitalize the CLS survey fabric. This will require a great deal of work by LSD to document the problems, to identify the remedies and to prepare standards for future work. Because both human and financial resources are dwindling as a result of government downsizing, it will be impossible to continue giving the step-by-step guidance to surveyors as has been done in the past.

After several studies and investigations, the Surveyor General has concluded that it is unethical to ask surveyors to work in unfamiliar survey jurisdictions having unique survey systems in which they have not received formal training. The alternative is to ensure that a sufficient number of CLS’s exist nationally who are adequately trained to operate on Canada Lands and ready to assume full responsibility for carrying out necessary surveys. Therefore, to ensure that surveys are carried out without step-by-step support from LSD, future contract survey work will be awarded to a much greater degree to fully qualified Canada Lands Surveyors. This new policy will be phased in over a period of time. Before it can be implemented fully, a number of other actions must be taken; namely, the recruitment of new CLS’s, the upgrading of the expertise of many existing CLS’s and the implementation of new procedures for managing and regulating surveys.

To address the training needs for CLS’s, the Board of Examiners considers the upgrading of the present syllabus to be an urgent requirement. There are specific areas of expertise that are not covered sufficiently. Therefore, the Board proposed to restructure the syllabus by adding four new subjects, dropping subjects taught by community colleges, and by combining and/or updating other subjects. The four subjects to be added to the syllabus are:
1. Property Rights Systems on Canada Lands
2. Native Government Issues
3. Offshore Management
4. Government Structures in Canada

These four subjects along with “Regulations of Surveys of Canada Lands” represent the expertise unique to the CLS jurisdiction. Eventually, this knowledge will be a mandatory requirement for all surveyors working on Canada Lands.

To ensure there are a sufficient number of CLS’s in all parts of the country, the Board of Examiners will encourage provincial land surveyors to obtain a CLS commission; especially those who have done acceptable contract work for the Surveyor General over the past years.

To qualify as a CLS under the revised examination regulations, a provincial land surveyor will be required to pass examinations in the above mentioned five subjects. As a result of this change, the Board of Examiners will no longer make a subject by subject comparison between the CLS syllabus and those of the various provincial associations. The fact a surveyor is a practicing member of a provincial association will be accepted as evidence he is a competent surveyor. He will need only to demonstrate his competence to survey in CLS jurisdictions.

Candidates who are not provincial land surveyors will be required to have a bachelor degree (or equivalent) in a surveying program from a recognized Canadian university and pass examinations in the five aforementioned subjects. Candidates not having such a degree will have to write examinations set by the Board of Examiners.

The Board also plans to prepare a series of Continuing Education (CE) seminars in co-operation with the Association of Canada Lands Surveyors (ACLs). The seminars are to assist previously commissioned CLS’s to upgrade their knowledge of Canada Lands Survey and to assist all candidates in preparing for the examinations. The seminars will be presented during provincial association meetings and at CISM annual and regional meetings, etc. The first of these seminars will be held in Halifax, N.S. on June 6, 1989 immediately prior to the CISM annual meeting. The subject of the one day seminar will be Native Government Issues. Seminars on the other new subjects will follow at later dates in various locations across Canada.
In planning the changes to its syllabus, the CLS Board has liaised with other regional and provincial Boards of Examiners, especially the Western Canadian Board of Examiners for Land Surveyors. As a result of this work, the CLS and Western Boards have adopted a common core of academic subjects. Hopefully, this step will lead to greater co-operation and reciprocity in the future.

Present planning calls for all necessary changes in both the CLS syllabus and examination regulations to be in place so that the first examinations under the revised regulations will be held in February, 1990.

There is one other initiative being taken at the present time that is worthy of mention.

The CLS Board of Examiners is responsible for all matters dealing with Canada Lands Surveyors. The ACLS, with the support of the Board of Examiners, is presently pursuing the possibility of becoming a self-regulating association. To this end, the Association presented a brief to Mr. J. Hugh O'Donnell, Assistant Deputy Minister, Surveys, Mapping and Remote Sensing Sector, Department of Energy, Mines and Resources, proposing the transfer of the Board of Examiners' responsibilities to the ACLS. The Brief received a favourable response since it is in line with present government policy to deregulate and where possible, to privatize selected government responsibilities. A liaison Committee composed of representatives from the Surveyor General's office and the ACLS has been struck to start negotiating the transfer. If the transfer of responsibilities proceeds, it will not be a short term project. A good deal of planning will be necessary, along with the reorganization of the ACLS and the passage of enabling legislation to allow the ACLS to become a self-regulating association. The government wants the project to proceed without delay. The likelihood of success appears good. Self-regulating status for the ACLS would give that association the same rights and responsibilities as the present ten provincial survey associations/corporations.

The efforts of the ACLS to attain self-regulating status and the revision of the CLS syllabus are proceeding simultaneously. However, they are separate projects. In the long term, they are complimentary to one another but they are not interdependent.

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From Terra Incognita to the Prairie West — A Map Exhibit

An exceptional exhibit of 39 maps was displayed at the Provincial Museum of Alberta, Edmonton, between October 2 and November 13, 1988. The exhibit dealt with the northwestern region of central North America.

The maps were on loan from the collections of the City of Edmonton Archives, Hudson’s Bay Company Archives, National Archives of Canada and the University of Alberta Map Collections Library. The exhibit was curated by Aphrodite Karamitsanis, Geographical Place Names Co-ordinator with Alberta Culture and Multiculturalism. An excellent catalogue was produced, edited by Ms. Karamitsanis, a copy of which is now housed in the Association library.

Many of the maps portray the routes traversed by early explorers and surveyors including Sir Alexander MacKenzie, Peter Fidler and Captain John Palliser. Several of those produced by Fidler were based on sketches drawn for him by local Amerindians in the early nineteenth century.

The oldest map in the exhibit was produced in 1566 by B. Zeltieri in Venice. The inscription on the map reads as follows:

"Map of the discovery of New France, made lately from the most recent voyages of the French into that place. Wherein one can see all the Islands, Ports, Capes and inland places there existing."

The map is typical of the period in that it is quite distorted, however, the outline of North America can be recognized.

A general map of North America was issued in 1762 by John Rocque of England, Topographer to His Majesty. The map portrays a remarkably accurate likeness of the continent with the exception of the coastline of British Columbia, which was not surveyed until thirty years later.

In 1863, a map showing the routes explored by the expedition under Captain John Palliser during the years 1857 to 1860 was produced. The map covers the area from Lake Superior to the west coast.

Of interest to Alberta surveyors was the 1883 plan of the Edmonton settlement, N.W.T. by M. Deane, D.L.S. and the 1889 first edition of the official plan of Township 24, Range 1, West of the 5th Meridian at Calgary.

In 1890, the Calgary and Edmonton Railway Company issued a land subsidy map showing lands finally selected in Alberta. Stovel’s map of 1905 was the first printed map of Alberta. It only extended to 54° N. as mapping of the northern regions was probably considered unnecessary due to lack of population.

The Calgary, Alberta Oil and Gas Fields Map was prepared in 1914. It followed the discovery of oil at the Dingman No. 1 well which led to the Turner Valley oil boom. →
The most recent map in the exhibit was the familiar Provincial Base Map on a scale of 1:1 000 000. Due to space limitations, only the Calgary to Edmonton portion was displayed. Other maps portray the origin and distribution of population, geological features and natural resources, hydrography, topography, transportation and telegraph routes and location of cereal crops, to name but a few. The maps trace the history and development of what is now Western Canada over a period of 322 years.

W.A. WOLLEY-DOD, A.L.S.

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In Search of Solutions

GIS is a rapidly developing field lying at the intersection of cartography, computing, geography, photogrammetry, remote sensing, statistics and surveying. As we are becoming aware, GIS will have a profound effect upon society. Yet this burgeoning field is not without its problems.

This conference provides a forum to search for and share solutions to our common challenges of implementation, development and maintenance of GIS. It will focus on users, applications and management. Topics under discussion include the roles of government, industry and universities; standards, data dissemination; systems development and technology; methodologies and research; as well as legal, educational and training considerations.

The Program

Morning plenary sessions and afternoon parallel sessions are supported by an exhibit of leading GIS and data suppliers, an industrial forum, data base demonstrations and technical tours.

Conference registrants may also attend optional introductory and advanced seminars. On February 27, the day preceding, registrants are invited to a state-of-the-art overview. The day after the conference, March 3, participants are invited to attend an advanced seminar on GIS issues.

Be part of the solution. Contact the Conference Director for further details.

Who Should Attend

Challenge for the 1990s is of interest to managers, users and applications specialists, whose professions increasingly depend on spatially referenced data. The conference will be attended by representatives from federal, provincial and municipal governments, industry, and educational institutions, representing the various fields of agriculture, civil engineering, climatology, forestry, geology, land registration, marine and land environment, municipal planning and management, natural sciences, surveying and transportation.

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