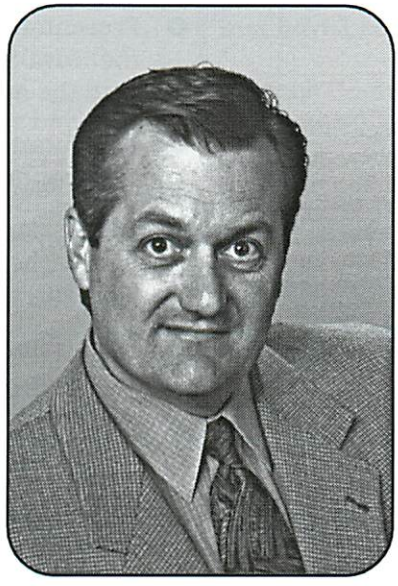
SASKATCHEWAN LAND SURVEYORS' ASSOCIATION

Newsletter

President's Message to the Membership

By R. J. Pominville, SLS, P. Surv, President



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Joanne and I had the pleasure of attending the Association of Nova Scotia Land Surveyors 49th Annual General Meeting in Yarmouth, Nova Scotia in October. Although the meeting went like clockwork there was plenty of excitement in the area. At the time of the meetings there were approximately 300 lobster fishing boats in the harbor staging a protest against the native fishing policy. To compliment this protest, the RCMP had approximately 70 extra officers in the area including a tactical squad. All of this turned the usually quiet town into a beehive of activity.

The fishing protest took the spotlight off of the pickets outside of the hotel where the AGM was held. The staff of the hotel were in a lockout position for the previous several months. The meetings and social events were excellent and very well organized, although the labour dispute caused our hosts some worry prior to the AGM.

Thanks to Doug Bouck for another great seminar in Saskatoon. The presentations were very informative and all were well attended, which speaks to the hard work that Doug puts into these. I'm sure we all appreciate the effort Doug.

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It was agreed that an ad should be placed in the classified section of the newspaper to see if there is any market for the old photocopier and laser printer, and failing any indication of reasonable interest, the matter should be brought back to Council for consideration of donating those items to a worthy charity or non-profit organization.

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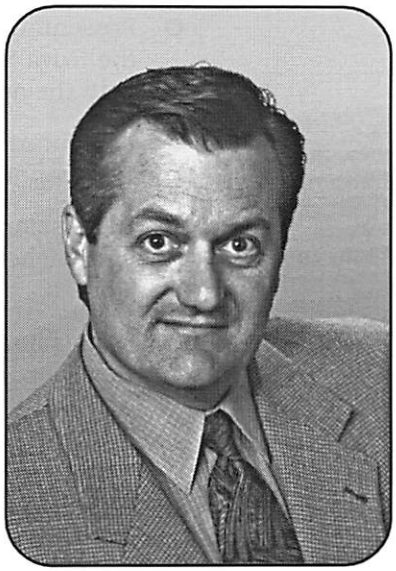

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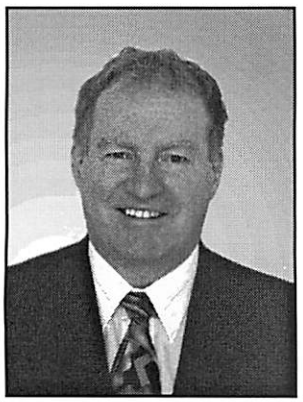
Council Highlights

By A. Carl Shiels M Sc., P. Eng., Executive Director



The **Saskatchewan Land Surveyors' Association** Newsletter is published by the Saskatchewan Land Surveyors' Association for circulation to its members.

Deadlines for articles will be the last Friday in December, March, June and September.

The opinions of the contributing writers may not be consistent with those of the Council of the Saskatchewan Land Surveyors' Association. Articles may be reprinted with appropriate credit given to the authors, unless it is under copyright.

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Office hours are from 9:00 a.m. to 5:00 p.m. on all regular business days.

Meeting #4, Nov. 1, 1999

The President reported on his trip to Nova Scotia the ANSLS annual meeting. He noted that it was the first annual meeting in many years that all provincial associations were represented. Two US states were also represented.

Highlights of the meeting included:

- Presentation on the Nova Scotia Coordinate Reference System.
- Presentation by the Land Rights Manager of the Nova Scotia Power Corporation dealing with the application of easement rights.
- Presentation on the history of the College of Geographic Sciences of Nova Scotia.
- Discussion of alternate dispute resolution approaches to resolving surveyor/client problems.
- Discussion of the Nova Scotia Practice Review Department.
- Issues related to plan preparation and in particular the development of a method for assigning unique plan identifiers.
- Plans for implementation of mandatory continuing education.

Agreement on Internal Trade (AIT) - Update

A letter was received from the Provincial Government indicating that the deadline for compliance with the Labour Mobility Chapter of the Agreement on Internal Trade had been set for July 1, 2001.

It was agreed that this matter would be tabled until the next meeting to allow members of Council an opportunity to review the background information.

Replacement of Association Photocopier and Printer

The Executive Director reported on a digital laser photocopier, that could produce print quality for

all Association printing, including the Newsletter, equal or superior to current contracted printing. Furthermore, the lease price of the device could probably be covered by advertising revenue from the Newsletter making all other office printing and photocopying very economical by comparison.

It was agreed that this issue would be dealt with during discussion of the 2000 budget.

Appointment of Auditors

D. K. McMillan had accepted the appointment as auditor for the 1999 fiscal year.

Western Provincial Survey Associations - Discussion of Reciprocity

The President reported that he had invited D. L. Gurnsey, as Chairman of the Board of Examiners, to represent the SLSA in discussions between the four Western Provinces to review the practical experience requirements of Land Surveyors who wish to be licensed in another province.

U. of C. Career Day 2000 - February 10, 2000 - Invitation to Participate

The SLSA had again been invited to participate in the U. of C. Career Day scheduled for February 10, 2000.

J. T. Skelton agreed to represent the Association at the U. of C. Career day, as well as at the 'Beef on a Bun' reception held the night before.

Council was joined by E. J. Desnoyers, SLSA representative to the WCBE, who provided an update on the issues being dealt with by the WCBE.

Highlights from Mr. Desnoyer's presentation included:

- Agreements have been reached between the WCBE, the Atlantic Board of Examiners and the ACLS for a common core curriculum.
- Discussions are ongoing between the WCBE and the provincial associations of Ontario and Quebec with a view to also adopting a common core curriculum.
- Graduates from the BCIT program have been granted credit for four or five of the WCBE requirements.

Committee Reports

Convention Committee

Details of the 2000 Annual Meeting had been 'firmed up' and published in the September issue of the SLSA Newsletter. The President reminded members of Council that accommodations may be scarce so it is important that they reserve rooms early.

Education Committee

The Chairman of the Education Committee submitted a report outlining plans for educational seminars on November 25, 1999 in Saskatoon and March 30 and 31, 2000 in Moose Jaw. Planning for a seminar session associated with the annual meeting is on hold until details of the meeting format have been finalized.

Finance Committee

Council reviewed a first draft of the 2000 budget. The Executive Director explained that the draft budget had been developed on the basis of no increase in fees.

It was agreed that the budget would be tabled until the next meeting to allow all members of Council time to review it at their leisure.

Practice Committee

Council reviewed a report from the Practice Committee in which they outlined their work plan and budgetary requirements for the next year.

Public Relations Committee

Council reviewed a report from the P. R. Committee outlining its plans for the next year.

The committee had received no further response from the members regarding the changes to the Pipelines Act proposed by Sask Energy and Mines.

Career Information for High Schools

A request that had been received from the librarian at a high school in Regina for materials related to a career in surveying. Since the Association has no such material specifically designed for distribution in the schools, the request had been referred to the P. R. Committee for suggestions.

It was agreed that the administrative staff would prepare a package of information including copies of the various pamphlets and publications on hand in

the office. The staff was also directed to examine the information provided on the ALSA web site to see if it could be adapted for distribution in Saskatchewan.

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It was agreed that a draft amendment to the bylaw should be prepared for the next meeting and that the reporting frequency should remain at once per month.

Future Planning and Requirements of the Geomatics Technology Program at SIAST

Council was joined by D. A. Bouck, Chairman of the Education Committee, and Dr. Brian Woods, Head of the Geomatics Technology program at SIAST to talk about the future plans of the geomatics technology program at SIAST. Dr. Woods explained that, following discussions with D. A. Bouck, he had been in contact with Red River College in Manitoba, SAIT and NAIT in Alberta and BCIT in BC, all of whom either had applied, or were about to apply, to the WCBE to determine the number of credits which could be obtained through their programs.

Dr. Woods explained that, in the face of declining enrollments in geomatics technology, he was finding it difficult to obtain the resources necessary for the program to be viable. One modification he was hoping to make was to provide a common first year for students wishing to pursue diplomas in Engineering Drafting, Digital Mapping, and Geomatics. In that way, he hoped to be able to generate interest in the Geomatics area prior to the students making their final decision as they started their second year.

Dr. Woods agreed that he would submit a package of information about the SIAST Geomatics Technology courses, along with examples of past examinations, to the WCBE to find out how many credits the courses would receive. He also expected to hold further discussions with BCIT to see if there was any way that the two schools could develop a cooperative approach for the delivery of the planned BCIT degree program to students in Saskatchewan. He could foresee no problems in having SIAST graduates recognized as suitable candidates for the advanced BCIT degree program.

The participation by members of the land survey industry on the advisory committee of the SIAST Geomatics program was discussed. It was noted that the industry was well represented but not directly through the association.

It was agreed that further discussions may be necessary with Dr. Woods after receiving a response from the WCBE regarding the number of credits that could be granted to the SIAST program as it currently stands.

Committee Reports

Convention Committee

There had been no new developments regarding the annual meeting since the last Council meeting.

Education Committee

The President noted that there had been a very successful educational seminar in Saskatoon and that another seminar was being planned for early March at the Temple Gardens Mineral Spa in Moose Jaw.

Finance Committee

2000 Budget

Council discussed the draft budget tabled at the last meeting. Concern was expressed that there may not have been sufficient funds allocated to the annual meeting. As a result, it was agreed that a total of $3300 should be assigned to that expense item.

A tentative budget was approved for distribution to the members which would reflect no increase in fees for 2000.

Practice Committee

No report

Public Relations Committee

No report

RPR Committee

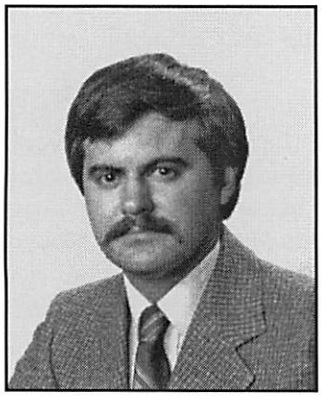
The president reported on a discussion he had with B. G. Clark, chairman of the RPR Committee. Mr. Clark had indicated that his committee had been inactive for the past year and that the only activities that they had been involved in during the previous two years were those associated with Title Insurance. Council accepted Mr. Clark's recommendation that the RPR committee be disbanded.

Next Meeting

The next meetings were scheduled for 9:00 a.m. February 14, in Regina and 9:00 a.m. April 3, in Saskatoon. □

Councillor's Report

By J. A. Boyd, SLS, P. Surv. P. Eng.



Last year at this time when I wrote my article for the Newsletter, it was -30°C. Today it is +5°C with the little bit of snow we do have melting.

As a second year councillor this will be my last required article for the Newsletter and will fulfill what is probably the hardest duty asked of any councillor.

As our first Continuing Educational Period (CEP) draws to a close, I have just begrudgingly spent the past half hour filling out and emailing my record of Professional Development Credits (PDCs). This year among other things, I spent four, 8-hour days for computer training required by my job, for a total of four PDCs. The two, 2-day SLSA sponsored seminars were worth ten PDCs each. Although always interesting, the actual educational value of many of the topics presented at the Association sponsored seminars is limited.

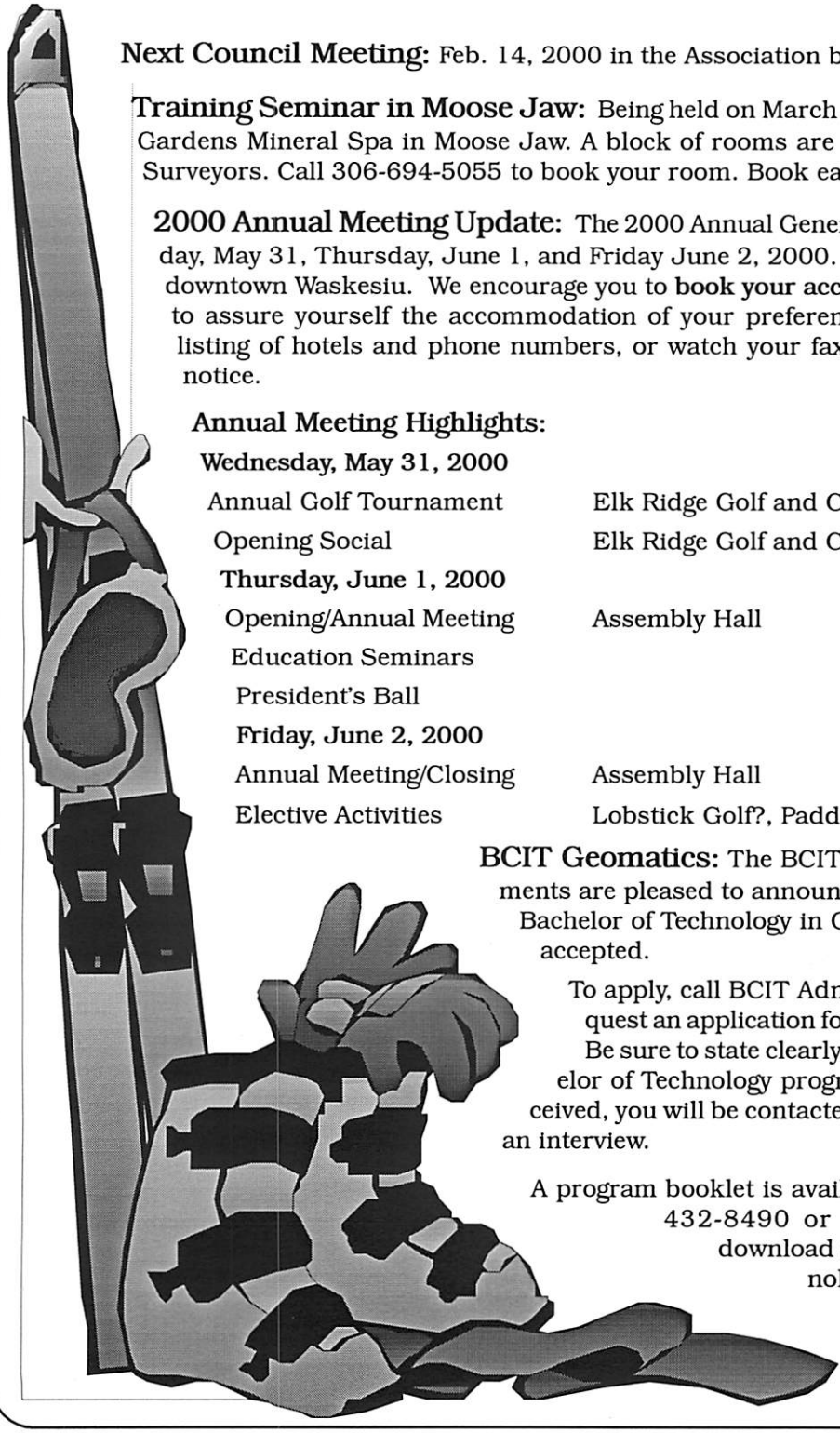
Two of the issues that Council looked at this year were how to attract new members and give support to articled students. At our last council meeting we met with Dr. Brian Woods, head of the Geomatics Technology Program at SIAST. Dr. Woods is very concerned about the declining enrollment in this program. As one councillor so astutely noted, an individual attending the current three year program at SIAST and wishing to become a Saskatchewan Land Surveyor could become a Doctor within the same time frame. The individual would need to attend the University of Calgary for four years, which is the easiest way to obtain a certificate from the WCBE, followed by articles and Provincial examinations. As a result of the meeting with Council and the Education Committee, among other initiatives Dr. Woods is going to look into obtaining credits towards the WCBE certification for the SIAST, Geomatics Technology Program.

Other problems with the education process referred to Council dealt with students not getting the appropriate varied field experience and others handcuffed by the current Bylaws which do not allow a working student surveyor to gain credit for practical experience until the WCBE Certificate has been obtained.

How many of us know individuals that have started the articling process, but because of a lack of field time have quit? Members who are prepared to sponsor students must take the responsibility that accompanies it seriously.

In closing I would like to wish all members and their families a happy and successful 2000. □

What's Happening?



Next Council Meeting: Feb. 14, 2000 in the Association board room, at 9:00 a.m.

Training Seminar in Moose Jaw: Being held on March 30 and March 31, 2000 at Temple Gardens Mineral Spa in Moose Jaw. A block of rooms are available for Saskatchewan Land Surveyors. Call 306-694-5055 to book your room. Book early.

2000 Annual Meeting Update: The 2000 Annual General Meeting will be held on Wednesday, May 31, Thursday, June 1, and Friday June 2, 2000. Accomodation is at a premium in downtown Waskesiu. We encourage you to **book your accommodation as early as possible** to assure yourself the accommodation of your preference. See the Sept. '99 issue for a listing of hotels and phone numbers, or watch your fax or mail box for a more detailed notice.

Annual Meeting Highlights:

Wednesday, May 31, 2000	
Annual Golf Tournament	Elk Ridge Golf and Country Club
Opening Social	Elk Ridge Golf and Country Club
Thursday, June 1, 2000	
Opening/Annual Meeting	Assembly Hall
Education Seminars	
President's Ball	
Friday, June 2, 2000	
Annual Meeting/Closing	Assembly Hall
Elective Activities	Lobstick Golf?, Paddle Wheeler?, Fly-in fishing?

BCIT Geomatics: The BCIT Geomatics and GIS departments are pleased to announce that applications for the Bachelor of Technology in Geomatics/GIS are now being accepted.

To apply, call BCIT Admissions at 604-432-8419 and request an application form, or apply online at www.bcit.ca. Be sure to state clearly that you are applying for the bachelor of Technology program. When your application is received, you will be contacted by the Program Head to arrange an interview.

A program booklet is available in printed format. Call 604-432-8490 or e-mail kschuurm@bcit.ca, or download a copy from the Bachelor of Technology in Geomatics Home page at www.geogis.bcit.bc.ca

OPEN FORUM

The "Newsletter" encourages provocative thoughts and rebuttal from the membership. This issue's contribution was submitted by W. W. Stockton, SLS, P. Surv.

Dear Editor:

In discussions with several of our members there seems to be a general feeling of concern about our declining membership. While it is not yet a serious problem this could change very quickly. On our active membership list, I counted at least 12 members in the 60 - 70 age group who will likely retire in the next couple of years. We only have 7 Land Surveyors in Training and if past experience is a guide, only half will get their commissions. Due to the field time requirements and particular scheduling of our examinations, it usually takes several years to qualify so it is obvious that the void will not be filled.

While I fully support the degree program in Surveying Engineering it has, in many ways, contributed to our current situation. The course content and general direction of the program does not lead students naturally into a career in land surveying. The program has opened up so many other career opportunities and the rewards currently available in our profession are not sufficient to entice students to commit to the sacrifices necessary to obtain a commission.

Between 1949 and 1969, we had 103 new members or an average of 5.15 per year. From 1969 to 1989, we had 76 new members or an average of 3.8 per year. Since 1989 we have had only 5 new members for an average of 0.5 per year. At this rate, the profession will disappear entirely in 25 years. This has to be a concern for all of us. When we can no longer supply adequate service to the public, something will have to give. If we allow a crisis situation to develop, governments will simply step in and set the rules.

I don't know what the answers are but I believe we can't waste any time in reviewing the options and a number of things could be done. In Alberta, for example, a student can write the examinations before he has completed his article time. Supplemental examinations could also be scheduled throughout the year rather than making a student wait a full year before re-writing. Also, field time requirements could be relaxed under certain circumstances, particularly for out of province surveyors. These are only a few suggestions, however, I think we have to take a serious look at all possibilities before too much more time passes by.

Yours Truly,

W. W. Stockton, SLS □

NRCan Legal Surveys Division Opens New Office for Nunavut

By Stan Hutchinson, ALS, CLS, Head, Nunavut Client Liaison Unit

On April 1st, 1999, Legal Surveys Division opened a Client Liaison Unit to provide service for the new territory of Nunavut. The office is currently located in Yellowknife NWT, but will be relocated sometime in the Year 2000 to Kugluktuk, Nunavut (formerly Coppermine), when facilities are expected to be ready.

The Client Liaison Unit is managed by Stan Hutchinson ALS, CLS. Two technicians have been employed - Michael Keenainak and Sylvia Novoligak, both from Nunavut.

The Nunavut Client Liaison Unit is the first point of contact for Nunavut survey matters and will provide the following:

- Canada Lands Surveys Records Information;
- Professional advice on survey matters;
- Other products and services related to surveys in Nunavut through partnerships and cost recovery initiatives;
- Survey instructions for legal surveys.

For surveys on Canada Lands in Nunavut, the Canada Lands Surveys Act will apply; Canada Lands Surveyors will do the work, and the Surveyor General of Canada Lands will maintain survey standards.

The Nunavut Land Titles Office has also established a temporary office in Yellowknife until fully operational. Their office is also scheduled to move to Kugluktuk sometime in the year 2000. The Nunavut Land Titles Act and Regulations came into effect April 1, 1999 and will be a mirror of the NWT Act and Regulations, with a few minor amendments.

The Community Planning and Lands directorate of the Nunavut Department of Community Government, Housing and Transportation, will manage subdivision approvals and the Surveying and Mapping program for Nunavut. They are currently establishing their office in Kugluktuk.

Contact Information: Stan Hutchinson, Head, Nunavut Client Liaison Unit, Ph: (867)669-2901. □

Office Calorie Counter

Activity	Calories Burned
Running around in circles	350
Running for coffee	450
Jumping to conclusions	275
Shuffling papers	100
Jogging your memory	75
Running errands	250
Climbing the walls	575

Liability of Surveyor for Retired Member's Files

By Peter Lohnes, NSLS, LL.B., reprinted from *The Nova Scotian Surveyor, Fall, 1999.*

I have recently addressed the issue as to whether or not a Nova Scotia Land Surveyor, having taken control and possession of a retired surveyor's files, assumes liability for those files.

There are numerous issues that arise on the broad question above and I will deal with them under several headings as follows: (1) Liability of Retiring Surveyor; (2) Indemnification or Transfer of Liability by Agreement, and; (3) Liability of New Surveyor receiving files.

First of all, there is a distinction between professional liability as a surveyor in the context of discipline as a member and civil liability in the case of money damages. Although I will raise certain issues relating to the surveyor's professional liability, we are specifically addressing the issue of civil liability in the case of money damages. In a general context, there is no liability attached to "the files" themselves, so we are specifically looking at liability for damages arising out of the performance of certain work documented in those files. The damages can arise by either a contractual breach or negligence on the part of the surveyor.

Liability of Retiring Surveyor

The files of the retiring surveyor document survey work performed by that surveyor during his/her career. Since a contract was made between the retiring surveyor and client, liability for breach of that contract rests solely with that surveyor and/or the survey firm, if any. Additionally, the retiring surveyor and survey firm owe a duty of care to the client and anyone that it is reasonably foreseeable would rely on that work carried out by the surveyor. Therefore, the retiring surveyor and firm would be liable for damages caused by their negligence to that class of persons.

In any case, the retiring surveyor as a professional will have to respond to a liability claim against his/her work performed, whether they have the files in their possession or not. This duty is imposed upon the surveyor and is carried through to their death. This means that whether the original surveyor is in business or retired, they are still professionally responsible for their work. In most cases, if the surveyor is still alive today, they will have insurance that should step in to defend a liability claim. If the surveyor is in business, the deductible (or split deductible, as the case may be) is the limit of the surveyor's out of pocket expense. If the surveyor is retired, hopefully for his/her sake, there is still past actions insurance coverage to protect him/her and there may not even be a deductible to pay. If there is no insurer, there would be a personal judgment against that surveyor for damages if he/she is found liable. A personal judgment would even attach to the surveyor after death in that his/her estate could be liable to pay.

Indemnification or Transfer of Liability by Agreement

Let us assume that the original surveyor who performed the work is now retired. Whether he/she is in possession of the files or not, again, they are still liable as a professional for the work they did and must respond to a liability claim. If they are found liable in breach of contract or negligent, then one looks as to whether there is something that transfers their liability for damages to someone else.

In one case, the retired surveyor may have had an agreement with the survey firm to indemnify the surveyor for damages. This has the effect of transferring the liability for paying those damages to "the firm" or its shareholders. Taking this a step further, if another surveyor or survey firm buys the

Continued on page 980

Non-Surveying Veterans Offer 10 Relevant Rules for Conferences

by Wendy J. Woodbury Straight, LS. Reprinted from CE News, September 1999, with permission.

Surveyors are not alone in their desire to deal effectively with the public. Someone has just found a clever way to summarize the complicated set of rules that are at work when we are doing everything right. The following recommendations comprise the first of a two part discussion on surveyor/client relations. The 10 suggestions pertain to meetings with clients, but were developed by veterans of a non-surveying profession. After you have had a chance to digest them, I'll reveal their source.

1 Don't summon clients to your office and then ask them to sit directly in front of your desk. They may be somewhat apprehensive about meeting with you, and it won't help if you put them in a subservient position. There is no need to distance yourself, either. Surveyors could think of it this way; it is easier to convey your message if you are sitting near enough to the client to enable a clear discussion of the documents before you. At the outset, offer a polite, friendly greeting and make sure that everyone is at ease.

2 Don't begin with a problem. Surveyors: if the meeting has been called to discuss unusual boundary matters, for example, start with analysis of your research and your field methods. Help the client understand the basis of your survey by reviewing the historic record as compared to field evidence. Move from there into the boundary question, and use the background you have just created to help explain the reason that a problem has arisen. Make certain that your meticulous nature and your authority are obvious, but if the client has ideas that might lead to further discovery, by all means, don't be too proud to consider them.

3 Don't dress too casually for an important meeting. Field clothes communicate that you have been there and have witnessed the items you are about to explain, but perhaps a more formal, business attire will alert the client that you also have a serious message to relay. Each situation is different, so it's important to establish

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ISO to Classify GIS Personnel?

Reprinted with permission, as seen in *Point of Beginning*, May 1999.

The International Standards Organization Technical Committee #211 (ISO/TC211) passed a proposed project that would describe a system "for the qualification and certification, by a central independent body, of personnel in the field of Geographic Information Science/Geomatics." The measure came before the committee in early March and was approved by a vote of 12 to 9 (11 member-nations did not vote) over strenuous objections from the United States and international organizations.

The project would classify GIS/Geomatics personnel into three categories: technologist, engineer and manager. A certifying body of the ISO/TC211 would establish educational and work experience requirements, as well as institutional accreditation requirements. Under the new project, employees entering the field will require either a community college diploma or a university degree.

The main objection, according to U. S. representatives, is that the proposal goes beyond the scope of the Technical Committee, which is limited to standards for information and does not include standards for practitioners. In their formal objections, the US representatives questioned whether the ISO/TC211 was the proper organization to establish certification criteria, "if indeed that can be done at all." The representatives also wrote, "We do not see a compelling reason to certify individuals as practitioners of geomatics."

In addition to the United States, opposing nations included Austria, the Unites Kingdom, France, Germany, Denmark, Norway and Sweden. Most of these nations agreed that the proposal was outside the scope of the ISO/TC211 and that such a certification process would be best left to professional organizations.

According to US representatives, international organizations such as the International Cartographic Association (ICA), The International Federation of Surveys (FIG), the American Congress on Surveying and Mapping (ACSM), the American Society of Photogrammetry and Remote Sensing (ASPRS) and the University Consortium for Geographic Information Science (UCGIS) are either unconvinced that such an effort is needed or outright opposed to the idea. The ISO vote appears final, however, and the project is proceeding. □

TEN BEST THINGS TO SAY IF YOU GET CAUGHT SLEEPING AT YOUR DESK!

10. *"They told me at the blood bank this might happen."*
9. *"This is just a 15 minute power nap like they raved about in that time-management course you sent me to."*
8. *"Whew! Guess I left the top off the Whiteout. You probably got here just in time!"*
7. *"I wasn't sleeping!" I was meditating on the mission statement and envisioning a new paradigm."*
6. *"I was testing my keyboard for drool resistance."*
5. *"I was doing a highly specific Yoga exercise to relieve work related stress. Are you discriminatory toward people who practice Yoga?"*
4. *"Why did you interrupt me? I had almost figured out a solution to our biggest problem."*
3. *"The coffee machine is broken..."*
2. *"Someone must've put decaf in the wrong pot..."*

And the #1 best thing to say if you get caught sleeping at your desk...

1. *"... in Jesus' name. Amen."*

Non-Surveying Veterans Offer 10 Relevant Rules for Conferences

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avenues that might help you to be understood. Your appearance might be one of them.

4 Don't wing it. While you may want to be substantially free to discuss survey matters with office walk-ins or with people you encounter in the field, prearranged conferences to address boundary problems, survey instructions, or subdivision plans for engineering work are instances in which preparation is necessary. No matter how well you know the subject, a difficult client can take you by surprise and then refuse to hear your own words.

5 Don't rely on spoken descriptions of your findings. In a boundary situation, have the drawing, your written report, and perhaps photographs or field sketches at hand. If you are discussing subdivision plans, have jurisdictional regulations on the table and be ready to point out each and very pertinent detail. If you are meeting with an engineer, architect, or contractor to receive specifications that will determine your estimate, present your standard office contract documents, or printed details of procedures; that way you can head off complaints about retainers or fee schedules before you have spent additional amounts of your valuable time for a potential client who would only balk at your requirements.

6 Don't point a finger or place blame. In the case of a boundary problem, we may privately speculate the cause, but it is never appropriate to make statements that could inflame the neighborhood. Similarly, if a governmental agency is forcing your client through a number of hops before permitting even the most minor of subdivisions, it is nevertheless inappropriate for you to make negative comments about the agency. During the engineering survey, it is frequently tempting to lash out about someone's faulty plans or a contractor's willingness to take shortcuts, but it is the survey's responsibility to refrain from comments not directly related to the job that he or she has been assigned to perform.

7 Don't dominate the meeting in such a manner that your client cannot ask vital questions. There is always a wealth of information that you wish to convey, and it is therefore tempting to talk incessantly. Remember to stop at planned intervals to be certain that the client has understood, and to allow an opportunity for clarification or suggestion.

8 Don't send them away empty-handed. For the boundary client, and assuming the bill has been paid to date, be ready to distribute drawings, reports, descriptions, and receipts. For the client proposing a subdivision, prepare a package of standard study materials, including copies of the public health law or other regulations that govern such matters. The engineering survey client should at least receive a business card attached to copies of your contract and other procedural documents.

9 Don't use jargon or acronyms. We all know the language of our trade, but the homeowner may suspect a snow job if we don't use the familiar language of the evening news. If you must use a buzzword, be sure to explain it. Conversely, when talking with the engineering client, phrase your discussion in such a manner that you are not talking down to anyone. For instance, say, "As you probably know..."

10 Don't end the meeting on a negative note. We all have an occasional client with whom it becomes nearly impossible to communicate, but we must somehow find a way to lighten the scenario. Saying thank you for the job is important, but only if it's sincere. For those clients we wish we hadn't taken, try to offer a smile even as you recommend that they hire someone else for a second opinion. For the engineering client who refuses to meet your requirement for a retainer, you may still thank them for considering your firm.

It may surprise you to learn that the bold portions of this compilation derive from a publication of the New York State United Teachers (KNESSET). The 10 items resulted from interviews with experienced classroom leaders, including master educators who offer courses in KNESSET's Effective Teaching Program. Though intended for parent-teacher conferences, the list bears a striking relevance for surveys.

Managing Your Business

By Graham W. Bowden, P. Eng., OLS, reprinted as seen in *The Ontario Land Surveyors Quarterly*, Fall 1999.

For years I used to say that a good survey practice required three surveyors:

The first to know the law of property;
The second to know business skills and;
The third was a social worker to deal with people.

In the case of a sole practitioner, the three types of surveyors existed in one body but all three were needed. In the late 1990s, I amended my cliché to include a fourth surveyor. As the tools of our industry have evolved so quickly, today's practice needs a hardware/software/applications specialist or wizard, a "technology wiz".

Running our survey practice, we are constantly faced with the challenge of improving our business. Too often we hesitate or withdraw from the challenge of examining our enterprise and our goals, as the task seems too time consuming. But since our time is limited, all the more reason why it should be measured, valued and not wasted. Perhaps we can make the challenge of improvement less daunting by asking a simple question.

If you could change just one thing about your business, what would it be?

Before you answer this question yourself, pose it to your staff. After all, they are the ones doing the jobs and will be implementing the changes. Invite your staff to share in the solution, because only if they buy in will you be successful in implementing the changes. Staff are more likely to be energized and enthused about change when it is their idea.

Start by having each person ask himself or herself, what activity do I do that is:

- Inefficient, unproductive or unnecessary?
- Could be (should be) done by someone else?
- Contributes little or nothing to the value of our business?

The answers to these simple questions should provide several opportunities to improve the efficiency of operations and the profitability of the business. No doubt you can think of many more questions, some specific, some general, that will assist. But, in each case, repeat the key words used in the third question "our business". Your name may be on the business, on the trucks and on the drawings, but if you and your staff think as one; our business, our trucks and our drawings, you are well on the way to improving the business.

Remind your team that working harder is only a short-term solution and that long lasting improvement only comes from working smarter. Working smarter happens when staff receive training on new applications and new equipment. How much time do you spend training/teaching your staff? Is it effective? I believe the most effective teaching is done on site. Why? Because the lesson can be tailored to the site conditions your field crew has experienced or is about to experience.

Those of you who have given a teenager a driving lesson can relate to this situation. Driving provides real situations and real outcomes for both the student and instructor. Each set of instructions or word of advice can lead to many questions. For instance, when I gave my teens driving lessons, I learned that the four-letter word "STOP" can mean many things i.e.; slow down, look to see why I should stop, stop just ahead, stop soon, stop sometime, etc.

After some hair raising experiences, I realized that instructions which may seem straightforward, often require additional direction, particularly to the inquisitive teen mind. In our case, we adopted the phrase "stop now" which meant don't ask questions, just hammer the brake pedal until the vehicle stops moving and then you can ask all the questions you want.

The point is, practical training is much more effective because it addresses these five conditions:

Presentation Present the information in clear and concise manner.

Application Explain the point by relating it to a specific experience of the trainee.

Comprehension Retell the information in another way to ensure understanding.

Absorption Ask the student to explain the matter and make a sketch to illustrate the situation. By having the student use four cognitive skills, hearing, speaking and visualization and drawing we greatly increase the absorption of knowledge.

Retention Have the trainee apply the knowledge to solve a similar problem in a different situation. Repetition enhances retention.

Staff welcome the opportunity to learn and to expand their skills. Skill sets can be most easily enhanced by increasing the level of expertise in a niche area. However, new millennium businesses are better served by mul skill set employees with a broader knowledge base. For instance, the employee with several skill set bundles, or parallel knowledge streams, can be both a CAD operator and a GPS receiver operator, or title record searcher and an office administrator.

In the 1950s, people worked at the same job and with the same employer for their entire working life. By the mid-1970s, people worked at the same job, but for several employers. Twenty-five years later employees expect and want to have multiple careers. The Y2K employee wants and enjoys the excitement of simultaneous multiple careers. If you think you don't understand the Generation X person, think back on your own career as expert in real property law, business person and social worker. Sounds to me like a similar career style.

I guess we were just ahead of our time. □

Liability of Surveyor for Retired Member's Files

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retired surveyor's business (i.e. the company) or the survey firm, the new surveyor or survey firm may be responsible for paying the damages that result from the breach of contract or negligence of the retired surveyor. This would arise where the transaction provided that the new surveyor assumes the liability for the past work. Again, the probability of an insurer stepping in to cover the damages applies and this is a matter of which party or insurer has assumed the risk.

There are, of course, many considerations from an insurance point of view regarding the transfer of liability to or indemnification by the new surveyor. Certain disclosure requirements and ultimate assumption of the risk by the insurer will operate to determine whether the insurer has to respond to the claim. This issue is related to liability to pay money damages but I will not deal with it further here.

At any rate, the retired surveyor was the one who breached the contract or was found negligent but the liability to pay the damages could be found to have been transferred to another party by way of indemnification or transfer of liability by agreement.

Liability of new Surveyor Receiving Files

As pointed out, unless there has been a transfer of liability by agreement or indemnification provided by the new surveyor under a scenario as above, a breach of contract or negligence by a retired surveyor will not result in the new surveyor having to cover the liability for those damages. In the case of a retired surveyor only selling or giving the files to the new surveyor, they are only assets being transferred and not a "business," which in the latter case could include liabilities for the work documented in those files.

There are some scenarios where liability could be in issue between the retired surveyor and the new surveyor. As an example, if the new surveyor relies on the retired surveyor's work, and damages arise as a result of an error in the retired surveyor's work, two arguments arise. First, the new surveyor could be negligent in relying on the retired surveyor's work (in the form of information documented in the file), and may therefore have assumed any ensuing liability with respect to damages arising from that error. Secondly, there would be an argument that the retired surveyor owes a duty of care to the new surveyor for the information contained in those files and it is reasonably foreseeable that the new surveyor would rely on that information. This would mean that the retired surveyor could share in the liability also or end up liable for further work that was done relying on his information from the files.

Another example where liability could be in issue, is where the new surveyor passes on information from the retired surveyor's files without actually relying on the information to generate his/her own new work. For instance, if a new surveyor gives out a copy of an existing Location Certificate from the retired surveyor's file to a person not normally having access to that document, (i.e. not the original client of the retired surveyor for which it was prepared), the new surveyor is possibly assuming the liability for any errors associated with the past work of the retired surveyor because it is reasonably foreseeable that the person is going to rely on that document. In this case, but for the actions of the new surveyor, the person would not have sustained damages caused by the original error of the retired surveyor.

One further consideration is that, as a member, a surveyor is responsible for keeping a supporting file for each survey as per S. 32 and S. 33 of the Regulations made under the *Land Surveyors Act:*

S. 32 Each survey shall have a supporting file kept by the member or survey firm...

S. 33 All original field notes, plans and supporting files shall belong to the member or survey firm whose responsibility it shall be for their safekeeping.

If the retired surveyor is no longer a member of the Association, there is still a procedure to hold that retired surveyor accountable for the keeping or safekeeping of their files because they are subject to the *Act* by virtue of S. 13(4). If the new surveyor is now holding the files of the retired surveyor, it is arguable that two obligations arise. First, the new surveyor may have accepted the responsibility under those sections of the Act to maintain that file which could include not losing or misplacing documents from that file. It is impossible to determine all cases where this may give rise to liability on

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Historical Bearings

By J. H.Webb, SLS (LM)

There are various names in Saskatchewan that are associated with Land Surveyors and Land Surveying terms that may be of interest to the reader.

#COSINE, Sask. Situated in Township 37, Range 28 West 3rd Meridian. The Hamlet of Cosine which received it's name when a Land Surveyor made a mistake in using the trigonometric function of Cosine from logarithmic tables instead of the Sin function. Their location came out three miles east of the 3rd Meridian instead of on the Meridian.

#FLEMING, Sask. Named after Sir Sanford Fleming when he was the Chief Engineer of the CPR in the 1880's. The main street in Fleming is called "Sanford".

#FORT BLACK, Sask. Survey plans of Ile-a'-la Crosse were compiled by the Department of the Interior in 1920 and it shows that surveys were performed by Mr. G. A. Baynes, Dominion Land Surveyor in July 1899 and by Mr. G. H. Blanchet, Dominion Land Surveyor in July 1919. The plan shows "Fort Black" as a North West Trading Company Post but with the original name of the area as "unknown". The name "Fort Black" was adopted as a geographical name in 1951.

#LESTOCK, Sask. Named for John Lestock Reid, Dominion Land Surveyor. Mr. Reid surveyed many of the river lots around Batoche. In 1885, during the rebellion, he was the paymaster for the Midland Battalion. He retired in Prince Albert, deceased in 1911.

#MADGE LAKE, Sask. Named after the wife of Charles Harvey, Land Surveyor around 1904.

#MERID, Sask. Near Alsask and on the 110 degree of longitude boundary between Saskatchewan and Alberta. Merid is a short version of Meridian".

#PATRICK, Sask. Near Balcarres. The head surveyor in 1914 on the Canadian Pacific Railway was "Miles Patrick Cotton" and thus named "Patrick".

#PENNANT, Sask. The local version is that the original surveyor of the town lots found a "Pennant" of some sort and thus named the town. The streets are named "Halyard", "Ensign", "Standard" and "Banner". He must have been a navy man.

WEEKES, Sask. Named after Abel Seneca Weekes, Dominion and Saskatchewan Land Surveyor. We assume Mr. Weekes or someone named the townsite while he was with the railway in the 1920s.

#YELLOWGRASS, Sask. Named by the CPR Surveyor in 1885 when he noticed that the early evening frost made the high grass look yellow by the setting sun.

ANEROID, Sask. South part of the Province. Named where a survey party supposedly lost an aneroid barometer.

TURNOR LAKE, Sask. Situated in the North. Evidently G. H. Blanchet, Dominion Land Surveyor, named the lake in 1918 after another surveyor, Phillip Turnor, who had worked for the Hudson Bay Company in the 1770's.

***INKSTER LAKE, Sask.** Situated north west of Lake Athabaska and named after Oluff Inkster, Dominion and Saskatchewan Land Surveyor.

***MARTYN Lake, Sask.** Situated north west of Lake Athabaska and named after Oscar William Martyn, Dominion and Saskatchewan Land Surveyor. Mr. Martyn was the Director of Surveys, Highways Department, Saskatchewan in the 1940's and 50's.

***MORRIER LAKE, Sask.** Situated in Prince Albert National Park and named after Joseph Eldridge Morrier, Dominion Land Surveyor and Saskatchewan Land Surveyor.

***WALDRON BAY, Sask.** Situated on Tyrrell Lake west of Flin Flon and named after John Waldron, Dominion and Saskatchewan Land Surveyor.

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Cookie Monster...the Risks of Internet Cookies and Aggregate Data

By Peter V. Radatti, reprinted as seen in *The Link,* October, 1999. Source: the Internet.

'Internet Cookies' as a computer technology, sound safe, slightly boring and maybe even tasty. This paper will attempt to demonstrate that Internet cookies are actually mud pies with a good deal less safety and tastiness than you would have eating mud. First, you need to understand what an Internet Cookie is. If you remember old cowboy movies, there was always a scene where cows were being branded. An Internet Cookie is the same thing except that it is you that is being branded. If you are using Netscape, the browser arrives on your computer with a default of accepting cookies silently. That is, you never feel or even know that someone just smoked your hide! As a matter of good security policy, I turned silent acceptance of cookies off. There is no option to turn off acceptance completely, so every time a cookie request is made to my browser, a pop-up message window appears. The message window gives me the option of accepting the cookie and being branded or cancelling the cookie. Since most people don't know what a cookie is, they don't understand that there are security issues in accepting them and may, in fact, be afraid of breaking something by pressing the button labelled 'cancel'. It is safe to assume that most people accept cookies. In fact, they would never even know that they were being 'cookied' unless they chanced to stumble upon the button that disables automatic acceptance.

I feel safe in the given assumption that most people are accepting cookies. So what is the big danger? The military knows. As long as there has been warfare, militaries have been concerned by something called aggregate data.

Aggregate data may be as simple as counting the number of cars that enter the gates at a military reserve. If there is someone counting the number of cars entering a few dozen reserves across the country over a period of time, then anyone who has access to the data from all of the reserves could, in fact, predict a major military engagement about to start. Simply put, if the number of cars entering all of the reserves demonstrates a sudden jump across the country and the people who entered didn't leave, then the conclusion is simple. They are about to go somewhere else, en masse. The same type of analysis can be done with your movements. There are now large networks of Internet Cookie data collection companies who keep track of where you are, where you came from, where you went to, and the kind of computer, browser and operating system you are using. In fact, they can also get your IP address, system name and, if configured, your name, company name and e-mail address. That is a lot of information about you in a single gulp, but it is by no means the end. At some point, you will come across a form or you will order something over the Internet. Suddenly, your real name, home address, telephone number, credit card number and anything else you tell them about yourself is now available to connect with your cookie. The interesting thing is that if the company keeps all your old cookie information, they can track your past, present and future movements. This could be dangerous if you accidentally end up at an embarrassing web site.

So why does anyone try to brand you with cookies? The reason is simple—effective advertising. In fact, I feel that advertising is a useful thing since it helps me find things that I want to buy. The problem, however, is that a billboard doesn't know who is looking at it but a computer does. If I were a member of a vegetarian household and suddenly started receiving e-mail, banner advertisements, postal mail and phone calls from meat producers, this could be a real problem, not to mention an unnecessary irritant. Say that, at sometime in the past I might have bought a book from an on-line

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More on Boundary by Agreement, Acquiescence

By James J. Demma, LS, Esq. This article appeared in the July/Aug. '98 issue of *Professional Surveyor Magazine* and is reprinted with permission.

In my last column, I wrote on the doctrine of a boundary by agreement or acquiescence. Just after I wrote that column, a case came to my attention on this same subject. *Steinherz v. Wilson,* 705 A.2d 710 (Maine, 1998). Again, the general law appears to be that, if there is no express agreement as to the location of a boundary line, the adjoining property owners cannot question a line that has been recognized as correct between the properties for a considerable number of years.

Richard D. Wilson contended in this appeal, to the Superior Judicial Court of Maine that the trial court erred in its determination of the location of the boundary line between his lot and a lot belonging to Mary A. Steinherz. Wilson argued that the contested boundary line must be located "on the face of the earth" by reference to the recorded subdivision plan, but the line recognized by the trial court was one created by a parol agreement and was binding on the parties, to which the appeals court agreed.

Background

Wilson and Steinherz both purchased their adjacent lots from a Jonathan Milligan; Wilson owning Lot 3 and Steinherz owning Lot 3B. The Appeals Court stated the facts as follows:

> *The perimeter of the tract was surveyed by Roland Libby in 1905 using boundary monuments. Its 40 individual lots, however, were superimposed on the tract between 1905 and 1961 by an unknown drafter, apparently without being surveyed. In 1961 Milligan hired surveyor Thomas Ober to prepare a recordable plan of the Brooks Farm Subdivision. Without the benefit of a field survey, Ober transposed a map that had distance and course data onto a map that had only lot lines. The resulting subdivision plan was recorded in 1961. During this process and in Ober's presence, Milligan drew a line on the map through the original lot 3, without using a stated length, compass course or survey markers. This purported to create the lots in dispute: 3 and 3B.*

Because no actual surveys of any individual lot were done at the time, the subdivision was created, Ober surveyed each lot as it was sold. Ober found numerous inconsistencies between the angles and distances shown on the subdivision plan, and he reconciled these inconsistencies using a "bestfit" approach, retaining consistent data while revising inconsistent data to fit each lot within the perimeter boundaries of the Brooks Farm plan.

Wilson purchased Lot 3 from Milligan in 1980 by a deed that referenced the Brooks Farm subdivision plan. Wilson testified at the trial that he "didn't know exactly where (the boundaries) were." Milligan and Wilson agreed before the conveyance that Milligan would have Ober mark the boundaries of Lot 3 on "the face of the earth," including the boundary line between Lots 3 and 3B. Ober did not mark that boundary line immediately after the Wilson purchase, and it was not until 1982, in conjunction with Steinherz's purchase of her lot, that Ober surveyed and marked that boundary line.

Steinherz purchased Lot 3B from Milligan in 1982, her deed description referring to the recorded plan, and she made the placement of the precise boundary corner, before closing, an express condition of the contract. Ober surveyed Lot 3B for Milligan in the summer of 1982, and the survey included the location of the line between 3B and 3. When some discrepancies were discovered between the Brooks

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Surveyors and Subdivision of Land

By Robert W. Foster, PE, PLS, Reprinted with permission from *Point of Beginning, Oct. 1999* issue.

Once upon a time, in the years following World War II, the surveyor's job in the subdivision of land was first and foremost an exercise in geometry. Give a surveyor a parcel of land, tell him or her the zoning and planning requirements (nominal width and depth of lot plus width of required roads) and he or she went to work fitting as many of those rectangles in the parcel as possible. The economics of residential land development said that one had to eke out every last possible lot and do it with a minimum of road construction.

A surveyor would start with a row of lots around the inside of the perimeter of the parcel, allow for the width of a road, then draw two more rows of lots back-to-back, add another road and keep doing that until the parcel was full of lots, each with enough road frontage to provide access. A few adjustments might be made for efficiency's sake, but armed with a pair of plastic triangles and circle template, a surveyor with a good eye could easily pump out a preliminary subdivision plan. But, times have changed.

If surveyors are to be the principal players in the design of subdivisions as they were 30 or 40 years ago, they must be more than surveyors. They must be landscape architects and wetlands specialists. They must be engineers who understand the economics of land development, and they must know planning and zoning laws, the current real estate market and the community's view towards development. It never hurts to be politically connected in the community - or at least politically savvy. And the ability to communicate effectively and sympathetically before large crowds of not always receptive citizens is a necessity.

There is still a bottom line in all this; a developer still intends to make a profit from the risk taken in land development. But the economic bottom line sometimes proves that less is more, and when that happens, it is often at great surprise to the surveyor who hasn't paid attention to changing times. Consider this real-life example.

A 38-acre parcel of land in one Massachusetts town survived the subdivision craze of the '50's 60's and '70's since is was too far from the greater Boston zone of residential development. By the mid-'80's this town became the community of choice for young urban professionals because of good schools, access to highways, nearby employment opportunities and its rural character. The 38-acre parcel, being actively marketed by its owners, had been proposed for development by a succession of entrepreneurs - unsuccessfully - over a period of nearly 15 years. The development concept usually entailed a subdivision of about 25 to 30 single-family lots with at least 4,000' to 5,000' of proposed roadway. (Zoning requirement was 60,000-square-foot lots with 200' frontage.) It was a standard surveyor's response to a typical developer's objectives.

Neighborhood opposition was able to defeat these proposals on the argument of wetlands, poor soils for septic systems and the narrow public road giving access to the parcel. A procession of prospective developers gave up the struggle early in the game. They knew there was a certainty of an expensive road and storm water management system if the planning board approved the subdivision, and they knew they would have to provide expensive mounded septic systems for the houses if the Board of Health approved the sites. It was an economically shaky proposition at best.

Finally a developer approached the town with a more innovative approach. The developer proposed a seven lot subdivision and a less than 2,000' road with reduced construction requirements. His proposal included 9.9 acres of common land to be shared by seven future homeowners whose lots would average over an acre each. An additional 15.9 acre parcel was dedicated to a public land trust.

Compared to the comparatively large developments the neighbors had been faced with in the past, this proposal looked quite good and was quickly approved by the planning board.

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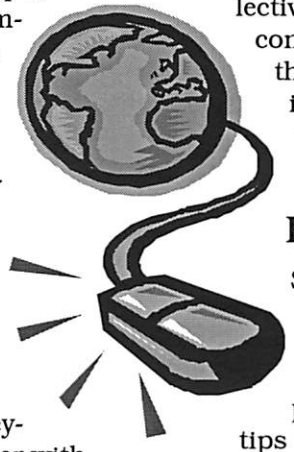
Internet Interest

Reprinted as seen in *The Quarter Post,* Autumn 1999 issue.

Survey Planet Inc. Launches World's Most Comprehensive Community for Surveyors on the Internet

BELLEVUE, Wash. - October 12, 1999 SurveyPlanet Inc., a new company focused on serving the needs of more than one million surveyors worldwide, today announced that it is launching SurveyPlanet.com (http://www.surveyplanet.com), an Internet community dedicated to providing surveyors and other professionals the information they need to conduct business. The community will also allow users to request and receive qualifications and proposals online, thus linking surveyors and those needing surveys together, while promoting the use of a qualification based selection process. The site went live last week and is expected to be fully functional by late fall of 1999.



There are more than 70,000 land surveyors in the United States alone, who together with realtors, builders, engineers and other professionals, generate $6.5 billion per year in revenue. Internationally, more than $25 billion per year is generated through surveys. SurveyPlanet. com will provide all of these industry professionals with the resources they need to make smart business decisions by delivering comprehensive information online, in one place.

Streamlining Survey Proposal Processes Globally

Using the speed and convenience of the Internet, SurveyPlanet. com makes it easier for surveyors and those who need surveys to work together. The ability to request and receive proposals and qualifications will expedite the surveying process and enable businesses that frequently use surveys to operate faster, more cost-efficiently, more accurately, and perhaps most importantly, more competitively in today's electronic marketplace.

"For many years, we've listened to the needs and concerns of our industry peers, as well as those in real estate, construction, architecture, and engineering fields," said Jesus Moulinet, president and CEO of SurveyPlanet Inc. "We created SurveyPlanet.com to deliver services to both the surveying community and its customers and collectively streamline their businesses. We are committed to providing the best place on the Internet for surveyors and those needing surveys to go to get information that will enable them to run their businesses smarter and more efficiently. "

Resources Aplenty

SurveyPlanet.com offers up a wealth of information, including education and career resources, industry news, links to national and international publications and associations, regular tips and expert opinions, and numerous other services. Current and future site features include the following:

- Latest industry news
- Jobs and human resource management
- Global, industry-wide information
- Panels of international experts
- Maps, aerial photos, integration of local Geographic Information Systems (GIS)
- Survey business marketing and management consulting services
- Surveyor's forum, message boards
- Equipment and supplies evaluation, purchasing and sales

Creates Cohesion, Communication Among Surveyors Worldwide

SurveyPlanet.com also provides a forum that encourages open dialogue among surveyors world-

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Cookie Monster... the Risks of Internet Cookies and Aggregate Data

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bookstore. I already had a cookie, so a relationship now exists between myself as a person and my cookie. The cookie is issued every time I enter one of the cookie networks and they target advertising to me based upon my movements. Very quickly they know more about me than I do. As a test, I turned cookies on for a while and started looking for travel information at the Alta Vista search engine, which is part of a cookie gathering network, as is the web site devoted to the Dilbert cartoon strip and many other sites.

As soon as I did my first search on "airfare to Boston", I was presented with advertisements for travel agents. When I travelled to other cookie affiliated sites, I received more travel related advertisements. This may sound fine, but think about the implications. If I browsed several financially-oriented sites, I might start receiving unsolicited and unwelcome attention from sleazy stock brokers. If I searched for medical information on the web, I don't want anyone to know what my problems are. Simply, put, it's none of their business. If my doctor or stock broker shared that type of information about me, I would have them in front of their respective state boards for unsavory behavior. The fact of the matter is that a cookie tracker could learn my medical problems, hobbies, financial interests and a whole lot more, depending upon what I did on the Internet. This is an invasion of privacy but, believe it or not, quite legal.

Ok, so you shut off automatic silent acceptance of cookies and just press the cancel button. It would appear that the cookie monsters have already thought of that. They've gotten pushy and rude. There are now many sites that enforce cookie branding by plastering you with literally dozens of cookie requests per page. Some of them plastered me with so many cookie requests per page that I lost count after 20. The message windows appear faster than I can cancel, them, get in the way of what I am trying to do, and waste my time. How rude! Department stores don't keep me out just because I refuse their "free" credit card and gift at the door. I don't mind one cookie request because I have the option of saying no, but receiving dozens of "requests" feels a bit like getting mugged.

So how can you deal with cookies? Actually it's easy. Turn on silent acceptance of cookies. Enter the "Netscape" directory and delete the file named "COOKIE". There are all kinds of dire warnings not to edit or delete the file but I've done it anyway

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More on Boundary by Agreement, Acquienscence

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Farm subdivision plan and Ober's surveyed boundary lines, Ober did a second survey, which confirmed that Steinherz's land included much of the disputed high point of land and the old foundation. On that basis Steinherz, had her house built near the old foundation.

Shortly after Steinherz's house was completed in May 1983, Wilson visited his lot, and upon seeing the house, he expressed to Steinherz that he thought his boundary was further up the knoll. In 1988, Wilson learned that an engineering company had done a systematic survey of the entire subdivision to resolve numerous inconsistencies between the Brooks Farm subdivision plan and the surveys of individual lots that had been done piecemeal over the years. This new survey concluded that the Steinherz house had been built on Wilson's lot 3. Wilson then purchased this new survey and recorded it, and Steinherz thereafter brought this action to quiet title and, because of the recording of the new survey, for slander of title.

Wilson counter claimed for trespass and sought an injunction to remove Steinherz's house.

The trial court noted the fact that the description in Wilson's deed does not "precisely locate the boundary on the face of the earth" and that Wilson, at least implicitly, agreed to have Ober "work the boundary" between Lots 3 and 3B. The court concluded that Ober's 1982 boundary became the legal boundary.

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Russian Association of Private Land Surveyors

By Rita M. Lumos, PLS September 4-18, 1999. Reprinted from the October, 1999 monthly mailing of the National Society of Professional Surveyors.

I was honoured to visit with the Russian Association of Private Land Surveyors in Moscow, Russia. This is a young organization, formed in 1996, which requested assistance from the US in the development and growth of their association. The sponsor of this trip was an organization called ACDI/VOCA. This group provides aid, funded through US government grants, primarily to agricultural related enterprises in Russia. They utilize volunteers with the appropriate expertise to carry out these assignments.

The Russian Association of Private Land Surveyors is an organization made of up firms, rather than individuals. They exist through a charter from the government and the executive director and small staff are employees of the Ministry of Land (Land Committee). Of the approximately 3,000 firms in the country only about 120 firms are currently members. There are only two regional affiliates at this time, one in the Moscow region and the other in St. Petersburg.

Prior to land reform which began in 1991 there was no private land and therefore no private surveyors. All surveyors were employed by the government and roughly 20,000 still remain government employees. An estimated 26,000 are employed in the private sector.

A university degree is required to reach professional status. There are 37 institutes in Russia which offer surveying degrees, graduating between 2,500 and 3,000 per year. Of these institutes, 25 have been founded in the last 10 years. Some of the degrees are engineering degrees and some are not. The curricula is either four or five years, depending on the specialty. Post graduate degrees are common. The colleges, which are four year programs beginning at about age 15, provide technical degrees. Many of the college graduates continue on to the universities.

The practice is broad, including traditional boundary surveying, topographic and engineering surveys, geodesy, photogrammetry, land valuation, and geographic information Systems. I often heard the practice referred to as "Land Use Planning".

There is no individual professional license. A license to practice is issued to a firm based by each region in which the firm practices. The license is granted by the Land Committee of the region, or county, and is based on the qualification of the firm's personnel and on their equipment. In the case of bad performance by the firm the license can be revoked.

There appears to be a strong tie between the surveying profession and agriculture. For many firms the great majority of the work involves the division of the collective farms into small, privately owned farms. Connected with this work is a land registry of the resulting cadastre. These GIS are often developed by the private firm and then transmitted to the local government. This information then becomes the basis for taxation and other regulatory interests.

A significant part of the private practice in the urban areas is now shifting to the survey and inventory of privately held industrial, commercial, and residential properties. Surveys for engineering de-

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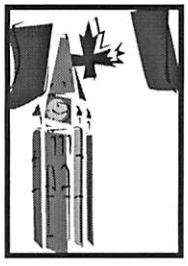
Comparing our National Pastimes

Government of Canada



- Number of Governments: 36
- Number of Prime Ministers: 20
- Number of Governor Generals: 26
- Number of Cabinet ministers (1999): 37
- Longest serving Prime Minister: William Lyon Mackenzie-King (22 years)
- Basic MP and Senator's salary: $66,900.00
- Number of Federal public servants and politicians earning over $1 million/year: 0
- Salary of Prime Minister: $139,600
- Total salaries and expense allowances of all MP;s and Senators: $37.6 million
- Number of government departments and central agencies: 22
- Number of MP's and Senators: 301+105=406
- Percentage of Canadian citizens: 100%
- Cost of Centre Block construction (1916): $12.4 million
- Cost of attending debates in public galleries and guided tours: $0
- Number of visitors to parliament (1997): approximately 500,000 on tour, 1,500,000 on Parliament Hill
- Average TV ratings for '97 federal election coverage (CBC and SRC combined): 3,197,000

Montreal Canadiens and NHL*

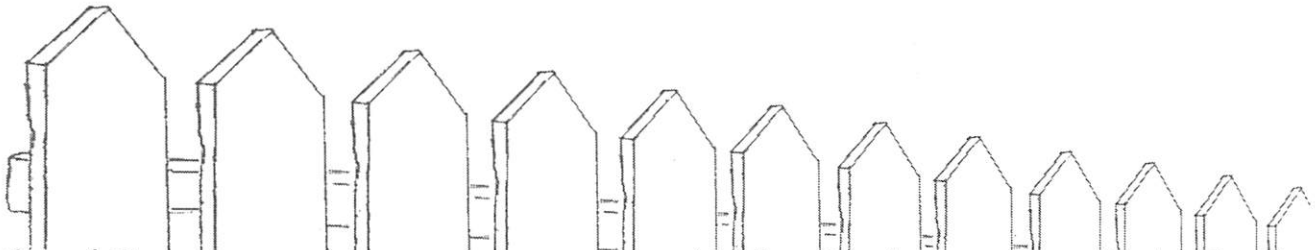
- Number of Stanley cups: 24
- Number of Coaches: 26
- Number of General Managers: 12
- Number of players (1999): 29
- Longest serving coach: Dirck Irvin (15 years)
- Average Montreal player salary: appx. $1,295,710.00
- Number of Monreal players earning over $1 million/ year: 17
- Salary of Montreal Team Captain: $4,429,440.00
- Total payroll of Montreal Canadiens: $45.2 million
- Number of NHL teams: 28
- Number of players in NHL: 644
- Percentage of Canadian players in NHL: 56%
- Cost of Molson Centre construction (1996): $230 million
- Average ticket price for Montreal games: approx. $52.15
- Total attendance to Montreal games(1997): 861,082
- Average TV ratings for '99 Stanley Cup finals coverage (CBC and SRC combined): 2,241,000

* Converted from US to Canadian dollars.

Sources: http://www.canadiens.com/english/, http://www.nsa.com, National Hockey League, House of Commmons, Senate of Canada, http://www.canada.gc.ca, Library of Parliament.

Fence Sense

Robert W. Foster, PE, PLS, of Hopkinton, Mass., is in private practice, offering professional consulting services nationally in arbitration, dispute resolution and litigation involving surveying and civil engineering issues. **Reprinted with permission from *Point of Beginning,* Sept. 1999 issue.**



Good Fences

Robert Frost said fences make good neighbors. Fences serve many purposes besides keeping the cows out of the meadow. They also keep the neighbor's kids out of your garden, separate your dog from the mailman and avoid disputes over boundary lines-usually.

To the land surveyor a fence is one of the first signs of evidence that attract his or her interest at the site of a boundary survey. Is it evidence of original intent? Is it evidence of adverse possession? Which came first, the fence or the boundary line? What does the record say about fence? Finally, is the fence evidence of location of ownership or merely of possession-and is there a difference?

There are friendly fences and spite fences. *Black's Law Dictionary* says that a spite fence is "of no beneficial use to the person erecting and maintaining it on his land and (is) maintained solely for the purpose of annoying (the) owner of adjacent land." A friendly fence is presumably one erected jointly by neighbors on a line agreed to by both. Unfortunately, the neighbors may have been wrong in their understanding of where the line was, complicating things for future owners and surveyors. The spite fence on the other hand, may survive the current quarrel and be recognized by future owners as authoritative.

There are modern fences and there are ancient fences. *Clark on Surveying and Boundaries* discusses the ancient fence doctrine and says that "If it can be shown that a fence was built at a time when the original corners were still standing, the presumption is that it was built on the true line." Satisfying the "if-it-can-be-shown" test is rarely easy, however, and the conclusion may be more from inference than from proof.

The surveyor's preference

For the surveyor, there are really only three kinds of fences: the fence that was in place before the boundary was described; the fence erected after the boundary was described and recorded; and the fence whose reference is found nowhere in the record.

The first case is the easiest and surest for the surveyor. If the original description of a line between adjoining parcels contains the wording "running by an old stone wall," the line is certain and there is no hiatus. The second case may be apparent when a reference shows up in a subsequent transfer of a parcel of land, but was absent in the original description. In this case, the ancient fence doctrine may apply.

The third case presents the biggest problem for the surveyor. A fence, like an iron pin or a concrete monument, is attractive evidence, but if not cited in a deed or other record, its significance is in doubt. It must be tested against other calls and evidence and may carry no weight at all.

The issue becomes a choice of apparent monument against record dimensions. A basic rule in surveying is that monuments—first natural monuments then artificial monuments—hold over distance and

direction. But if the monuments are not a matter of record, perhaps distance and direction will carry more weight in a dispute.

In *Evidence and Procedures for Boundary Location,* authors Brown, Robillard and Wilson suggest that in the United States "There are probably more uncalled-for monuments found on the ground than there are monuments described."

Possession and ownership

One of the most perplexing issues of land tenure is the distinction between possession and ownership of land. A fence is obvious evidence of possession and may appear more compelling then some obscure evidence of original intent. When evidence of possession and evidence of original intent are in conflict, the surveyor should resist making a quick judgment. The surveyor's role is to identify the difference. Here lies the slippery slope of surveying: when the surveyor chooses between evidence of possession and evidence of original intent and places monuments accordingly, he or she runs the risk of a contradictory court decision. A surveyor is well advised to put all parties on notice, carefully documenting found evidence and reasons for his or her opinion.

In the 'burbs

Frost's dictum about fences and good neighbors has been taken to heart by the modern suburban homeowner. The backyard swimming pool demands a fence, often by local ordinance, if for no other reason then to avoid lawsuits. Residential subdivisions everywhere in the United States sport fences of all kinds and costs. Some cities and towns require building permits be obtained before fences are erected, and often limit the height and even the materials used.

A great irony in all this is the role of the surveying profession in the fence setting activities of suburbia. We advise people to have a professional surveyor define a boundary before spending several hundred dollars on a fence, and some prudent homeowners actually follow that advice. But others rely on the plot plan they received at the closing when they bought their home. They were told that the plot plan was merely to assure the lender of the position of the house and its compliance to zoning regulations, and was not meant for construction purposes. To the new homeowner, however, the plot plan shows dimensions from house corners to the side lot and surely is suitable to position a fence-isn't it? After all, the plan was made by a professional surveyor. So two points on the ground 30' apart and within a half-foot of true location are used to position a 150' fence, which ends up encroaching on the neighbor's yard either at the front or the rear of the property. The dispute that follows can be settled by a new survey to define the true line but the homeowners and their attorneys (and a judge if the dispute has gone that far) are left wondering about the reliability of surveyors' plot plans.

If Robert Frost had been a surveyor he might have said that *good* fences make good neighbors, and that only good surveyors make good fences. □

Historical Bearings

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***BERESKIN Island, Sask.** Situated on Lac La Ronge and named after A. I. Bereskin, Dominion and Saskatchewan Land Surveyor. Mr. Bereskin was a former Controller of Surveys, Province of Saskatchewan.

***LAMB Lake, Sask.** Named after Fred Lamb, DLS, SLS, and situated in the Kamsack area of Saskatchewan. Mr. Lamb worked for the Saskatchewan Highways Department.

***TYRER Lakes, Sask.** These lakes are in the Island Falls area north west of Flin Flon and named after Mr. T. G. Tyrer, DLS, SLS, who was the Chief Surveyor to Land Titles in the 40s and 50s.

***TYRRELL Lake, Sask.** Near Flin Flon and named after Joseph Burr Tyrell, an eminent Geographer, Geologist, Mining Engineer and Land Surveyor; deceased in 1957.

# Indicates portions obtained from the book "What's in a Name" by E. J. Russell

* Indicates material copied from the book "Muskeg, Outcrops and 40 Below" by J. H. Webb □

Russian Association of Private Land Surveyors

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sign and construction surveys constitute about half the practice of many urban firms.

It is interesting to note that anyone who wishes to sell property must notify the government of their intentions and hire a surveyor to prepare the necessary documents. These documents are voluminous and include, among other documents, a deed, description, map, coordinates, calculations, and a digital file for the GIS. This is all done on letter size paper and bound into a booklet which is transmitted to the Land Committee with a copy going to the owner.

They found the US system of distributing government surveying work on the basis of qualification rather than competitive cost bidding quite amazing.

At this point the association does not provide continuing education opportunities for its members but rather cooperates with the universities for this purpose. They are looking forward to their first conference in January, 2000.

During the early days of land reform work was plentiful and firms were able to purchase modem equipment, computers, and software, including GPS equipment. The current instability of the Russian economy and ever changing government ministers has impacted the private surveyor badly. They have had to drastically cut their personnel and are mostly unable to update equipment.

The major goals of this young association are to obtain legislation which ensures the continuation of land reform and funding for continuing the land inventory, which regulates the practice of surveying and requires a license to practice, grants a fair proportion of the work to the private sector, and which grants greater support for surveying education. It is apparent that they still look to the government as the main provider of both jobs and education.

They found the US system of distributing government surveying work on the basis of qualifications rather than competitive cost bidding quite amazing. It seems that in Russia the work is not often advertised and is frequently awarded on a political basis. Corruption in government is a serious and widespread problem.

It seemed very difficult for the Russian surveyors to understand the concept of an association which can exist entirely outside the government structure and without enabling legislation. They were similarly amazed that there is no federal authority which licenses surveyors and that the National Council of Examiners for Engineering and Surveying (NCEES), which prepares the licensing exams and model laws for the use of the member boards, is a voluntary organization with no government charter.

Many of the problems and concerns which were expressed sounded very familiar. It is sometimes difficult to get cooperation from other organizations such as those of engineers and architects; it is often difficult to get paid for their services; it is difficult to get legislation passed; and so on.

I had the privilege of visiting a number of firms, both in Moscow and in a city in an outlying region. I found it interesting that all of these firms were located either in a university building or in a government building which also houses the regional office of the Land Committee. In every case, the office was small with several people working in each room.

The Russians are extremely interested in continuing an exchange of information between NSPS and themselves and have proposed a formal agreement be executed to ensure a relationship between us. I'm told that this is customary in Russia.

I was treated with extreme kindness and superb hospitality during my visit. Everywhere I was received almost as a celebrity from the US. Each day was an adventure, with very little knowledge of what I might expect. Some days were meetings with the association officers and directors, some were visits to firms and officials. One day was led into a room full of surveyors assembled for an all-day seminar and asked to speak for an hour about the practice of surveying in the US. A little preparation would have been helpful. Anyone embarking on a similar mission in the future should be prepared to give one or two presentations of a formal nature. □

Biography

By J. H. Webb SLS (LM)

ABEL SENECA WEEKES
DLS, OLS, SLS, ALS

Born one of thirteen children at Middlesex County in Ontario on February 17, 1866. All thirteen children had a minimum of a high school education and many went on to obtain a University degree. Mr. Weekes worked as a surveyor in northern Ontario from 1887 to 1890 and was employed by Code and Robertson, Surveyors at Clinton, Ontario. Coming west in 1894 he then worked as a land surveyor and prospector in the prairies and in the Yukon. In 1897 he and Albert Schaefer built a boat in the upper MacKenzie River and tortuously worked their way up the river. They spent five years mining, trading and seafaring in the north country. Mr. Weekes returned to the prairies and began work for the Canadian Northern Railway as a land surveyor. In 1919 he was made chief land surveyor in Western Canada for the railway. He eventually moved to Winnipeg with the railway and retired in 1931. Mr. and Mrs. Weekes were blessed with a son and 5 daughters.

Accomplishments of Mr. Weekes in the survey fraternity:

- 1890 - Received his commission as a Ontario Land Surveyor
- 1892 - Received his commission as a Dominion Land Surveyor
- 1910 - Received his commission as a Saskatchewan Land Surveyor
- 1911 - Received his commission as a Alberta Land Surveyor
- Member of the Engineering Institute of Canada.
- President Dominion Land Surveyors Association in its early stages prior to 1920.
- President Alberta Land Surveyors Association in 1918.
- President Saskatchewan Land Surveyors Association in 1927.

Mr. Weekes passed away on April 25, 1936 in Winnipeg, Manitoba. □

Cookie Monster...the Risks of Internet Cookies and Aggregate Data

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with no ill effects. Unfortunately, Netscape keeps recreating the cookie file, so I have to keep deleting it. On the UNIX computer that I use to browse the web I could put the "rm/export/home/radatti/.netscape/COOKIE" in my ".login" and "logout" files, but I found a better way. From your home directory, enter the "Netscape" directory. Remove the COOKIE file and put in a logical line to "/dev/null" (ln -s /dev/null COOKIE). As fast as the web browser creates new cookies, the UNIX system throws them away. It works great. I no longer get bothered with pop-up windows and I clog the cookie monster with hundreds of fake identities per day. In fact, as far as the cookie trackers are concerned, they must think that 80 different people visit each page without bothering to finish downloading the page. Besides not being able to target me for advertising or gather any type of history or aggregate data on me, this has got to really hurt their statistics. But don't feel bad for them. They pushed me to be clever, took their chances and lost. I almost look forward to their next move.

In conclusion, cookies are only one way for people to gather aggregate data on you while you're on the Internet. Cookies are not restricted to Netscape, Microsoft Explorer and other programs also process Internet cookies. Remember, your Internet service provider can gather all of this information and more about you without using cookies. It's a dangerous world, so be careful!

Let Cookies Go Stale

Christina LeMaire of Natchitoches, Louisiana, found another way to keep your cookie file from being scrutinized. Delete its contents and then save it as a read-only file. If your browser is Navigator, head to the cookies.txt file in the Netscape directory. Within the Navigator folder, right-click the cookies.txt file and select Properties.

Change it to read-only and click on Apply. If you're running Microsoft's Internet Explorer, you'll find a cookies folder in the Windows folder. Right-click it, select Properties from the menu, and check Read-only in the Cookies Properties dialogue box. ☐

More on Boundary by Agreement, Acquienscence

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Appellate Court Decision

The Supreme Judicial Court of Maine ruled that, pursuant to the agreement Wilson had with Milligan, Ober's survey established that boundary. Once established, the legal effect of the boundary so established was not diminished by the later survey. The Appeals Court said that:

Although Wilson had only an oral agreement with Milligan that Ober would survey the boundary, a written agreement is not necessary. A contract between owners of adjoining tracts of land fixing a dividing boundary is within the Statute of Frauds but, if the location of the boundary was honestly disputed, the contract becomes enforceable notwithstanding the Statute when the agreed boundary has been marked or has been recognized in the subsequent use of the tracts.

It seems that the majority rule in this country is that, if a valid parol agreement is found, it can determine an uncertain boundary. That is, if a boundary is marked by mutual agreement of the parties with the intent to conform to a deed already delivered, the agreement will control, notwithstanding inconsistencies with the deed.

James J. Demma is an attorney with offices located in Rockville, Maryland and a Contributing Editor, for the Professional Surveyor. ☐

President's Message

Continued from page 965

The LAND Project Committee is currently reviewing a draft of the new Land Survey Act. It is hoped that the Act will be in its final form by the spring sitting of the Legislature. This time line seems quite short, however the committee is working towards that end.

We are looking forward to attending the Corporation of Land Surveyors of the Province of British Columbia's Annual General Meeting in Prince George in late February.

Joanne and I wish you all a Happy New Year. ☐

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Internet Interest

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wide and provides them with relevant and up-to-date information, enabling them to keep abreast of industry news and trends, as well as changing laws and practices affecting surveying. Surveying firms who wish to offer their services through SurveyPlanet and who want to be included in prospective online qualification based proposal opportunities may do so by registering at http://www.surveyplanet.com.

About SurveyPlanet Inc.

SurveyPlanet Inc., based in Bellevue, Wash., is the leading Internet resource for companies with surveying needs. The company provides time and cost-saving tools to surveyors, realtors, architects, builders, engineers, and related industry professionals. SurveyPlanet.com will offer business consulting, industry news and research, online continuing education and jobs, and multiple informational resources and links. □

A Million Years...???

Reprinted as seen in the Nebraska Surveyor, Fall 1999 issue.

A young man once asked God how long a million years was to Him.

God replied, "A million years to me is just like a single second in your time."

Then the young man asked God what a million dollars was to Him.

God replied, "A million dollars to me is just like a single penny to you."

Then the young man got his courage up and asked: "God, could I have one of your pennies?"

God smiled and replied, "Certainly, just a second."

Units of Measure

Excerpted from; *Surveying: an Introduction to Engineering Measurements,* Prentice-Hall, Inc. Englewood Cliffs, NH (1956). Reprinted from; *Nebraska Surveyor* Fall 1999 issue.

An early measure of area was based upon the amount of seed necessary to plant a given peice of land. Later, the unit of land measure became the amount which could be plowed by a man with a yoke of oxen in one day. A furrow long (furlong) was the distance the oxen could plow before they were stopped to "blow". This distance was taken as forty lengths of the poly or goad used in driving the oxen, and was eventually standardized as one-eighth mile.The length of the ox goad was taken as sixteen and one-half feet and became known as the pole, perch, or rod. The width of a strip of land which could be plowed in one day was designated as four ox goads. A strip of land 40 rods long and 4 rods wide was legalized in England by the statutes of King Edward I as an acre. The designation doubtless came from the Anglo-Saxon aecer, a plowed or seeded field. It will be noted that the acre, be these definitions, contains 160 square rods or 43,560 square feet. This is the realtionship in use in the United States today. □

WEBSITES

CCRS Websites: www.ccrs.nrcan.gc.ca - the main site for CCRS.

http://gcpdb.ccrs.nrcan.gc.ca:8080 - this site at the present time is intended for tying down landsat and SPOT and most of the points are in the northern part of the country, but as time goes on, it will continue to grow and have higher resolution data.

Right of Way: http://www.rightofway.com - provision of information pertaining to surveying/maping, property rights and land use, petroleum landmen, etc.

GPS Rollover Turns Out Well

Reprinted with permission as seen in the Nov. 1999 issue of *Point of Beginning*.

At midnight on Aug. 21, 1999, GPS System time settings everywhere went through a rollover from week 1,203 to week 0000. The GPS End-of-Week (EOW) rollover occurs once every 20 years. The GPS system calculated time by counting the number of weeks since Jan. 6, 1980 up to a maximum of 1,023 weeks.

How did it turn out?

Computer Economics Inc., one of the prominent companies analyzing the results of the rollover, reported that the majority of calls placed to its GPS troubleshooting hotline were from individuals rather than companies or organizations. It seems the general public did not understand the problem or the consequences of the rollover, and though industry manufacturers recommended running accuracy tests, many did not do so. Computer Economics said individual consumers were uninformed about their GPS devices and could have found themselves lost when camping, hunting or sailing.

New information tables were uploaded to the GPS satellites. These tables, known as almanacs, contain information that allow GPS receivers to predict which satellites are in view at an estimated location and time. These are used by the receiver to lock onto the correct satellites and to continue proper operation as satellites fall below the horizon and others rise into view. GPS receivers not fully compliant with the current standards experienced malfunctions when trying to use the new almanacs.

The data of many systems could have been interpreted as invalid, causing malfunction. If a GPS system is not compliant with rollover standards, the satellite receiver could process satellite data incorrectly and cause the display of faulty information such as the wrong time, position or date.

Computer Economics' Vice President of Research, Michael Erbschloe, said a lot of people were nervous about their systems. But, evaluations concluded that only about a million receivers were not compliant, a number Erbschloe said deems the rollover to have gone "remarkably well."

The most notable area of non-compliant devices was Japan, where most devices were of low-end quality that had not originally been built to be compliant with the rollover. Owners of the non-compliant devices must now buy new ones.

Erbschloe said South America, Africa and some Asian subcontinents and Soviet states haven't completed their evaluations, but he expects few negative responses since most of these areas possess higher-end devices that are rollover compliant.

Now, GPS users await another date for rollover anxiety; Jan.1, 2000, the leap year rollover. The upgrading of ground stations from old IBM-1 systems to SUN-1 systems is behind, according to the latest Inspector General report. And though there was a small percentage of complaints from the rollover, Erbschloe said the Year 2000 compliance issue remains a great concern. □

Liability of Surveyor for Retired Member's Files

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behalf of the new surveyor. However, as an example, if the loss of the file or loss of certain documentation in that file jeopardized the ability of the retired surveyor to defend a claim, it could lead to certain liability being attached to the new surveyor.

Secondly, there are instances where information from the file may be sought by an original client of the retired surveyor or may be sought by a third party pursuant to S. 14 of the Act. In these cases, timely disclosure of that information by the new surveyor may be required. If it is not forthcoming and damages arise therefrom, it is possible further liability could attach to the new surveyor.

Conclusion

If a retired surveyor gives or sells only his/her files as an asset to a new surveyor or firm, the new surveyor in receipt and possession of those files does not *prima facie* assume the liability for damages arising out of a contractual breach the or negligence of the retired surveyor. If circumstances exist wherein the liability has been transferred by agreement or an agreement for indemnification was obtained by the retired surveyor, then it may be that the new surveyor or firm would ultimately be liable to pay damages arising out of the retired surveyor's error.

Further, depending on the use of the information by the new surveyor, either relying on it himself/herself or passing it on to another person to rely on, the new surveyor may be assuming the liability of the retired surveyor for damages.

The above analysis is not intended to be exhaustive, as the area of law involving liability is very broad. I have tried to point out the most obvious issues that would arise regarding the transfer of files from a retired surveyor to a new surveyor and liability flowing therefrom. I also have tried to address those issues through an analytical approach that ultimately would be used from a legal perspective and which I hope gives the membership some guidance in determining their particular exposure. □

Surveyors and Subdivision of Land

continued from 984

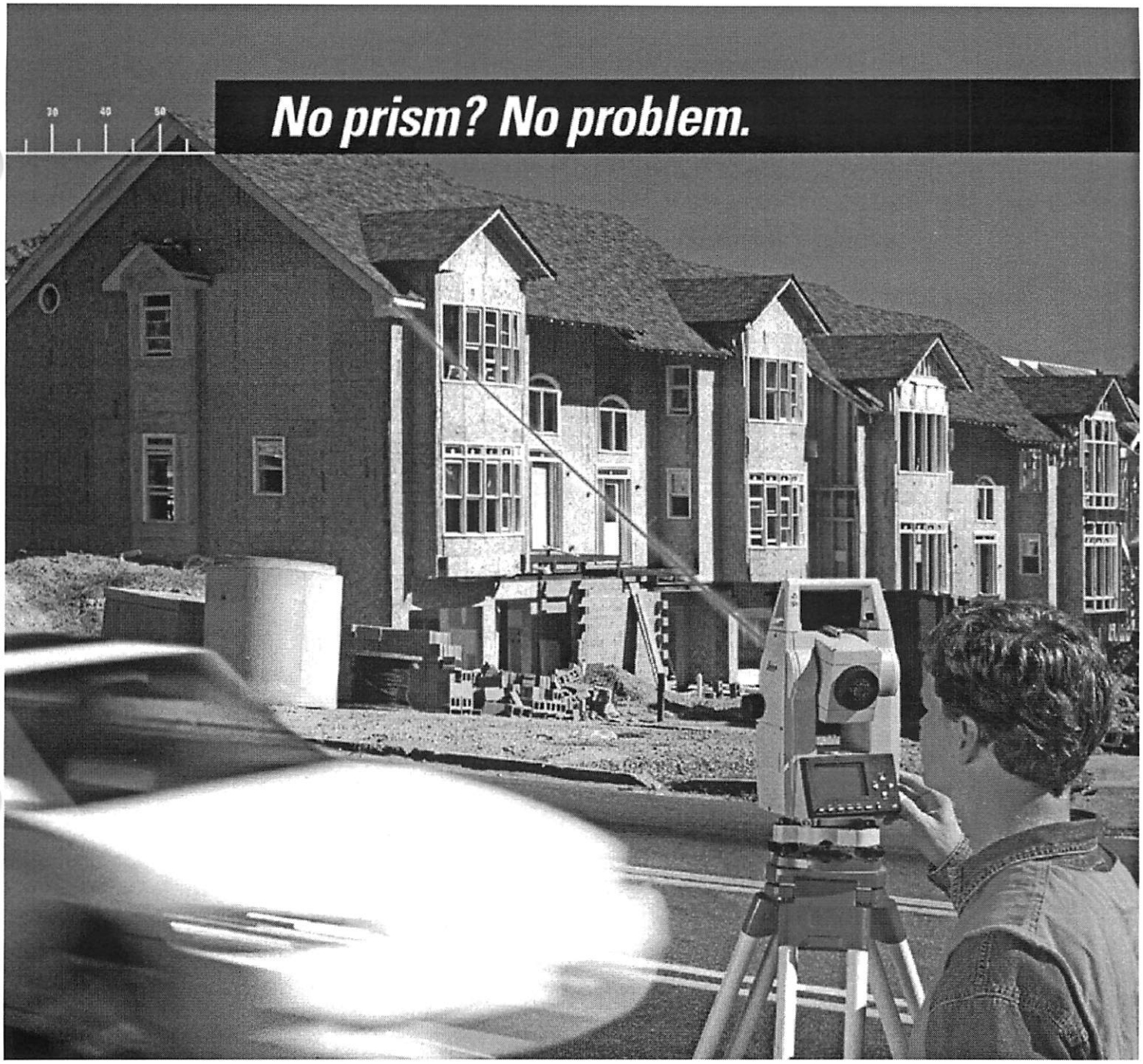
The landowner, who had paid taxes on the land for several decades, was finally able to sell it at an apparent profit. The developer was able to develop the land with a minimum of construction cost: a 1,600', 18' -wide paved road in a 38' way, no sidewalks, curbs, sewer or gas pipes, and no structural storm water facilities. To date, homes have been built on five lots, each selling from $450,000 to $700,000. According to the developer, there is no money to be made on the land. Instead, he builds the most expensive house the market will bear and makes his profit there.

Town is happy with fewer houses at a high assessment rate. There is a minimum of road to be maintained and one more preserved parcel of wetland.

This subdivision was conceived by a developer who knew the economics of land development and the current market for housing in the area. The plan was designed by a landscape architect (LA) who knew how to match the developer's objectives and the town's constraints on land use. The LA's plan was turned over to a land surveyor who digitized it and prepared the final plan for approval and recording.

This is not to suggest that the surveyor's role was insignificant. After all, he performed a perimeter survey, topographical survey and the entire construction layout survey services. The suggestion is, however, that the dynamics of land development have changed, and if the surveyor is to continue in the planning and design process, he or she must be involved in more than measurement and geometry.

Robert W. Foster, PE, PLS, of Hopkinton, Mass., is in private practice, offering professional consulting services nationally in arbitration, dispute resolution and litigation involving surveying and civil engineering issues. □



Heatherbrooke Townhomes / Architect: RDM Design, Inc. / Atlanta, GA

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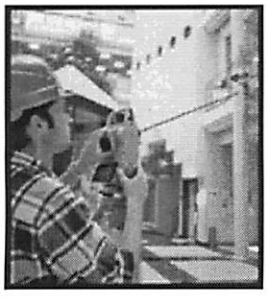

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SLSA Calendar

December 1999 to May 2000

December

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25 Christmas Day
26 Boxing Day	27	28	29	30	31	

January

						1 New Year's Day
2	3	4	5	6	7	8
9	10	11	12	13	14	15 Fees Due
16	17	18	19	20	21	22
23	24	25	26	27 BCLS AGM	28	29
30	31					

February

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16 AOLS AGM	17	18	19
20	21	22	23	24	25	26
27	28	29				

March

			1	2	3	4
5	6	7	8 CIG AGM	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April

						1
2	3	4	5	6	7	8
9	10	11	12	13 ALSA AGM	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May

	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22 Victoria Day	23	24	25	26	27
28	29	30	31 SLSA AGM Waskesiu			