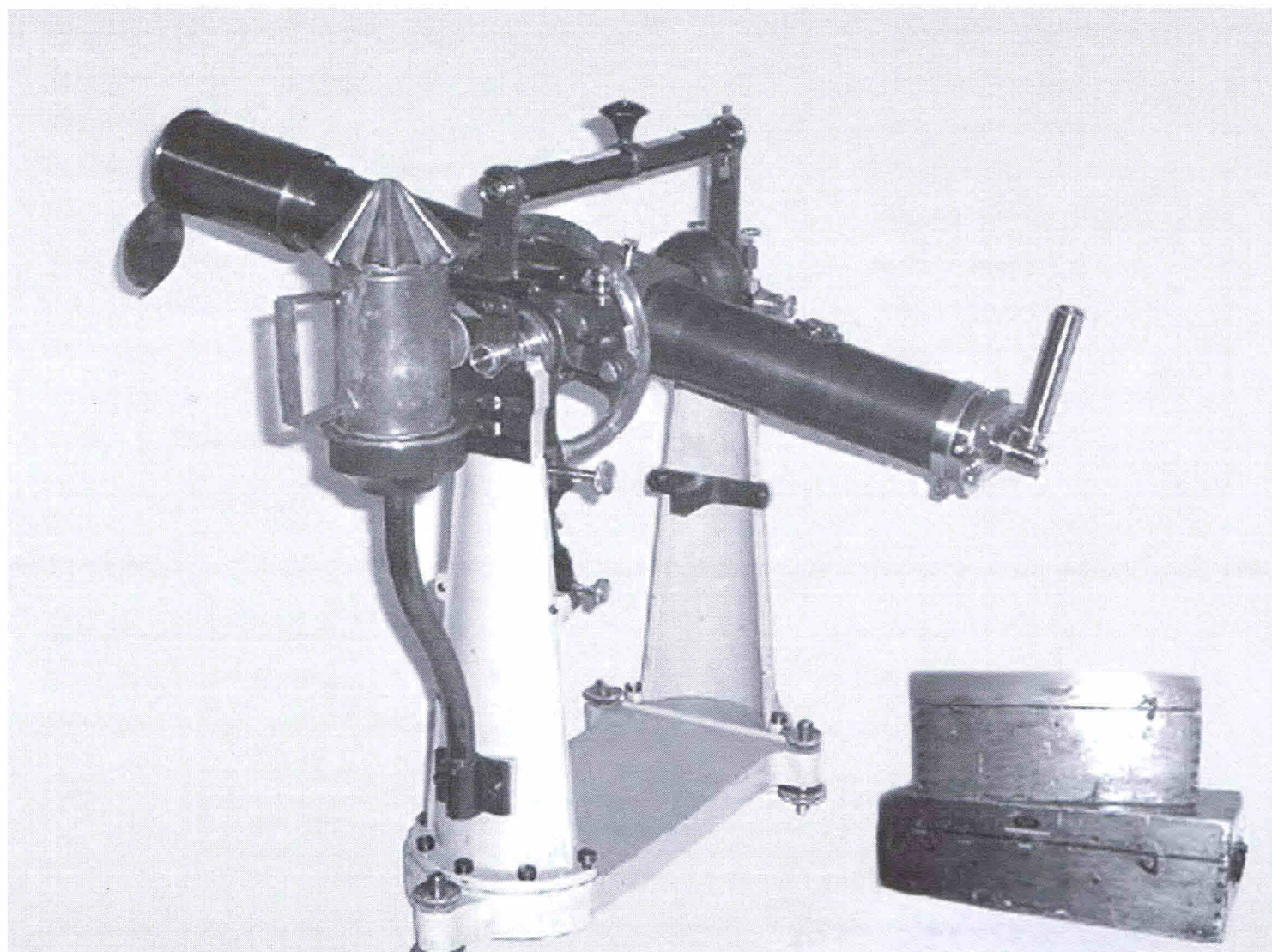


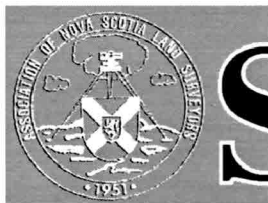
# THE NOVA SCOTIAN SURVEYOR

Spring 2005

No. 173



**Meridian Theodolite with 25 Inch Telescope  
and Wooden Carrying Cases**



# THE NOVA SCOTIAN SURVEYOR

SPRING 2005

No. 173

## CONTENTS

## PAGE

<b>President's Report</b> .....	<i>John Ross</i> .....	<b>2</b>
<b>Executive Director's Report</b> .....	<i>Fred Hutchinson</i> .....	<b>4</b>
<b>SRD Manager's Report</b> .....	<i>Gerry Bourbonniere</i> .....	<b>6</b>
<b>Continuing Professional Development in New Zealand</b> .....	<i>Mele Rakai &amp; John Baldwin</i> .	<b>8</b>
<b>ANSLS Professional Examinations</b> .....	<i>Grant McBurney</i> .....	<b>12</b>
<b>What Customers Really Want</b> .....	<i>Kelley Robertson</i> .....	<b>13</b>
<b>Is It An Azimuth Or A Bearing Being Shown On The Plan?</b> .....	<i>Gerry Bourbonniere</i> .....	<b>16</b>
<b>Arbitrating A Boundary</b> .....	<i>Knud E. Hermansen</i> .....	<b>18</b>
<b>Minutes of the 54<sup>th</sup> Annual General Meeting (2004)</b> .....		<b>23</b>
<b>Surface Drainage</b> .....	<i>Fred Hutchinson</i> .....	<b>27</b>
<b>Edmonton Chosen As Site For 2010 FIG Conference Bid</b> .....	<i>G.K. Allred</i> .....	<b>28</b>

## THE NOVA SCOTIAN SURVEYOR

**Editor:** Fred C. Hutchinson

**Production:** Kathy Alcorn and Wade Company Limited

**Cover:** This meridian theodolite was made by Troughton & Simms of London, UK, and is part of the ANSLS collection. It was used for latitude determination in the 1800s. It was set up on a monument and oriented astronomically, north-south. Observations of altitude were then made on stars (note the side lantern for night time lighting) or the sun at meridian passage. Any tabulated celestial body for which the declination was given could be used. Observations would be taken over a period of weeks with the mean calculated, resulting in a reasonably reliable latitude.

**Circulation:** Free of charge to ANSLS members. To non-members at a yearly rate of \$12.00 in Canada and the USA; \$16.00 for other countries, plus handling charges.

The Nova Scotian Surveyor is published three times a year. Address all enquiries to: The Association of Nova Scotia Land Surveyors, 325-A Prince Albert Road, Dartmouth, NS, B2Y 1N5 Canada. Tel: (902) 469-7962; Fax: (902) 469-7963; E-mail: [ansls@accesswave.ca](mailto:ansls@accesswave.ca)

- Views expressed in articles appearing in this publication are those of the author and not necessarily those of the Association.
- Letters to the Editor should be limited to one page.
- Articles or material originating with the Association of Nova Scotia Land Surveyors or its members may be reprinted without permission.



## PRESIDENT'S REPORT

*John Ross, NSLS, CLS*



This year started for me with a relatively productive Council meeting on 26 November 2004. By mandate the president is on the Administrative Review Committee which met 2 November 2004 and 3 February 2005. I am also on the Strategic Planning Committee, which met 3 and 17 of February. The past president and president also sat in on a Land Titles Committee meeting 23 November.

We had an invitation to the annual meeting of the Maine Society of Land Surveyors which, because of short notice, we weren't able to accept. Garry Parker, VP, was prepared to represent us at the Association of New Brunswick Land Surveyors' AGM January 20-21, but the weather ruined his plans. Bev and I did get to Victoria to take in BC's 100<sup>th</sup> AGM January 18-21 by leaving early to avoid a storm. Besides being a special celebration for them, it was special for us to attend with our oldest son, who is a BCLS.

Some highlights of their meeting:

- Historical seminar on Cadastral Survey Practise 1851-2004
- Icebreaker reception at Government House with an impressive speech by the Lieutenant-Governor, The

Honourable Iona Campagnolo

- Official launch of the Land Title and Survey Authority of BC as part of their meeting
- Change of name to Association of British Columbia Land Surveyors with a new log.

At this writing we are ready to leave for Ontario's AGM at Deerpark Resort.

Here's a true story. One day 30 years ago in the woods of Cape Breton, we were running a boundary line. The saw operator was a big, strong, willing worker. Problem was he wasn't staying on line. I handed him my car keys with a request he take it. He agreed and started running but soon stopped short and inquired "Where am I going?" "What does it matter?" I replied. "You have been cutting all day without thinking about that." "Oh, I see," he said and went back to work with much better results. This same idea demands we revisit our strategic plan. The plan lays out a course to a predetermined destination. Progress so far is on schedule. The SWOT analysis done at the AGM was an internal look at where we are now. Subsequently, our planning consultant, Jim Power, interviewed outside interests for an external perspective. Want to know what they said about us? Refer to an ancillary package of information from the Strategic Planning Committee. It's your responsibility to review this material and return comments. It's only with everyone's input that our goals can be a consensus of the whole Association. We hope to have a doable plan for 2 or 3 years prepared by April.

At this time the province is poised to implement Land Titles in the remaining nine counties. In the 1960's the case was put forward by several pro-active surveyors that land surveying, mapping and title registration together formed

the basis for correcting problems with land tenure that hindered economic development in this region. This led to the development of a 4-phase program. Phase 1 being the coordinate control system, Phase 2 being base and property mapping, Phase 3 being Land Titles and Phase 4 being a land data bank. Nova Scotia is now at Phase 3. In an information booklet produced by LRIS, half a dozen advantages of the new Land Title System were listed. The first one was "guarantee to property owners both of the title to their land parcel and the physical location of boundaries of the parcel." Somewhere along the way it was determined that guaranteeing boundaries would be cost prohibitive. It would seem the legacy of an accurate cadastre envisioned by the last generation of forward thinking surveyors has been waylaid.

Actually, in some cases, we see a degradation of descriptions used to migrate properties. Another concern to us is the fear that records we use on a daily basis may get archived or even lost. Concerns such as these have caused us to hold off signing the LRA agreement with SNSMR. I believe we should rekindle the original dream of guaranteed boundaries. I realize such a goal would not be easy to attain. Does that mean we should not try? A preliminary step would be to get some type of boundary confirmation legislation in place by which questionable location and extent could be cleared up. Title, and supposedly boundaries, can be settled under the Quieting Titles Act but the process is conceded to be long and costly. A process that doesn't have to precipitate from an argument would be desirable. The conclusion of Chapter 8 in Survey Law in Canada, authored by James F. Doig, advised us in 1989 of immediate need for such legislation. New Brunswick passed a Boundaries Confirmation Act in 1994.

Since final implementation of Registry 2000 is here, their Steering Committee has served its purpose and I would like to thank Fred Hutchinson for representing our association on that body for 5 years or so. Within the association we have a Land Titles Committee, chaired by Bruce Mahar, which acts as a watchdog. More recently Derik DeWolfe, Andy DeCoste, Peter Lohnes and Carl Hartlen have volunteered to serve on an External LRA Procedures Advisory Working Group.

The first year under Mandatory Continuing Education is finished. The program has definitely increased participation and that, as I see it, is the value. Nevertheless there must be some tracking of all this activity hence the importance of reports.

Recruitment of new members is a current topic in other survey associations and other professions. Besides the student resource we should realize that there is something else that may impact this

situation. Take note that NS has a provincial immigration strategy and has appointed its first Minister of Immigration, Rodney MacDonald. He says, "We are committing significant resources to promote immigration and settlement. And we're determined to make our province the most immigrant-friendly place in Canada." Further, it's said, the strategy will require the support and active participation of, among others, professional organizations.



# WE'VE GOT THE SOLUTION

**GEODESY**

## MAGNETIC MARKERS

- ~ for soil
- ~ for rock or concrete
- ~ GPS marker

## PROTECTIVE COVERS

- ~ aluminium
- ~ mix
- ~ lifts

## POST

- ~ witness post
- ~ raised characters

**LEGAL SURVEY**

## MARKERS

- ~ aluminium
- ~ plastic
- ~ steel
- ~ boundary
- ~ terminus type
- ~ CLS-77
- ~ CLS-69

## STATIONS

- ~ PK nails
- ~ identified washers
- ~ MAG nails

"ASK FOR OUR BROCHURE"

**SERVICES**

- ~ installation on the site for geodesic markers
- ~ design of special markers on request
- ~ markers to fit federal and provincial standards
- ~ shipping all around the world

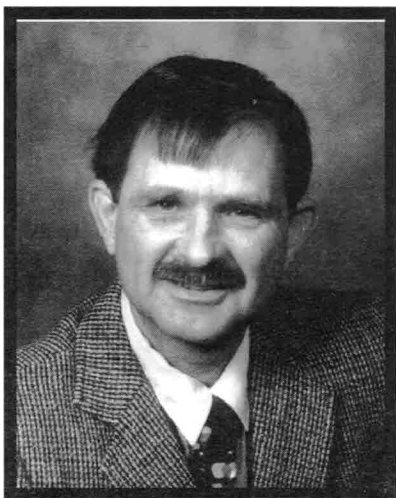
J. P. MORASSE INC. 1321, Marie-Victorin, St-Nicolas, Quebec, Canada G7A 4G4  
Tel.: (418) 831-3811 ~ 1 800 463-6866 • Fax: (418) 831-7827 ~ 1 800 463-8138  
WEB SITE: [www.morasse.com](http://www.morasse.com) • E-mail: [morasse@total.net](mailto:morasse@total.net)

**MORASSE**



## EXECUTIVE DIRECTOR'S REPORT

*F.C. Hutchinson, BA, NSLS, CLS*



As March 1, 2005 approaches and I put pen to paper or should I say, keyboard to memory, we are on the eve of land titles for all of Nova Scotia. It is heralded by some as being the best thing since sliced bread while others are of the opinion that the hole is just getting deeper. Whatever your view, the game is well underway and we are all players.

The Association has formed a Land Titles Committee to address members' concerns about the quality of migrated properties with regard to both title and extent of title issues. Our Association also has four members appointed to a provincial committee established by Service Nova Scotia and Municipal Relations, which is responsible for the Land Registration Act (LRA). This committee's mandate is to assist the LRA process with regard to technical and administrative issues that may give rise to conflict.

The land surveyors presently working in the nine counties al-

ready under the umbrella of the LRA have concerns for the preservation and access of the historical documents. Once a property is migrated to 'land titles' the curtain is drawn on the back title and the legal perception seems to be that from then on you only refer to the description of the parcel at the time of migration. Surveyors are creatures of history and need the benefit of past records to assess extent of title for the protection of legitimate titleholders.

Some people, myself included, are concerned that surveyors will be placed in a position of having to defend their surveys against the property mapping used for parcel identification. An even greater fear is that the graphic illustration of parcels in the property-mapping database will be perceived to be correct by the public and the government that produced it. Surveyors may be expected or tempted to use a parcel's graphic position rather than attempt to establish lines by title document or evidence at a cost that the client might perceive to be excessive. Mapping is only as good as the data used to construct it. When many lots are mapped based on vague descriptions, owners' interpretations and by staff with limited experience there is a need to be ever vigilant about the quality of the cadastre.

On a brighter note, the need for surveyors does not seem to be waning and we will continue to provide services to the public for many years to come. Our place in history is documented at every

street corner, fence, rock wall, and is something to be proud of.

Mandatory continuing education is rolling along with great acceptance and participation by most members. We will likely lose some members who are inactive or whose income is not dependant upon membership. This will affect revenue in the long run but a self-governing profession cannot claim to be protecting the public or advancing the profession (Land Surveyors Act, section 3(4)) if continuing education is not promoted and insured. There may also be those who were unable to acquire the required points in 2004 for one reason or another. Their names will be presented to Council along with those who have not submitted their point evaluation form, which is available at [www.ansls.ca](http://www.ansls.ca).

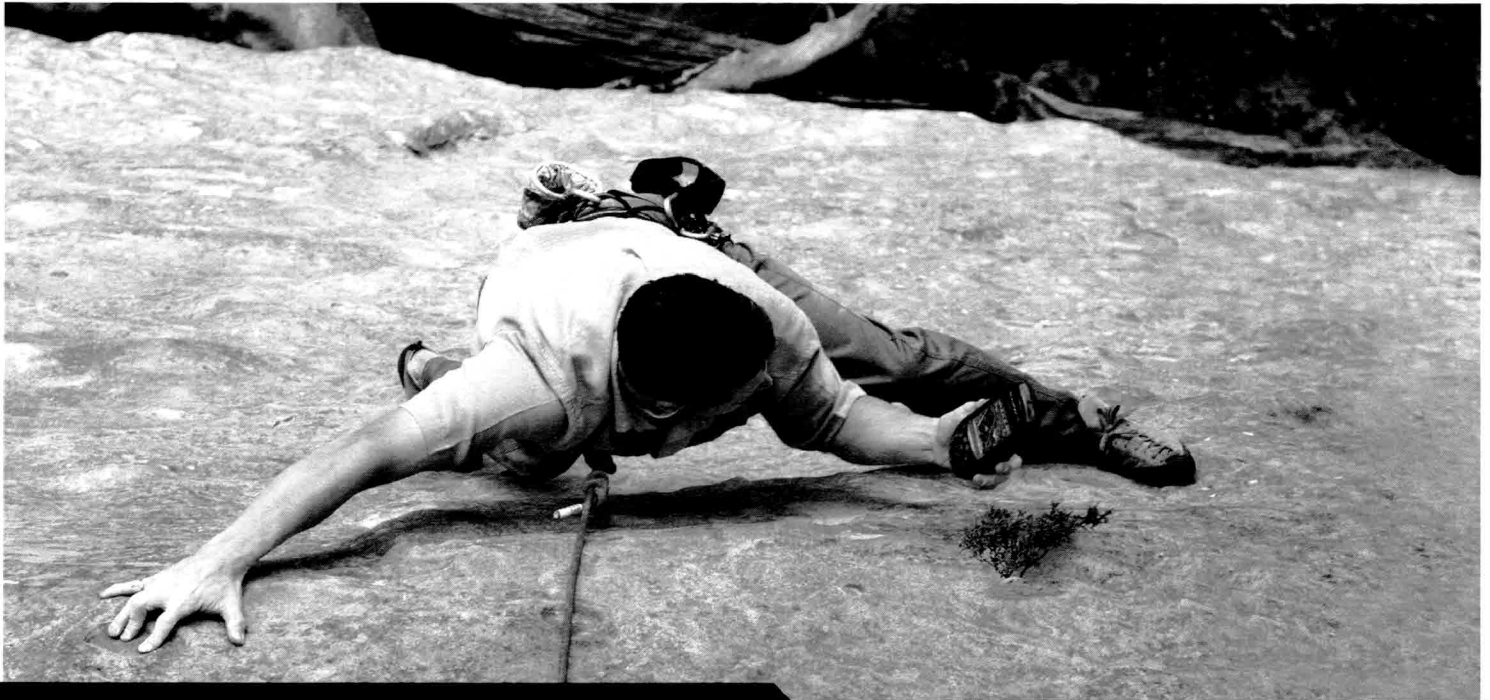
The Strategic Planning Committee has been busy during the past few months and will be calling on the membership's assistance in completing a questionnaire in the near future. Hopefully the members will have had a chance to review some of the committee's work by that time which should assist in completing the questionnaire. Strategic planning is part of good governance and provides both short and long term goals over and above our legislative mandate.

The sun is climbing higher, the snow banks are shrinking and fishing season is on the horizon so all is good with the world. Take care and drive safely. ❧



**GEMINI  
POSITIONING  
SYSTEMS LTD.**

# THALES



## Extreme GIS: Extraordinarily Mobile

### **MobileMapper™ CE: EXTREME PERFORMANCE FOR MOBILE GIS PROFESSIONALS**

Lightweight and built to withstand the most demanding conditions, MobileMapper CE offers unparalleled GIS capabilities for field professionals anytime, anywhere. Running Microsoft® Windows® CE .NET, MobileMapper CE provides sub-meter, real-time GPS performance, integrated Bluetooth® wireless technology, removable SD card memory, alphanumeric keypad, touch-screen and more. MobileMapper CE – the features and performance you need at the price you want.

**Let MobileMapper CE take your GIS field work to the edge, and beyond!**



- > Sub-meter accuracy
- > Extremely rugged and waterproof
- > Field replaceable Li-ion battery
- > Bluetooth wireless technology and removable SD card memory



**Gemini Positioning  
Systems Ltd**

204-148 Colonnade Rd

Ottawa ON K2E 7R4

Phone: +1.613.723.8865

Email: gerryb@gps1.com



## SRD MANAGER'S REPORT

by Gerry Bourbonniere, NSLS



### *Survey Review – is it a plan review or a practice review?*

Regulation 93 sets forth the duties and responsibilities of the Department. Section (1) states SRD shall monitor the quality of survey plans, SLC's **and** survey practices. Section (2) states in this monitoring process all legislation and any accepted survey practice guidelines and standards in effect for practising land surveyors be considered.

Thus, this regulation directs the Survey Review Department to conduct the review of both the plans prepared by surveyors and their surveying practices.

A practice review should not and cannot be restricted to the review of one plan only. However, the review of a plan is the logical beginning. The manner in which a plan is prepared is an indicator of

the surveyor's approach to the project and understanding of pertinent regulations. If problems are discovered, are they unique to the plan reviewed or are they repeated on all plans? A quick check of other plans for the identified concerns will confirm this.

Many times a problem may be unique to the one plan. Thus, it is an anomaly to the surveyor's normal practice. Not an uncommon happening which the surveyor identifies himself, usually immediately after the plan has been signed and/or receives approval. How many times have we questioned, "how did I miss that"? Sometimes the "secondary" checks identify inconsistencies between the various plans in the concerns identified. Is this an indication that the surveyor may not be using good quality control procedures relating to plan preparation? If deficient in this area of practice, does the same apply to field procedures? Because of this process, reports sent to surveyors may be based on one plan only or several plans.

One item of concern regarding plans is that, at times, the references to documentary evidence, as required by Regulation 60(n), may be a "mirror image" of the information shown on the Property Online site for the parcel under sur-

vey and the immediate adjoining. If no plans or deeds are in the data base, then none are referenced on the plan. There may be documentary evidence, such as Department of Highways plans, referenced to parcels adjacent to the adjoining of the lands under survey. These documents may also impact on the lands under survey and should be reviewed by the surveyor.

Whereas Regulation 13 requires that the surveyor "**refer**" to all available pertinent documentary evidence relating to the lands being surveyed and the adjoining lands or any such evidence that may affect the boundaries under survey, I suggest that the research for some projects may be deficient. I further suggest the term "**refer**" means the documents are to be reviewed in conjunction with other documents during the boundary analysis, not simply referenced on the plan being created. The latter is required by Regulation 60(n). The next phase of "review", the comprehensive review, may confirm such deficiencies.

The above is a quick illustration how a "review" beginning with a plan review may evolve into a review of one's surveying practices, both of which are within the duties of the Survey Review Department as established in Regulation 93. ❖

**Not Evolution. Revolution.**

## **Introducing the Trimble S6.**



**TRIMBLE CANADA LTD.**  
Tel: 1.800.563.7184 Fax: 1.416.252.8635  
Email: [info\\_trimble\\_canada@trimble.com](mailto:info_trimble_canada@trimble.com)  
©2005, Trimble Navigation Limited. All rights reserved.  
Trimble and the Globe & Triangle logo are trademarks of  
Trimble Navigation Limited registered in the  
United States Patent and Trademark Office. SUR-076

The demands on a surveyor's time are greater than ever. So, when you asked for better performance, improved accuracy and extreme versatility, we listened. The Trimble S6 represents a revolution in survey technology.

Bringing you enhanced and more dynamic functionality, the Trimble S6 contains the latest technical advances.

### **CABLE FREE**

The internal battery and integrated radio make both the instrument and the Robotic rover completely cable free. The smart battery provides six hours of power in Robotic mode.

### **MAGDRIVE™**

Silent, direct-drive electromagnetic servos deliver unmatched speed and accuracy.

### **MULTITRACK™**

Combines passive prism tracking with active Target ID for exceptional flexibility and performance.

### **SUREPOINT™**

Automatic pointing correction ensures the most accurate measurements, even in difficult conditions.

Experience the new Trimble S6 now.  
[www.trimble.com/revolution](http://www.trimble.com/revolution)





---

# Continuing Professional Development in New Zealand

---

by Mele Rakai, University of Calgary (rakai@geomatics.ucalgary.ca)  
&  
John Baldwin<sup>i</sup>, University of Otago, Dunedin, New Zealand (john.baldwin@otago.ac.nz)

---

As Ken Allred noted in the June 2004 issue of *ALS News* (a publication of the Alberta Land Surveyors Association), land surveyors in Canada are a part of an aging profession in an active, competitive marketplace, where it is becoming increasingly difficult to obtain and retain good qualified staff. It is therefore important that we ensure that current members as well as incoming members – including graduates of our learning institutions – are continuously encouraged and given opportunities to keep abreast of the various changes (e.g. technological, social, legal, legislative) that affect the surveying profession. In many professional surveying organizations, a committee such as the Professional Development Committee (PDC) in Alberta, or the Continuing Professional Development (CPD) committee in New Zealand, has been established to facilitate the process of keeping members continuously educated in order to be kept up to date with the winds of change affecting their profession. This article provides a quick overview of the development of the CPD program in New Zealand, by the New Zealand Institute of Surveyors (NZIS).

## The CPD Program in New Zealand

Since introducing its voluntary CPD program about a decade ago, the NZIS has been encouraging members to be actively involved with CPD. As expected, questions have been raised over its definition: is it 'Continuing *Personal* Development' or 'Continuing *Professional* Development' or even 'Compulsory Professional Development'? The NZIS responded by taking the approach that CPD embraces both personal and professional development.

Initially CPD activities were classified into 3 categories that included extra-curricular activities such as community service and even survey practice.

This was aimed at recognizing that continuing proven competence in surveying activities was relevant. Generally members were (and are still) required to log 20 hours or points per year. In 2003 the NZIS recommended that points or hours be scored in only one category – a category that emphasizes participating in professional surveying activities such as branch meetings, seminar and conferences. To this effect, the CPD committee developed a points-system for participating in events such as meetings, workshops, seminars and conferences. These events generally have a maximum value of 6 points. However the points do not necessarily equate to the number of hours used - for instance, higher points may be awarded for a particularly valuable seminar. Furthermore, since some of the smaller branches meet infrequently the percentage of a meeting attended, out of the overall number of meetings held may be used. Members are also encouraged to undertake additional studies, with a limit being placed on the points that may be claimed – such as 10 points for a university course.

The active encouragement of members to attend CPD sessions places a responsibility on the NZIS to organize appropriate educational sessions, such as those dealing with new software, cadastral procedures or subdivision engineering. Consequently a conference (3 to 5 days), a local government seminar (2 days) and a consultants workshop (2 days) are organized annually by the NZIS. Local branches of the NZIS are also encouraged to include relevant topics and speakers in their regular meetings. There have also been many briefings seminars and training sessions over the decade, with the development of New Zealand's national LIS program, including over the past few years, its *eSurveys* and *Landoline* initiatives. [*eSurveys* may be seen as the equivalent to Alberta's digital plan lodgement process, while



**GEMINI  
POSITIONING  
SYSTEMS LTD.**

# THALES



## Make More Money in Less Time

### **Z-Max® GPS Surveying System: INITIALIZATION AS FAST AS 2 SECONDS**

Centimeter accuracy in seconds means faster surveys, more profit and a decisive edge over the competition. Fast, FREE firmware upgrades and toll-free telephone support keep you on the cutting edge without additional costs. Superior long-range capability means fewer base moves, greater productivity and more cash in your pocket.

**Z-Max'imize your productivity and pay less today and less over time.**



- > Fast initialization
- > Fast positions
- > Fast, accurate surveys up to 30 miles from your base
- > Fast, toll-free support\*

### **Gemini Positioning Systems Ltd**

204-148 Colonnade Rd  
Ottawa ON K2E 7R4  
Phone: +1.613.723.8865  
Email: [gerryb@gps1.com](mailto:gerryb@gps1.com)



*Landoline* may be seen as the equivalent to Alberta's *SPIN* system.]

### Issues and Recent Innovations

A contentious issue has been the need for compulsory or mandatory CPD. Some members, particularly older members and/or those residing in remote areas, have objected to the introduction of compulsory CPD, due to the difficulty of travelling to seminars and workshops in order to obtain their CPD points. They argued that while attending seminars and workshops was not a problem for members residing near or in the main centers, it was difficult for those residing in remote locations. They also pointed out that some consideration needed to be given to allowing such members to keep abreast of new developments and issues by reading surveying-related material.

To date, achieving adequate CPD points has not affected a member's right to gain and retain a license to practice as a cadastral surveyor. However it should be noted that in keeping with recent professional and legislative reforms in NZ, the legal title of *Registered Surveyor*, has been replaced with that of *Licensed Cadastral Surveyor*. In addition the past practice of Registered Surveyors renewing their Annual Practicing Certificate yearly, has now been replaced with the need for Licensed Cadastral Surveyors to renew their license every 3 years. As yet, there is no mandatory requirement for New Zealand surveyors to have a CPD portfolio. However, given the many changes in laws and procedures affecting cadastral surveying, surveyors are doing many hours of "CPD" (which may or not be logged), in order to be able to practice effectively as a cadastral surveyor. The renewal of a Cadastral license will have a requirement to have recently completed a number of official cadastral surveys. Thus CPD may be compulsory for licensed cadastral surveyors, but will remain voluntary for other categories of surveyors.

Creating 'compulsory' CPD brings with it the need to police members' CPD returns. With around 1,000 members to submit returns, careful monitoring of paper records can be a major logistical undertaking for a small voluntary organization. For instance, a few reams of inadequately completed forms may require validation. In response to these issues, the NZIS CPD website was revamped in early 2002, to make it easier to access professional information, relevant reading materials and make site searches that could facilitate professional learning. Also included within the site was a facility for members to log their CPD performances. This part of the site lets members

select their CPD activity, claim their CPD points and if they wish, provide a brief explanation of the activity. The record cannot be lost like a paper record, and is available on any internet connected computer. The paper work for CPD administrators is also substantially reduced. A CPD administrator is able to download every CPD record and save it as an excel or similar spreadsheet file. It is envisaged that the CPD record can be used by a member as defense against any accusations of not being up to date. Alternatively in a disciplinary action, the NZIS is able to refer to the last 3 years of a member's activities.

### CPD Benefits Realized To Date

CPD has been introduced gradually by the NZIS over the last decade. Members who have embraced it have expressed the opinion that it is not a major chore, but simply one of remembering to record one's CPD activities. Their experience has helped convince more of their colleagues that it is not a burdensome program. One benefit of the newly created online CPD recording system is that it allows members to keep a record and/or even a diary, of every relevant activity as desired. Although members are required to record only 20 to 25 hours per year, some conscientious members have been logging well over 100 hours each year and seem to delight in adding to their score sheet. They are persuading and instructing their colleagues about how easy and quickly a creditable record can be built up.

---

*For more information on the NZIS CPD program, you can check out [www.surveyors.org.nz](http://www.surveyors.org.nz). You are also welcome to try out NZ's online CPD recording program, by becoming temporary NZIS website members – contact John Baldwin ([john.baldwin@otago.ac.nz](mailto:john.baldwin@otago.ac.nz)) if interested.*

---



---

<sup>i</sup> The Professional Development Committee of the Alberta Land Surveyors' Association had the pleasure of meeting with John Baldwin, long-time member of the New Zealand Institute of Surveyors (NZIS), and senior lecturer at the University of Otago's School of Surveying in Dunedin, New Zealand, in September 2003.

---





***"Just what we needed..."***

PROJECT: ESTATES AT HIDDEN CREEK / A Rural Cluster Subdivision / Snohomish County, Washington

## **Leica System 1200. TPS & GPS, working together.**

"They say too much work is a good problem to have, especially when you consider the alternative. But when our business took off, it quickly became apparent that our old total

station just couldn't keep up with the workload. The Leica TPS 1200 total station was the solution we needed: fast, accurate, efficient — and reliable. When the projects kept coming in, GPS was next on our list, and that choice was a no-brainer. The Leica GPS 1200 uses the same user interface, same data management, same functions and features. If you know TPS, you know GPS — and that makes us more productive and more profitable than ever. Purchasing the Leica System 1200 was a big investment for our small company. But with Leica Geosystems' innovative system approach, we're confident it's a decision that will pay for itself again and again."



**Richard Healey, P.L.S.**  
ORCA Land Surveying  
Everett, Washington

**Leica**  
Geosystems



## ANSLS PROFESSIONAL EXAMINATIONS

by Grant McBurney, NSLS

---

*What is the prescribed minimum percentage of article time to be spent on office practice by a person undergoing a twenty-four month article period?*

*Can a lease having a term of more than three years, but not registered in the office of the Registry of Deeds, ever be deemed ineffective?*

*Under normal circumstances how close can the boundary of a new cemetery be to a hospital?*

These and more than 90 other questions were posed to student members recently, as part of their final testing process on the way to become a licensed surveyor, the writing of the “Professional Examinations”.

Our Board of Examiners requires all candidates to write two Professional Examinations. The first of these, Nova Scotia Statutes, covers property, land and survey matters contained in approximately 95 provincial statutes. The exam is open book, and the candidate must not only give the correct, brief answer, but must also support his or her answer by reference to the correct statute, along with the appropriate section and subsection. The Manual of Good Practice stipulates what sections of each statute are pertinent to the surveyor. In some instances only a few sections might be relevant, whereas in others (The Municipal Government Act, for example) the surveyor should have knowledge of a significant part of the statute.

The second examination is the Land Surveyors Act, Regulations and By-laws. It is also open book style, and also requires answers to be supported in detail by reference to the applicable act, regulation or by-law. A portion of this exam is set aside specifically for questions on the Code of Ethics, thus giving the candidate the opportunity to express in essay style his interpretation of our “code”.

These examinations, each three hours in duration, can be offered as frequently as twice per year. Preparation for them is really an exercise in organization, certainly a desirable quality in a land surveyor. In preparation, candidates should read the Manual of Good Practice carefully to be sure all the listed Acts are addressed, then go through the statutes carefully a few times, and make notes and cross references. If this is done, the actual writing of the exam itself should be little more than a formality.

So ...

*Can possession or occupation of property of a municipality convey any right or title to the property?*

The answer can be found in the Municipal Government Act, Section 50(4).

<http://www.gov.ns.ca/lgi/legc/statutes/muncpgov.htm>



## What Customers Really Want

by Kelley Robertson

“R - E - S - P - E - C - T.  
Find out what it means to me.”

Although Aretha Franklin was referring to relationships when she sang these words, they relate to the business world – more so now than ever before.

Although respect means something different to most people, there is one certainty – good customer service is at the heart of it. Here are four strategies you can use to keep your customers coming back:

1. Under promise, over deliver. Although this seems fundamentally simple, the consistent execution is challenging. In our haste to please people and close sales, we often make promises we can't keep. We tell a customer we will deliver by 3:00 P.M. forgetting that we made a similar commitment to several other people. We promise to return a call by the end of the day but get caught up in other tasks and forget. Or, a salesperson tells a client that a back-ordered product will be available on a certain day without first confirming this. These situations end up causing us stress and strain the relationships we have developed with our customers. Avoid these types of problems by thinking through your decision before you make a commitment.

2. Hire the right people. My wife and I recently shopped at a local supermarket. The cashier smiled and struck up a conversation with us as she rang through our order. Another cashier who was not busy stepped over to bag our order and also smiled and talked to us. There was a friendly energy in the store and as we left, my wife said, “That is why I shop here.”

In addition to creating a good working environment, the management team also hired the right people. Front line employees have a tremendous impact on your business. But many managers make the mistake of focusing strictly on technical skills when they interview and hire new employees. Invest the time to hire individuals who have excellent interpersonal skills and who can relate well to other people. Ask questions such as;

“Tell me about a difficult customer problem you have had to deal with in the past.”

“What would you do if you were faced with this situation...?”

“Have you ever had a customer yell at you? How did you respond?”

You can always teach someone the technical aspect of a job. However, you cannot teach someone to have the right attitude.

3. Proactive communication. I once ordered furniture from a national chain and was told it would be delivered on a certain day – it was on back order at the time I made the purchase. I called the company the day before the furniture was to be delivered only to be told that it was still on back order. Had I not made the call, I would not have discovered this until the next day – when my furniture would not have been delivered. It would have been simple for the company to notify me and preempt my frustration.

In another situation, I was told a service person would drop by my home by 1:00 P.M. on a particular day to give me an estimate on a repair. Two hours *after* the scheduled appointment, I received a call telling me that he would not be able to drop by until the next day. As a result, I wasted two hours of my time waiting for him.

When things go wrong, and in business they often do, it is how you respond that makes a difference. Don't make your customer call you, call them instead. A small local repair shop makes this their policy. When a customer brings an item in for service, they give that person an approximate time frame when the product will be ready. Then they tell the customer, “We will call you when it is fixed so you don't have to waste your time checking with us.” It is little wonder this business continues to flourish even in a challenging economy.

4. When you make a mistake, apologize. Most people can accept mistakes, providing they are treated with respect afterwards. This past summer I was inconvenienced on several occasions by different businesses, yet not one bothered to extend an apology to me. In each situation, an apology would have quickly and easily remedied the problem. However, their lack of concern to the problem – which was caused by the organization itself – caused me to stop doing business with each company.

Competition is fierce in every industry. Yet, it is very easy to differentiate yourself from your competition



# SOKKIA

Take the Lead with Superior EDM Performance and Powerful SDR Software

## 350m Reflectorless Range



### ■ Exceptional Range & Accuracy

Rely on the new Series030R total stations for high-precision reflectorless measurement of distances up to 350m (1,140ft.). Sokkia's exclusive RED-tech EDM delivers fast, precise measurements with superior accuracy of  $\pm (3 + 2\text{ppm} \times D)\text{mm}$ . What's more, an ultra-narrow visible laser ensures pinpoint accuracy with challenging tasks.

### ■ Unprecedented Productivity

Any of the three available models (1", 2", and 3") will help you boost productivity in more situations than ever. Each features the finest Sokkia technology, including comprehensive data collection software (Expert) and original absolute encoders. The Series030R total stations also offer a 14,000-point internal memory and CF card drive, user-friendly operation, an optional wireless keyboard, a weatherproof design, and more.



Reflectorless Total Stations with Integrated Data Collectors

## Series030R

SET1030R3 • SET2030R3 • SET3030R3

MSRP... \$14,650 (3030R)

Plus Applicable Taxes

**12 month  
Interest Free  
Payment**

## \$1,221/Month

12 Month Interest Free Payment Event



an Atlantic Canadian tradition for over 40 years

## wade company limited

Visit us at [www.wadecompany.ca](http://www.wadecompany.ca)





100% Atlantic Canadian Employee Owned and Operated

# Wade Special

Sales • Rentals • Service • Printing • Training • Technical Support

**12 MONTH INTEREST FREE  
PAYMENT EVENT**

*on Approved Credit*

## **TOPCON Pipe Lasers**



### **TP-L4 Series Pipe Lasers**

**TP-L4B** - Economy Red Beam

**TP-L4AV** - Red Beam with Laser Plumb

**TP-L4GV** - Green Beam with Laser Plumb

- Solid Cast Aluminum Housing, Waterproof to 5m
- RC-200 Remote Control with 200m range
- Rechargeable batteries and external power cable
- Digital input displays for simple setups
- Loaded with "Smart" features for easy alignment and second day set-ups

**TP-L4AV MSRP... \$7,495.00**

Plus Applicable Taxes

**12 month  
Interest Free  
Payment**

**TP-L4AV  
\$625/Month**

Halifax 902.429.5002  
1.877.256.9233 (wade)

St. John's 709.722.8772  
1.877.722.9233 (wade)

Saint John 506.634.1820  
1.800.838.4888

Dieppe 506.862.0020  
1.877.862.9233 (wade)

*Visit us at [www.wadecompany.ca](http://www.wadecompany.ca)*



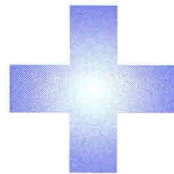
100% Atlantic Canadian Employee Owned and Operated

# Wade Special

Sales • Rentals • Service • Printing • Training • Technical Support



**SOKKIA 30R**



**Recon 200C**

***Save up to \$2300 Off  
the Regularly Bundled Price***

We have several slightly used Sokkia 30R Reflectorless Total Stations and TDS Recon Data Collectors substantially discounted and available for end of May delivery.

### **30R Quick Specs**

- Like New Condition
- Waterproof Design
- Reflectorless Distance Measurement
- Balance of Factory Warranty (15 Months)
- Available in 6" or 5" accuracy

### **Recon Quick Specs**

- Ultra Rugged / Water Resistant
- Long Battery Life
- TDS Survey Standard Software
- Windows Pocket PC Operating System
- Includes Instrument Cable

### **Sokkia 630R with Recon 200C**

**Regular Price - \$11,733.00**

***Special - \$9,490.00***

### **Sokkia 530R with Recon 200C**

**Regular Price - \$13,088**

***Special - \$10,790.00***

***While Quantities Last***

**Halifax 902.429.5002  
1.877.256.9233 (wade)**

**St. John's 709.722.8772  
1.877.722.9233 (wade)**

**Saint John 506.634.1820  
1.800.838.4888**

**Dieppe 506.862.0020  
1.877.862.9233 (wade)**

***Visit us at [www.wadecompany.ca](http://www.wadecompany.ca)***



**TOPCON**

# HiPer<sup>®</sup> Lite<sup>+</sup>

## Cable Free Integrated<sup>®</sup> RTK GPS+ System

- Compact and Lightweight
- Fully Integrated Receiver/Antenna
- Completely Cable-Free Design
- Dual Constellation /Dual Frequency RTK
- High Performance Spread Spectrum Radio
- Communicates up to 1.5 miles
- Includes Recon 200C with TDS Survey Pro

**MSRP... \$38,500**

Plus Applicable Taxes



**12 month  
Interest Free  
Payment**

**\$3,209/Month**

**12 Month Interest Free Payment Event** on Approved Credit



**12 month  
Interest Free  
Payment**

**\$3,988/Month**

12 Month Interest Free Payment Event

**MSRP... \$47,550**

Plus Applicable Taxes

**TOPCON**

# HiPer<sup>Pro</sup>

## Wireless Long Range Integrated GPS + Receiver System

- Completely Cable-Free Design
- Long Range UHF Radio - Up to 4 Mile Coverage
- Compact, Lightweight Design
- Fully Integrated Receiver/Antenna
- Dual Frequency, Dual Constellation RTK GPS + Tracking
- Includes Recon 200C with TDS Survey Pro

**Halifax 902.429.5002**  
**1.877.256.9233 (wade)**

**St. John's 709.722.8772**  
**1.877.722.9233 (wade)**

**Saint John 506.634.1820**  
**1.800.838.4888**

**Dieppe 506.862.0020**  
**1.877.862.9233 (wade)**



by showing your customers respect. This behaviour starts at the top, with you, the owner or manager. The leader of the business must treat both his customers and employees with respect if he expects his team to take care of the customers. Companies that treat customers with respect will always thrive, as long as they provide a good product or service at a competitive price.

Respect your customers' time, feelings, opinions, beliefs, and business and they will respect you.

Copyright ©2004 Kelley Robertson. All rights reserved

Kelley Robertson works with businesses to help them increase their sales and motivate their employees. He is

also the author of "Stop, Ask & Listen – Proven sales techniques to turn browsers into buyers." Visit his website at [www.RobertsonTrainingGroup.com](http://www.RobertsonTrainingGroup.com) and receive a FREE copy of "100 Ways to Increase Your Sales" by subscribing to his 59-Second Tip, a free weekly e-zine.

-----

**Editor's Comment:** Throughout Mr. Robertson's article is the theme of communication. The lack of reasonable communication between client and service provider usually results in a problem for both parties. Everyone needs to know exactly what was ordered and the terms of the deliverable. Progress, lack of progress or complications should always be communicated. ❏

## Is it an Azimuth or a Bearing being shown on the plan?

Gerry Bourbonniere, NSLS

Brown's Boundary Control and Legal Principles (Fourth Edition) pages 113 - 114 and 116 - 117, indicates an azimuth is determined by the angle from a line to a true north (or meridian) line. A Lambert or Mercator coordinate system may be used to avoid confusion caused by the direction to true north changing as one moves in an easterly or westerly direction. In these systems, all directions are referred to true north as defined relative to one datum line in the zone. The central meridian of the grid is the true north-south line to which all grid lines are made parallel or perpendicular.

In a grid system, directions are azimuths only at the central meridian of the grid. In Nova Scotia, these are the central meridians of each zone within the NS Coordinate Survey System.

Regulation 20 states that directions of boundaries be expressed in full circle or quadrantal bearings. It further provides the definition of full circle bearings.

Regulation 19(4) states all bearings, other than magnetic, be referenced to the appropriate central meridian of the NS Coordinate Survey System.

Most plans reviewed by the ANSLs Survey Review Department (SRD) express directions as quadrantal bearings however some use full circle bearings. Of the latter, many include the statement in the legend that **azimuths** are grid and are related to NSCM's 123 and 456 (or similar wording).

Directions derived elsewhere within the grid but related to the central meridian are **grid bearings** and, by Regulation 20, may be expressed as quadrantal or full circle bearings. Stating directions in terms of 360° (or full circle bearings) in itself does not make these directions azimuths.

More proper terminology in the legend would be "**bearings** are referred to the 3° MTM Projection, Zone 5 (or 4), Central Meridian 64° 30' (or 61° 30') West Longitude and were derived from NSCM's 123 and 456" (or some such similar wording). ❏

o u t t h e r e w i t h y o u

**The most advanced optical total station in the world has arrived.**



 **Trimble**



**Trimble S6**

**Fast. Silent. Precise.**

Contact your local Cansel sales  
representative for a demonstration  
at 1-888-222-6735.



**Cansel**

Vancouver • Calgary • Edmonton • Winnipeg • Toronto • Ottawa • Montreal • Quebec • Halifax

# Arbitrating a Boundary

*Knud E. Hermansen, PLS, PE, Ph.D., Esq.*

*While written as a single arbitration event, the events described are actually a compendium of experiences from several arbitrations engaged in by the author.*

The sun was just barely above the eastern horizon as I drove up to the two surveyors parked along the road. They were leaning against their vehicles and talking to each other. They were waiting for me. Today I am an arbitrator or arbiter. I am a judge appointed not by election or governor but by the parties themselves. My powers are derived from the agreement between the parties supplemented by statute and common sense. I embarked upon this arbitration approximately three weeks ago when I received a call from one of the attorneys. The attorneys were inexperienced with arbitration but willing to let their clients give arbitration a try. I sent the attorneys a sample arbitration agreement with an explanation on what to consider. The most important task for an attorney willing to involve their client in arbitration is to craft a solid arbitration agreement. Writing an arbitration agreement is a story by itself.

I greeted the surveyors warmly. I counted both of them as old acquaintances and friends. Both surveyors had a reputation for quality work. We were meeting at this early hour to perform the view required by the arbitration agreement. In this case, the landowners had been locked in heated litigation with all the power of a law firm to fight for them. I felt I was safe at this twilight hour. Given the poor light available at dawn, the chance of a landowner mistakenly shooting their own surveyor was too great for them to take a chance shooting at a stranger walking with their surveyor.

Prior to this day, the attorneys had decided that the early morning view should be left to the surveyors and arbiter alone. I must admit that I had eagerly anticipated watching attorneys dressed in their

dresses or suits scrambling through the mud and pucker brush to look at pins, pipe, fences, walls, trees, etc. I was disappointed – there would be no wrecks at the races today. As I applied a liberal dose of bug repellant to hold off the mosquitoes and black flies that were expected to stir soon, I couldn't imagine why the attorneys would willingly forego the experience of watching the sun rise over the fields, especially if they could get paid to do so.

My combination as both a lawyer and surveyor has placed me in much demand for performing this type of service. (Though, in truth, any competent surveyor could easily fulfill the role as arbiter in boundary disputes and often do.) This case, like so many I had been involved with, had been waiting for trial for over four years. Continuances and a long court docket had caused an untold number of delays. Lengthy delays are common in civil litigation. In this case, the parties, out of patience and money, were finally willing to try some alternative to litigation. The path from death threats, to litigation, to settlement or arbitration is often simply a question of how long the clients can withstand being beaten on their heads with their own wallets. (I have never been able to determine if it is the abuse of the landowner by the process itself or the fast and steady weight loss of the wallet that is most compelling.)

On this day I believe the three of us were, for the most part, content to be doing this part of the arbitration by ourselves without landowners or attorneys present. We can speak in "surveyeze" without the blank looks from laypersons or questions from counsel. We can freely use technical language that intermingles terms like "traverse," "rods,"





TOLL FREE 1-866-423-4466

**423-4466**

[www.atlanticdigital.ca](http://www.atlanticdigital.ca)

FAX 423-5706

**ATLANTIC DIGITAL REPRODUCTIONS INC.** is a leader in the Architectural, Engineering and Construction Industry for printing, printing equipment sales, supplies and service.

**Atlantic Digital is the Authorized dealer for XEROX and HP wide format Printers**

- Sales and supplies for HP Plotters (paper, vellum, film, ink cartridges and more)
- Sales and supplies for Xerox Large Format Printers (paper, toner cartridges)
- Only Xerox Authorized Service center in Nova Scotia

**Atlantic Digital is your complete Reprographic Service Provider**

- Engineering, Architectural and Construction Copies
- Scan to file, black/white and colour
- Plotting services from digital files (AutoCAD, PDF, TIFF, etc)
- Small format printing and copying (8.5 x 11, 11 x 17)
- Preprinted Sheets
- Lamination and dry mounting up to 60"
- Digital colour mapping reproduction
- Colour printing from Business Cards to Billboards

To inquire on equipment, supplies, or service please give us a call.

**Atlantic Digital has two locations;**

**Head Office**

51 Sterns Court  
Dartmouth, NS  
B3B 1W7  
Phone: (902) 423-4466  
Fax: (902) 423-5706  
Toll Free: 1-866-423-4466

**Halifax Office**

1496 Lower Street, Suite 331  
Halifax, NS  
B3J 1R9

Authorized Dealer For:



Xerox  
Wide Format Solutions  
Authorized Reseller



“scribings,” “N30 degrees W,” etc. without causing confusion. A corner stone that resides some five feet from the spot where meticulous protraction of the record measurement would otherwise place the corner is easily put aside with the mention of the original surveyor’s name. Experience has taught us what measurement precision can be expected from the ancient surveyor who placed the stone and whose reputation is familiar to all surveyors.

I walked around the property, sometimes joking, but more often in serious contemplation as each surveyor pointed out and described the evidence they found and what weight it should be given. Finally, with the time of the hearing fast approaching, the view and casual conversations were ended and we drove our vehicles to the lawyer’s office where the hearing would be held.

Waiting for us outside the attorney’s office was one the lawyers with their client, along with a couple of witnesses. I could tell how they greeted the one surveyor and glared at the other surveyor which one of the two litigants I was seeing for the first time. Inside was the other landowner with their lawyer and witnesses. Needless to say, there wasn’t a lot of hugging and kissing between the two groups.

When there is a big crowd like the one present at this arbitration hearing, I start by getting the surveyors and lawyers off by ourselves and going through the rules that aren’t in the arbitration agreement. I tell them that the first witnesses I like to hear from are the surveyors. There are several reasons for this. First, the surveyors introduce the plats and other documents that the other witnesses will often use. Second, they usually provide the most compelling evidence in the most logical format. Third, they are getting paid by the hour. I can save the landowners money by getting the surveyors out of the hearing and back to other business as soon as possible. Most lawyers and surveyors aren’t familiar with arbitration so I take this opportunity to point out that the rules of civil procedure and evidence don’t apply. The lawyers can make all the objections they want but I’ll usually let the story go on especially, as in this case, it is rumored one litigant-landowner attempted to murder the other. I know that such testimony is totally irrelevant in locating the boundary but this

testimony is what the other witnesses appreciate the most. I also tell the attorneys that they are free to consult with their client’s surveyor during the questioning of the other surveyor. The attorney can even let one surveyor question the other. If one surveyor questions the other, I don’t get a numb question like: “Could you please explain to the arbiter why you feel the orange post marked ‘W.B. 1951,’ is a corner monument set by William Bigelow in 1951?”

After the meeting with the attorneys and surveyors, we all file back to the reception area to pick up the litigant-landowners and witnesses before heading to the conference room where the hearing will take place. The look of relief on the receptionist as the people file out of the reception area tells me the two litigant-landowners weren’t attempting to kiss and make up while we were gone. There is a heavy run on the coffee pot at this time.

We enter the conference room. The conference room is big. Clearly this was meant to stand as a status symbol for the law firm. People living in a mobile home don’t have this much room. Naturally, each side of the litigation occupies their own side of the conference room. The conference room contains more area than the litigant-landowners are fighting over. After listening to University faculty describe their “love and peace” vision of life for 15 years, I’m half tempted to ask for a big group hug to settle the whole affair. According to faculty, people can be persuaded to put aside their differences and to love another. I worked for a living before teaching so I know better than to believe it. Four years in the Marines has taught me that ill-will toward another can only be settled by combat. The only difference between military training and legal training is the former emphasizes that victory is measured by the amount of blood from the opponent while the later determines the victor by the amount of money squeezed from the opponent. The strategies taught by the Marines and law school were pretty much the same. (Ambush the other side. Gain fire superiority, cut off supplies, etc.) Legal and military training did not include group hugs or sessions on how to understand the other person’s feelings while denying your own.

I start the arbitration hearing by introducing myself. I can tell that some of the people present expected someone in a robe or at least a suit and tie. Of course, I'm wearing a polo shirt with a tint of mud on the front resulting from climbing under a barbed wire fence. I'm still trying to stop the bleeding on my arm where a blackberry bush ripped a gash in my skin less than an hour previously. (I usually stop bleeding quickly but the insect repellent was causing this cut to burn and bleed.) My position on wearing a suit is simple. You can have a view or a coat and tie but not both within the same hour.

I've conducted hearings where the parties agreed only the surveyors and attorneys would be present at the hearing. The only difference between that small hearing and meeting with the same people in a bar is that beer is lacking in the former while plentiful in the later. Conversation is pretty informal where the landowners are not present. There is quite a crowd at this hearing, including the landowners. As a general rule, when the landowners are present, I mirror the decorum of the courtroom. I can't guarantee they'll be happy with the outcome but I can go a long way toward making them feel they've been fairly heard and had their day in court.

The first witness is one of the surveyors I've spent the last two hours talking to at the view. I've got to be careful to address him as "Mr." and not his first name. I try to look solemn as I put him under oath even though we both know he can lie with a straight face. Not more than an hour ago I suspect he doubled the size of the trout he caught on his last fishing trip when recounting the details of the trip to me. He begins his testimony. It's not long before both lawyers are thoroughly lost. They have to start asking questions in the guise of helping me understand what they don't. In truth, I can't hold the lawyers at fault. You can hardly blame the attorney for asking a question when the surveyor identifies a corner as the one where I slipped on the dew laden grass and fell on my ass. Such testimony tends to limit the number of people comprehending the location of the corner to exactly three people in the room. Of course, there are some questions from legal counsel that give surveyors in the room the opportunity to look bewildered. *"Could you explain to the arbiter why you didn't question the possibility*

*of the monument being moved? Let me remind you that you previously stated that you measured 3,234.45 feet between the monuments you found while the deed clearly calls for 3,233.82 feet."*

Questions like that cause the surveyor to stare at the questioning attorney with a look of bewilderment. I let several of these questions and the resulting answers go before I feel compelled to explain to the attorneys that certain facts are no more cause for concern than the number of clouds that will be in the sky next week. Fortunately for me, most attorneys that are involved in arbitrations are good real estate attorneys and don't seek answers from the obvious.

We work through the testimony in a methodical manner similar to trial – direct, cross, re-direct, re-cross, and so on. At this point, the only difference between an arbitration hearing and a court hearing is that I ask questions. I enjoy retracing boundaries so I have lots of questions. Often the lawyers become lost because my questions and the answers from the surveyors are spoken in technical terms. Whispered conversations between the lawyer and surveyor on the other side of the room are common as the other surveyor explains to his client's attorney what I asked and what the other surveyor said in response. I suspect the attorneys are clearly surprised at this point by my interest in the testimony. No doubt in court hearings, the judge is starting to nod off at this time. This is one reason why parties specify a surveyor as an arbitrator in boundary disputes.

Finally both surveyors are done testifying. Rather than leave the room, I'm surprised to see that they remain. No doubt they are waiting for a fight to erupt when the litigant-landowners testify. Rather than one side presenting their entire case then the other side presenting their case like a trial, my arbitration hearing lets each side offer a witness in turn. Attorneys seem pleased with the flexibility as they make deals to allow elderly witnesses or those with pending appointments or jobs testify and go on about their normal business. Hearsay and extraneous evidence run on without objection. My hand movements signal attorneys that I understand the marginal benefit of the testimony but to let it continue. Justice not only requires that the hearing be fair but the landowners sense they have been fairly heard. I listen to one witness explain why the



boundary should be in a certain location because her grandmother told her the boundary location when she was seven years old. I figure that must be almost forty years ago. I listen to this testimony attentively and with some amazement. In truth, I tend to forget what my wife asked me to pick up at the store an hour earlier. This person's memory must be remarkable, if true. I'm mindful that a conversation about a boundary to a seven year old some forty years ago is to be taken with some trepidation on my part.

Testimony brings in every rancorous act — dogs shot, trees cut, cuss words shouted, and so on. This is better than day-time television. Fortunately, the fight expected when the litigant-landowners testify does not occur. Apparently there is some deal between the attorneys to keep a tight reign on their client's testimony. Clearly the failure of a fight to break out disappoints some witnesses and the surveyors who stayed. Looking around the attorney's conference room at all the antiques and costly paintings, it is easy to see why at least one attorney is eager to prevent fights.

We have been at the hearing for six hours. All the testimony has been wrapped up. I now provide some closing comments. I ask the surveyors for their coordinate files so I can reconcile the different basis of bearings between the respective plats. Each surveyor has typically excluded measurement information about the other surveyor's location. There is some reluctance to hand over large coordinate files but the two surveyors quickly agree on providing coordinates for three common points so I can reconcile the different basis of their bearings. The attorneys can't follow the conversations that are occurring at this point. They got lost at the mention of coordinates. The surveyors ignore the attorney's bewilderment and promise to send me the information. That done, we review the arbitration agreement to make sure we are all clear on the leeway I am allowed in my decision. In some cases I must choose between one of two monuments. In this

case I can place the boundary wherever I feel a location is appropriate. The arbitration agreement in this case specifies that the parties will execute and exchange quit-claim deeds to seal the decision. I offer to prepare the descriptions for the deeds. I have seen too many descriptions and decisions prepared by attorneys and judges that are problematic. Often the description the judge prepares or adopts is worst than the description the parties were fighting over. The attorneys accept my offer with relief. I also put them on notice that my decision will require one or both parties retain surveyors to adequately mark the boundary I describe. They have no objection with that part of the decision even though it is unusual after a court hearing. Finally, I promise to publish my decision within two weeks after receiving the coordinates from the surveyors. Their clients will be pleased with the quick decision. They have waited over two years to get into court. Once they agreed to arbitration, a hearing date was set within three weeks and the decision followed in two weeks. Everything will be over in slightly more than a month. The judicial sleigh ride on their wallets is coming to an end.

A week later the coordinates arrive by electronic mail. My decision is reached after carefully considering the evidence and rules of construction. I have never had an easy time reaching a decision because I agonize over each piece of credible evidence. My decision is documented and sent to the attorneys. One will be pleased the other disappointed. I don't believe in splitting the difference unless the facts clearly show that to be proper. The landowners came for justice not reconciliation. I prepare an affidavit with a description of the boundary. The affidavit with supporting documentation is sent to the registry with the proper recording fees. I do this myself to make sure a record of the decision will exist for future landowners. The boundary location is fixed. No doubt the feuding will continue over some other matter.



# MINUTES OF THE 54<sup>th</sup> ANNUAL GENERAL MEETING

Held at Oak Island Resort  
Western Shore, Nova Scotia  
October 15 & 16, 2004

## Friday, October 15, 2004

1. President Jeff Fee called the meeting to order at 9:25 am. The meeting is governed by Robert's Rules of Order and common sense. The Parliamentarian is Phil Milo.

2. The out-of-province delegates and exhibitors were introduced.

3. **Introduction of Council Members:** President Forbes introduced the members of Council for the past year: Zone 1 - Erwin Turner; Zone 2 - John Logan; Zone 3 - Emerson Keen; Zone 4 - Garnet Wentzell; Zone 5 - Cyril LeBlanc and Stewart Setchell; Zone 6 - Greg Smith, Lawrence Miller, Robb Ashley and Terry MacGillivray; DNR representative - Keith AuCoin; Vice-president - John Ross; Past president - Forbes Thompson.

4. President Fee reviewed the order of business and meeting agenda. The order may be altered if there are no objections.

5. President Jeff asked that everyone stand and observe a moment's silence in memory of former members, John Robert Cameron, NSLS # 486, and Victor J. Comeau, NSLS # 184, who passed away during the last year. He offered his and the association's condolences to all those who lost loved ones this year.

6. **Secretary's Report on Convention Attendance and Membership Roll:** Fred Hutchinson reported that there are 140 NSLS's registered for the meeting. There are more than 35 present at the meeting, which exceeds the quorum requirement. Fred reported on membership and dues as follows:

Year	Dues	Reg	Life	Ret	Std	Hon	Assc	Non-Pr	Total
2004	\$800	187	20	35	24	4	0	0	270
2003	\$800	197	18	34	21	4	0	0	274
2002	\$800	203	16	35	21	4	0	1	280
2001	\$670	208	16	36	19	4	0	1	284
2000	\$670	216	16	35	17	3	0	1	288
1999	\$670	221	15	35	18	3	0	3	295
1998	\$670	225	15	34	14	3	1	3	295
1997	\$670	227	14	33	15	3	3	3	298
1996	\$620	239	14	31	15	3	3	3	308
1995	\$600	246	14	36	16	3	6	3	324
1994	\$600	254	13	31	14	4	7	3	326
1993	\$550	261	14	27	12	4	10	4	332

7. **Approval of the Minutes of the 53<sup>rd</sup> Annual Meeting:** It was moved by John Pope, seconded by Stewart Setchell that the minutes of the 53<sup>rd</sup> annual meeting, held on October 24 and 25, 2003 at the Delta Halifax Hotel, Halifax, Nova Scotia be approved as published in the Summer 2004 issue of *The Nova Scotian*

*Surveyor.*

Motion carried.

8. **Business Arising from the Minutes:** There was none.

9. **Report from the Secretary of the Board of Examiners:** Fred Hutchinson reported as follows:

The Board meets twice yearly

New members since the last annual meeting are Cory Sullivan, NSLS # 622 and Wayne Collet, NSLS # 623

There are 24 active student files plus a few incomplete applications. Professional exams will be written November 22, 2004. There are presently about 4 students that have the capability of attending next year's convention as members. One will be our third member under labour mobility.

Members of the Board for 2004 were: John MacInnis (Chairman), Kevin Fogarty, Forbes Thompson, George Sellers, Keith AuCoin (DNR Appointee), Paul Slaunwhite (APENS Appointee) and Bruce Gillis (Barrister Appointee).

I would like to thank all the Board members for their time and expertise. Examiners for the past year were John MacInnis, Doug MacDonald, Allan Owen, John Conn and Grant McBurney.

10. **Treasurer's Report:** Fred Hutchinson reviewed some details, including share value and dues revenue, of the 2003 audited financial statement as published in the Fall 2004 issue of *The Nova Scotian Surveyor*.

11. **Report from the Survey Review Department:** Gerry Bourbonniere had no additions to the SRD report published in the Fall 2004 issue of the "Surveyor". He addressed questions from the floor regarding the SRD Accounts Contract.

12. **Report of Scrutineers:** Vacant positions for Vice-President and Councillors in Zones 1, 4, 5 and 6 were filled by acclamation.

Zone 6 member, Brian Wolfe, has agreed to let his name stand for a term on Council unless there is a nomination from the floor.

Zone 1 member, Mark Whynot, has agreed to let his name stand for a term on Council.

It was moved by Jeff Fee, seconded by Jim McIntosh that Brian Wolfe be nominated as Councillor from Zone 6.

It was moved by Dan Gerard, seconded by Kevin Fogarty that Mark Whynot be nominated as Councillor from Zone 1.

Calls for nominations were repeated 3 times, after which nominations ceased.

Brian Wolfe and Mark Whynot were elected to Council by acclamation.

New members of the Executive and Council are:

President Elect	John Ross
Vice-President	Garry Parker
Past-President Elect	Jeff Fee
Councillor Zone 1	Mark Whynot
Councillor Zone 4	Frank Gillis
Councillor Zone 5	Raymond MacKinnon
Councillor Zone 6	Kevin Brown
Councillor Zone 6	Brian Wolfe

Retiring members of Council were thanked for their service and presented with plaques. They are:

Zone 1	Erwin Turner	Zone 6	Lawrence Miller
Zone 4	Garnet Wentzell	Zone 6	Greg Smith
Zone 5	Cyril LeBlanc		

Returning Councillors are:

Zone 2	John Logan	Zone 6	Lawrence Miller
Zone 3	Emerson Ken	Zone 6	Greg Smith
Zone 5	Stewart Setchell	DNRRep.	Keith AuCoin

**13. Report of Council and President's Activities:** Jeff Fee reported that Council addressed various issues, as follows:

- Discipline action cost recovery.
- Administrative Review Committee restructuring and terms of reference.
- Mandatory Continuing Education and seminar presentations.
- Land Registration Act and the Registry 2000 project to implement land titles in Nova Scotia.
- National Forum on harmonization for entry into the surveying profession.
- Survey Review Department - new staffing and systematic review mandate.
- Review of financial statements and budgets.
- Strategic Planning Committee.
- Represented ANSLs at various meetings across Canada. Gerald Pottier attended the Quebec associations' AGM as the ANSLs representative.
- Declining membership in ANSLs is an issue. CCLS is addressing it in part by trying to harmonize the entrance standards for students across Canada.

- CCLS director, Ray Pottier, attends Council meetings as an ex-officio member.
- Dealt with the HRM building moratorium.
- ANSLs has been part of changes at various government levels with respect to Registry 2000, the Land Registration Act, the HRM development moratorium, NSCRS reference system.
- A Strategic Planning Committee has been formed and a planning session will take place tomorrow.

The meeting was adjourned until Saturday morning, October 16, 2004.

#### **Saturday, October 16, 2004**

**14. Committee Reports:** The following committee reports were published in the Fall 2004 issue of *The Nova Scotian Surveyor*: Administrative Review, Complaints, Continuing Education, Discipline, Land Titles, Life & Honourary Members, NSCRS Task Group, Public Relations, Regulations, Statutes, Strategic Planning.

Report additions / updates:

Atlantic Provinces Board of Examiners for Land Surveyors (APBELS) - John MacInnis: The Board has not met since January 2002. The information for this report was forwarded to me last week.

The Nova Scotia members of APBELS requested a meeting in the summer of 2003, but the chairman and the registrar felt that a meeting was not justified. A conference call was promised but it has not happened to date.

2002: There were 9 registrations - 2 NB, 2 NL, 5 NS. Six certificates were issued - 3 NB, 2 NS, 1 NL.

2003: There were 14 registrations - 2 NB, 4 NL & L, 8 NS. Four certificates were issued - 1 NB, 3 NS.

As of December 31, 2003: 278 registrations, 135 certificates issued, 47 open files.

The Board has a positive bank balance.

NS Board of Examiners for Land Surveyors - John MacInnis: Report was given by Fred Hutchinson, Secretary to the Board of Examiners, in his report to this meeting on October 15, 2004.

By-Laws - Allan Owen: The committee has not met since last year's AGM.

Complaints - Glenn Crews: One of the issues that the committee is dealing with is complaints against retired members. If there is a finding of professional misconduct, forwarding the complaint to the Discipline Committee achieves nothing. If the member is not currently practicing, then the public is protected and there should be no further action required on the part of the committee. The



current mandate does not allow for this alternative.

**Continuing Education** - Grant McBurney: There will be at least one seminar before the next AGM, probably in late winter. No topic has been chosen at present. The MCE points tracking process should be in place by the beginning of the new year.

**Strategic Planning** - Keith AuCoin: Since the report was published in the "Surveyor", committee members have attended zone meetings to inform members about the direction of the Strategic Plan. The committee is encouraged by comments received so far. There will be a strategic planning session this afternoon. Member response and participation is very important.

**15. Introduction of Executive and Council for 2005:** Members of the Executive and Council for 2005 are:

President Elect:	John Ross
Vice-President:	Garry Parker
Past President:	Jeff Fee
Councillors:	
Zone 1	Mark Whynot
Zone 2	John Logan
Zone 3	Emerson Keen
Zone 4	Frank Gillis
Zone 5	Stewart Setchell, Raymond MacKinnon
Zone 6	Robb Ashley, Terry MacGillivray, Kevin Brown, Brian Wolfe
DNR Appointee:	Keith AuCoin

**16. New Business:** President elect, John Ross, assumed the chair and indicated to members that he wants to hear from them regarding the Strategic Plan.

John presented the President's pen and a Past President's pin to Past President elect, Jeff Fee, and thanked him on behalf of the Association.

Jeff Fee assumed the chair to deal with new business.

## **17. Motions for Consideration:**

### 2005 Budget

It was moved by Fred Hutchinson, seconded by Robb Ashley that the 2005 budget be approved as printed in the Fall 2004 issue of *The Nova Scotian Surveyor*.

Motion carried.

At this point, a strategic planning session took place. A report on the session and results from it will be prepared by the Strategic Planning Committee.

### Discipline Costs

**Whereas** disciplinary costs to the Association over the past 17 years have been in the order of approximately \$80,000 to the membership;

**And whereas** the Nova Scotia Court of Appeal has ruled that the *Land Surveyors Act* does not authorize the collection of costs for a discipline action from a member found guilty of professional misconduct;

**And whereas** the member, student member or holder of a certificate of authorization should be held accountable for disciplinary costs when found guilty of professional misconduct;

**And whereas** the Council of the Association desires to recover the costs of a discipline hearing, order and appeal;

**And whereas** the Council of the Association desires to add a fine provision to the possible dispositions which could be made by the Discipline Committee;

**Be it resolved** that Section 26(1)(f) of the *Land Surveyors Act* be repealed.

Moved by Ray Pottier

Seconded by Robb Ashley

Motion defeated.

**Be it resolved** that Section 26A be added to the *Land Surveyors Act* with the following wording:

26A

COSTS

- (1) Where the Discipline Committee finds a member or student member or holder of a certificate of authorization guilty of professional misconduct or finds that a person has obtained admission as a member, student member or holder of a certificate of authorization by reason of misrepresentation, the Discipline Committee may order that the member or associate member or other person pay the costs of the Council in relation to the matter, in whole or in part.
- (2) Where a member or student member or holder of a certificate of authorization is ordered to pay costs pursuant to subsection (1), such person shall not practice professional Land Surveying until such costs are paid at such time and on such terms as the Committee directs.
- (3) For the purpose of this section "costs of the Council" include:
  - (a) expenses incurred by the Council, the Board, the Complaints Committee and the

Discipline Committee;

- (b) solicitor and client costs, including disbursements and HST, of counsel for the Board, the Complaints Committee and the Discipline Committee.

**And be it further resolved** that the following subsection be added to Section 26(1) as (b) and the remaining subsections be re-lettered accordingly:

- (b) a fine not exceeding Five Thousand Dollars (\$5,000.00);

Which are now to replace current section 26 (1)(g).

Moved by Walter Rayworth      Seconded by Ray Pottier

With permission of the mover and seconder, the motion was amended by removing the words "*or associate member*" from proposed section 26A (1) to read in part:

**"... the Discipline Committee may order that the member ~~or associate member~~ or other person pay the costs of the Council in relation to the matter, in whole or in part."**

It was moved by George Sellers, seconded by Keith AuCoin that the motion be further amended by adding the words "*up to a maximum of \$15,000.*" at the end of proposed Section 26A (1) to read in part:

**"... the Discipline Committee may order that the member or other person pay the costs of the Council in relation to the matter, in whole or in part, up to a maximum of \$15,000."**

Motion to amend carried.

The question was called on the amended motion. Motion carried.

**18.** Past president Fee urged members to bring their concerns or issues to Council.

**19.** The 2005 AGM will be held on October 14 - 16, 2005 at Pictou Lodge.

**20.** At 5:20 pm it was moved by Gerry Bourbonniere, seconded by Brian MacIntyre that the meeting be adjourned.

F.C. Hutchinson, BA, NSLS, CLS  
Secretary

## QUIZ

(For answers, see page 28)

#	Questions taken from the Land Surveyors Regulations (dated 25 Nov '99), Sections 46-67	T	F
1	Only the surveyed boundaries of a plan should show a heavy line weight.		
2	Lettering is permitted outside a plan border if it is a file number.		
3	Plans should read from the bottom and right side only.		
4	The location map (key plan) does not need to be oriented to the diagram.		
5	Chord information can be used in place of an arc distance and its radius.		
6	All adjoining boundaries must be graphically illustrated on the plan.		
7	The title block can be located anywhere on the survey plan as long as it is legible.		
8	The name of the surveyor and company should be the most visible item on the plan.		
9	The date of the plan and Surveyor's Certificate should never be the same.		
10	The surveyor's seal must also accompany a Surveyor's Certificate when a plan of subdivision is submitted.		

# Surface Drainage

*by F.C. Hutchinson, BA, NSLS, CLS*

Reference to surface drainage as a topic excludes tidal waves, earthquakes and the melting of the polar ice cap. All, of which, have the capability of flooding a perfectly dry basement. The topic does, however, try to address the issue of the 100-year storm, building on a flood plain and generally ignoring the laws of nature.

The “dream home”, no matter the cost or location must take into consideration certain basic rules. Domestic water is under pressure so delivery from source to dwelling is usually not an issue. Sanitary and storm sewers from the dwelling are better left to gravity if there is a choice. Lift stations have a limited capacity during power failures.

What many homebuilders and owners are not aware of is upstream water and ground water. Both can be a blessing as well as a hazard. If you are to get your water from a well, then ground water is a blessing. If you build your foundation too low then groundwater becomes your enemy. Upstream water may be in the form of a trickling brook meandering through your yard on a warm summer day while the same brook becomes a threatening river with April rains and snowmelt.

There are many property owners who are afraid to leave their homes unattended for fear of sump pump failure. This applies to areas with municipal services as well as on-site sewer and water. Actually, the more urbanized properties tend to be at greater risk from surface drainage than rural properties. The smaller and more compact the development, the less room there is to channel water away from dwellings. The more developed the area, the more intense the runoff. The parking lot of the neighborhood mall sheds its water during a rainstorm much faster and with greater velocity than Farmer Brown’s cornfield or a rural woodlot. The downstream recipient is usually not impressed with poor drainage design.

Gravity is one of the laws of nature and its effect on water is that it seeks the lowest point in any landscape. It is important to consider natural

sources of water when building a new home. It is also important to be concerned about the vertical position the foundation and not just its horizontal position on the lot. Altering your house plans to fit the lot topography is desired over changing the lot to fit your house plans. Changing a lot’s topography may also have an adverse effect on adjacent land, which could result in liability for damages.

Many lot owners cut into the rear yard slope in an effort to obtain a nice level backyard. The result is that ground water becomes a problem and your backyard doesn’t dry out until mid-August. In an effort to drain the backyard many owners dig a trench to the street and install pipe and gravel (French Drain) that flows year round and in the winter months causes ice dams at curbside and in the street. If rear yards are sloped and the ground is also sloped away from the foundation, the result will be a surface swale that can handle the water and still be usable by the owner. The finished landscaped yard should not be less than six inches below the siding and the front yard should slope towards the curb.

Larger rural properties with on-site services are generally at least five times and often ten times the size of an urban “postage stamp” lot. Many rural lots have natural features such as brooks, swamps and open ditches that need to be considered when positioning a new home. Any attempt to alter these features may cause unwanted problem. The well should always be located at a higher elevation than the septic system and the basement floor should be higher than the septic field to allow a gravity feed. Lot conditions will sometime require a deviation from the previous suggestion but it is a goal that should be considered. The homeowner also needs to be ever mindful of low-lying areas that have a history of flooding and make sure that the low price of the lot is a “real deal” and not “real risk”.

A site plan that shows elevations and all cultural features drawn to scale at the design stage is highly recommended and in some municipalities it is a



requirement of the building permit process. If such a drawing is not prepared then the owner needs to have a good understanding of what is being proposed and the impact of the construction on the finished grade with respect to surface drainage.

Building a foundation one foot too high can usually

be fixed with a few truck loads of fill while the foundation built one foot too low is entirely a different situation and creates a long-term headache for all concerned. You should enjoy the sunshine if you take a vacation and not be the least bit concerned about the rainy weather back home. ☒

## Edmonton Chosen as Site for 2010 FIG Conference Bid

*G.K. Allred*

In late July and early August 2004, Markku Villikka, Executive Director of FIG and Ken Allred toured the convention facilities in Edmonton, Calgary and Vancouver examining potential sites for a Canadian Institute of Geomatics bid to host the 2010 Congress of the International Federation of Surveyors - FIG.

The Council of the Canadian Institute of Geomatics, which is the Canadian member association of FIG, has now selected Edmonton as the Canadian venue for a bid for the 2010 Congress. Edmonton was chosen primarily because of the cost factor. Based on convention centre and hotel costs a Congress in Edmonton would be considerably less expensive than either Calgary or Vancouver. FIG also considered the fact that several organizations such as the Alberta Land Surveyors' Association, Natural Resources Canada and the Alberta Director of Surveys are headquartered here.

Once the bid has been officially submitted it will go to the FIG Council which is expected to shortlist the bids received and put the short list together with a report before the General Assembly in Cairo in April for a final decision. It is not known at this time how many countries will be submitting bids but it is expected that there will be at least four bids submitted.

A Canadian contingent will be required to attend in Cairo to promote the Edmonton bid to members of the FIG General Assembly. Anyone who is interested in attending the Cairo Working Week of FIG from April 17-21 should contact the FIG in Ottawa or Ken Allred <gkallred@telusplanet.net>. Full information is available on the FIG website at <www.fig.net/cairo>.

Under the new FIG structure, the Congress will be organized by the FIG office in Copenhagen assisted by a local organizing committee of FIG members. A Congress Director will be appointed by FIG. This person may or may not be a local person. All financial contracts will be the responsibility of FIG. ☒

## Answers to quiz on page 26

1	True
2	False
3	True
4	False
5	False

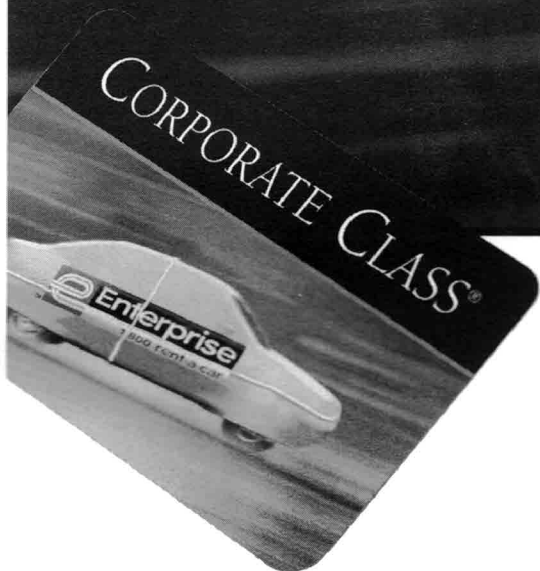
6	True
7	False
8	False
9	False
10	True

# You Belong.

Save Every Time You Rent A Car With The  
Association Of Nova Scotia Land Surveyors  
Corporate Class Business Rental Membership.

*Just look at all the benefits:*

- Choose from a great selection of cars, trucks and vans
- Get the special discounted Corporate Class rate on all your rentals, business and pleasure
- Free pick-up



The company that's famous for great cars, low rates, and free pick-up also offers a terrific business rental program to save you more time and money.

It's Corporate Class.

And with more than 6,000 locations, including all major airports across North America, it's a better way to go.



To reserve a vehicle, call 1 800 rent-a-car or visit us at [enterprise.com](http://enterprise.com)  
and refer to Corporate Account #9CA0787.

Pick-up is subject to geographic and other restrictions. ©2005 Enterprise Rent-A-Car Company.





# Wade Wide Format Solutions

**Sales • Rentals • Service • Printing  
Training • Technical Support**

- **Scanner Plotters**
- **Digital Systems**
- **Toner - Media**



**KIP Canada**



**Visit us at [www.wadecompany.ca](http://www.wadecompany.ca)**

**Halifax 902.429.5002  
1.877.256.9233 (wade)**

**St. John's 709.722.8772  
1.877.722.9233 (wade)**

**Saint John 506.634.1820  
1.800.838.4888**

**Dieppe 506.862.0020  
1.877.862.9233 (wade)**

**100% Atlantic Canadian Employee Owned and Operated**