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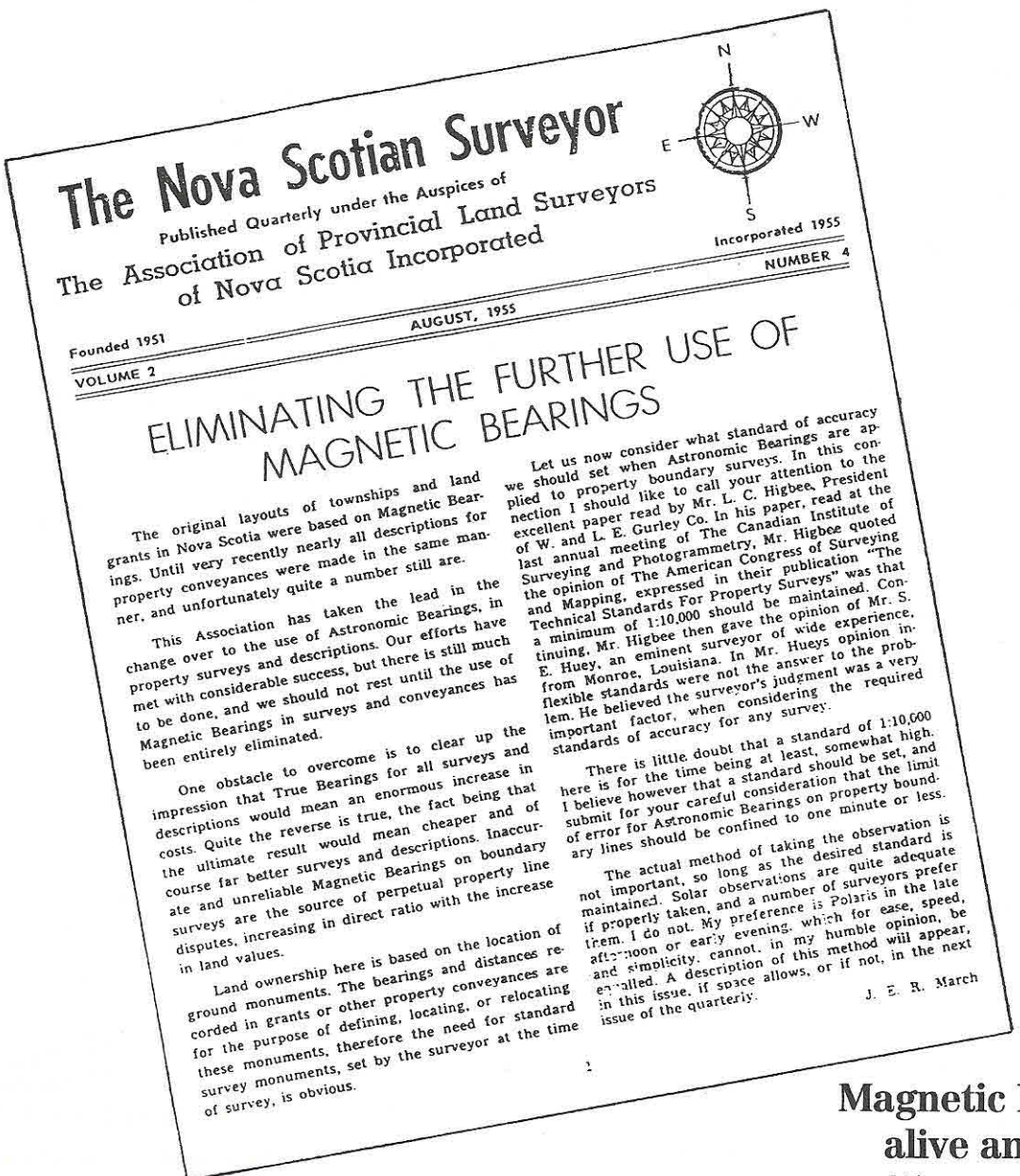
# THE NOVA SCOTIAN SURVEYOR

Summer 2000 No. 162



The Nova Scotian Surveyor

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VOLUME 2

## ELIMINATING THE FURTHER USE OF MAGNETIC BEARINGS

The original layouts of townships and land grants in Nova Scotia were based on Magnetic Bearings. Until very recently nearly all descriptions for property conveyances were made in the same manner, and unfortunately quite a number still are.

This Association has taken the lead in the change over to the use of Astronomic Bearings, in property surveys and descriptions. Our efforts have met with considerable success, but there is still much to be done, and we should not rest until the use of Magnetic Bearings in surveys and conveyances has been entirely eliminated.

One obstacle to overcome is to clear up the impression that True Bearings for all surveys and descriptions would mean an enormous increase in costs. Quite the reverse is true, the fact being that the ultimate result would mean cheaper and of course far better surveys and descriptions. Inaccurate and unreliable Magnetic Bearings on boundary surveys are the source of perpetual property line disputes, increasing in direct ratio with the increase in land values.

Land ownership here is based on the location of ground monuments. The bearings and distances recorded in grants or other property conveyances are for the purpose of defining, locating, or relocating these monuments, therefore the need for standard survey monuments, set by the surveyor at the time of survey, is obvious.

Let us now consider what standard of accuracy we should set when Astronomic Bearings are applied to property boundary surveys. In this connection I should like to call your attention to the excellent paper read by Mr. L. C. Higbee, President of W. and L. E. Gurley Co. In his paper, read at the last annual meeting of The Canadian Institute of Surveying and Photogrammetry, Mr. Higbee quoted the opinion of The American Congress of Surveying and Mapping, expressed in their publication "The Technical Standards For Property Surveys" was that a minimum of 1:10,000 should be maintained. Continuing, Mr. Higbee then gave the opinion of Mr. S. E. Huey, an eminent surveyor of wide experience, from Monroe, Louisiana. In Mr. Hueys opinion inflexible standards were not the answer to the problem. He believed the surveyor's judgment was a very important factor, when considering the required standards of accuracy for any survey.

There is little doubt that a standard of 1:10,000 here is for the time being at least, somewhat high. I believe however that a standard should be set, and submit for your careful consideration that the limit of error for Astronomic Bearings on property boundary lines should be confined to one minute or less.

The actual method of taking the observation is not important, so long as the desired standard is maintained. Solar observations are quite adequate if properly taken, and a number of surveyors prefer them. I do not. My preference is Polaris in the late afternoon or early evening, which for ease, speed, and simplicity, cannot, in my humble opinion, be equalled. A description of this method will appear, in this issue, if space allows, or if not, in the next issue of the quarterly.

J. E. R. March

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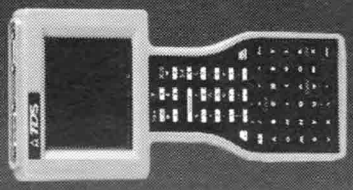


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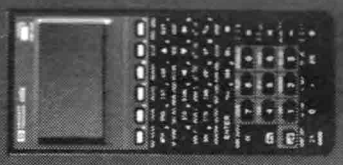

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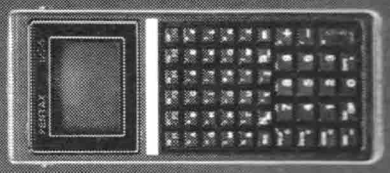


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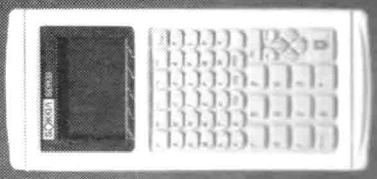


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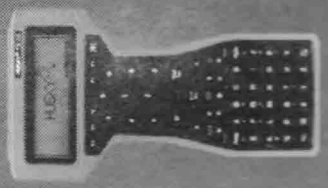


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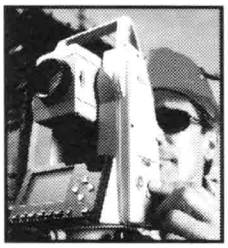

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THE
NOVA SCOTIAN
# SURVEYOR

SUMMER 2000 No. 162

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**THE NOVA SCOTIAN SURVEYOR**

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## PRESIDENT'S REPORT

*David Wedlock, NSLS*

Since my last report I have represented you at survey conventions in Ontario, Alberta and Saskatchewan. Although there are different issues brought up at these meetings, there is a common message that is conveyed and that is that the survey industry in Canada is in great shape. The private survey firms in each of these provinces all appear to be busy and are expecting to have an active summer field season. In Western Canada the Oil industry has come around again and is generating a lot of work in exploration surveying. Also legal and construction surveying appears to be at an all time high.

In February I attended the 108th Annual Meeting of The Association of Ontario Land Surveyors which was held at the Chateau Laurier Hotel in Ottawa. At this meeting the AOLS approved a new category of membership, "OLIP", Ontario Land Information Specialist. This designation may now also be used by Ontario Land Surveyors. At the time of writing this report the AOLS have inducted fifteen new members into this category and they currently have seventy–five waiting to be processed, all of whom are in the GIS field. This is a concept that should be investigated within our Association.

In March I attended the 91st Annual Meeting of The Association of Alberta Land Surveyors . This meeting was held at Jasper Park Lodge in Jasper Alberta. The presidents from all provincial survey associations were in attendance at this meeting as well as representatives from CIG, CLS and ACLS. At this meeting the members approved the concept of a coordinate-based test project. The objective of the project will be to validate or refute the decision to move to a coordinate based cadastre. In the project two trial subdivisions of approximately 100 lots will be evaluated over five years. One subdivision will be developed under conventional monumentation, while the second will be developed without monumentation. These subdivisions will be established in urban areas in Alberta. The final output will be a report validating or rejecting the concept of a coordinate based cadastre.

In May I attended the 90th Annual Meeting of The Association of Saskatchewan Land Surveyors. This meeting was held at Waskesiu Lake in Prince Albert National Park. This was a much smaller meeting than the Alberta meeting however still interesting and informative. The SLSA, along with the other Western associations, is seeking changes to the survey program at the University of Calgary. This topic took up considerable time at the meeting. In short, they are looking for a greater emphasis on cadastral surveying at U of C and they would like to see the current course broadened to suit the needs of the cadastral land surveyor. A June meeting is planned with U of C and the Western Presidents.

In October (19, 20, 21) we will be holding our annual meeting at the Pines Resort in Digby. As this will be our 50th annual meeting we are expecting a large turnout from our members and from invited guests from across Canada and the United States. The Convention Committee has been working hard to make this an eventful Annual Meeting. The committee has incorporated many of your suggestions that were collected from the zone meetings. The seminar on Thursday the 19th will deal with GPS and Map Projections and will be presented by Ray Pottier, NSLS. The committee chose this topic as it was one that was requested from many of the zone meetings held during the past winter. At this meeting you will see more exhibitors representing a wider variety of survey and software related products. On the fun side there are some special events planned for the Icebreaker on Thursday and a new event is planned for the Friday social evening. So watch your mail for the convention schedule and set some time aside to attend your 50th Annual Meeting.

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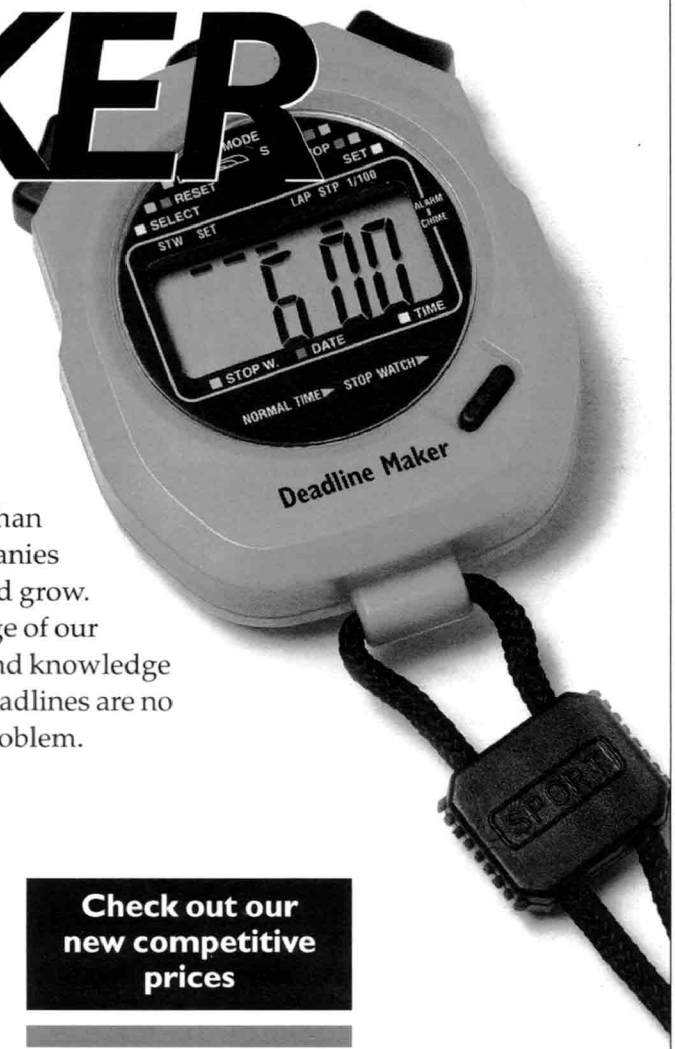


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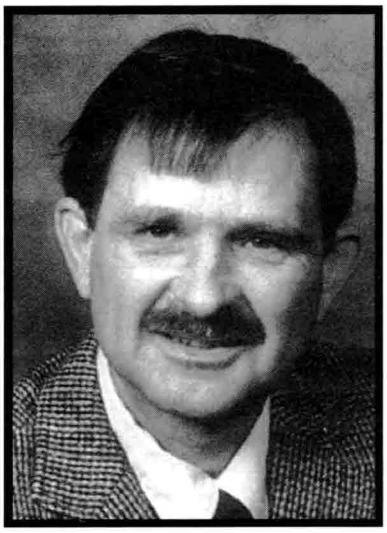
# EXECUTIVE DIRECTOR'S REPORT

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



T'is the season for black flies and wood ticks. Ah, what a wonderful profession. Especially when you combine that with a boundary dispute between neighbors who have developed a dislike for each other.

There is no lack of boundary disputes in our fair province. I guess it is the nature of our registry system and the quality of monumentation that has or has not been placed over the years. Too often surveyors are contracted to solve a dispute about the position of a boundary and 50% of the problem is the owners' attitude. Many times it is a "no win situation" for any surveyor. If you agree with the survey of the adjacent property your client feels that you have collaborated with the enemy. If you pick a location that conflicts with a previous survey then the war is on.

The surveyor should always be mindful of the repercussions of his or her actions when establishing a boundary line. If you are the second surveyor on site then there is a 100% chance that your opinion will be challenged. Is the first surveyor aware of all the data collected to date? Does the possibility exist for a third opinion? You may be dealing with a lost boundary or using evidence that does not relate to an original survey. The surveyor should always advise a client that his or her opinion is just that, an opinion. It is always subject to challenge. Is the information used the "best evidence" and are you prepared to go to court and defend your survey? Should a conventional line be considered?

Boundary disputes are not likely to disappear anytime soon, but can the practicing surveyor reduce the litigation with respect to disputes? You can and should counsel your client to the best of your ability but bear in mind that the surveyor is not an advocate for a client. Consideration must always be given, however, to the rules and regulations that govern the profession, the standard of practice as well as case law. Remember that a boundary line is something that must be shared, like it or not. The rights of both owners must always be considered when a boundary line is positioned. Responsible communication and full disclosure of evidence are guidelines worthy of consideration.

Mark the dates of October 19-21, 2000 on your calender this very minute. These are the dates for the Association's 50th annual meeting. The location is the Digby Pines Resort, right in our own backyard and one of the finest resorts in Canada.

The Association is a co-sponsor for the Geomatics Atlantic 2000 conference to be held in Halifax on September 25-27, 2000. We are also participating in a workshop on a GIS topic during the conference. For further information you can check the convention website at www.geomaticsatlan tic. com

Under the direction of CCLS with support from the provincial and federal governments, all the survey associations of Canada are discussing labour mobility as it relates to the Agreement on Internal Trade. A meeting is scheduled for September 8-9, 2000 in Ottawa. For more information check out the labour mobility site at www.hrdcdrhc.gc.ca/stratpol/lmp/mobility/mobility. shtml

Have a great summer and here's hoping that you don't develop an allergy to bug spray. ■

# SRD MANAGER'S REPORT

*by A.E. MacLeod, B.Sc, B.Ed, NSLS*

The number of plans received and SLC sales for this year show that we are on track with last year. It is interesting to note that traditionally we receive only one third of our submissions in the first half of the year or, to put it another way, our workload doubles in the last six months.

I continually try to improve the way plans are reviewed and the results addressed to the members. Recently, a member suggested I contact surveyors to discuss aspects of their plans prior to completing my review. This seems to have improved the effect of the review. Additional details are revealed about the individual projects and the surveyor is more understanding about why certain remarks are made. If you receive a phone call or e-mail from me about one of your plans it is because I want to make sure that I fully understand the intent of your plans under review.

Another way to make sure that the proper information is reviewed may be to submit either approved plans or at least photocopies of the approval stamps along with the plans. In most cases the purpose of the plan is obvious while in others it can be quite difficult to fathom, as when a plan is used for different approvals than the title block suggests.

The morning session of the Continuing Education Seminar on May 26 featured presentations from two surveyors and a lawyer on Legal Descriptions and the afternoon session was devoted to plan checking. Everett Hall, Lester Berrigan and Brian Anderson each allowed a plan to be scrutinized by their peers. I thank them very much for this.

Phil Milo and Doug MacDonald spoke on the preparation of descriptions and a local real estate lawyer, Stephen Russell, talked about how barristers and the public value the description and the fact that the description should only be prepared by a land surveyor.

The plans were inspected using a check list based on our regulations. The ensuing discussions revealed some of the difficulties encountered examining plans when the underlying history of the plan is not known to the reviewer. Some surveyors believed that more infractions existed but in actuality their own conventions were clouding the actual regulations.

One plan highlighted the fact that some Development Officers, in abiding by their own subdivision bylaws, are instructing surveyors to prepare plans that contradict our regulations. When a lot is being increased in size it does not always require all of the new lot to be surveyed, only the additional piece. Our regulations state that we are to place a heavy line around the area surveyed yet some subdivision bylaws require the entire new lot to be shown using the darker line. The surveyors prepare the plan to accommodate the DO requests. When the 'Only boundaries surveyed ...' note is added it contradicts the diagram of the plan again. Currently, Council is discussing this matter.

I would like to remind the members that when the location of a new structure is added to a retracement or subdivision plan then the certificate form as shown in regulation 141 should be used, an SLC number added and a copy submitted.

GPS technology is starting to take hold in Nova Scotia. I encourage any member who is interested in becoming involved to seek appropriate training since we market ourselves as being experienced professionals.

# Subject to Survey

*by Ian H. MacLean, LL.B*

A lawyer searching title to a property for a client will provide what is known as a Certificate of Title. This Certificate will ordinarily certify that the title to the property is clear, subject to certain specified exceptions, including a statement that the Certificate is "subject to survey"

The Certificate of Title verifies registered ownership of a particular parcel of land, but cannot determine its size, location, or whether or not there are buildings located on the land.

It is important to know the boundaries of your property, so that you will not mistakenly trespass on neighboring lands. This is of particular importance when carrying out harvesting operations on woodlands, given the dire consequences which can result from cutting across the boundary line. In such cases the "guilty" party (whether it be the contractor or the landowner, or the contractor and the landowner) will predictably face costs or penalties significantly exceeding the stumpage or standing value of the forest products which were wrongfully harvested. In Nova Scotia the Crown Lands Act provides that:

> *"The Court may order a person ... to restore the land to a condition as near as practicable as it was before the offence was committed and pay an amount equal to twice the market value of the timber or other resources cut, damaged or removed".*

Of course this Act applies only in cases of Crown lands. However a practice has developed in some areas, whereby double stumpage is used as the rule of thumb in cases where wrongful harvesting has taken place on private lands. While most of the Court decisions dealing with trespass or wrongful harvesting of forest products don't refer specifically to double stumpage, the Courts have generally been prepared to compensate the innocent landowner by ordering the guilty party to pay significantly more than the stumpage value. In some case the Courts have decided that the value of the trees after they have been cut (i.e. the roadside price) is the appropriate measure. In other cases, the Courts have considered the stumpage value and then added costs such as survey fees, legal costs, site restoration, replanting, and so on. There have been instances where the Courts have considered the special value to the innocent landowner of the trees or of the property itself. Calculations of this special value can result in a much larger Court award being made against the guilty party.

Of course this logic is not limited to woodlots. The same calculations of damages would apply in other cases where trespass occurs, whether it be for the purpose of removing gravel, farm crops, or whatever.

In the preceding paragraph I used the word "guilty". Certainly in cases where it appears that the trespass was deliberate, the costs to be paid by the guilty party can be higher than in a case where the trespass was innocently committed. However, even where the guilty party sincerely believes that he/she had the right to carry out work on the area in dispute, the innocent party is entitled to compensation. In most cases it will be possible to avoid these headaches and heartaches by relying upon a survey of the lines of the property. Having said that, we have to recognize the fact that the determination of a line by a surveyor is merely a statement of that surveyor's opinion as to where the boundary should be. Generally speaking, a surveyor running a line established earlier by another surveyor will come up with a similar result, but this is not always the case. Sometimes differences of opinion arise between the surveyors. This can then be resolved by Court action or preferably by reaching agreement in writing ( in the form of a properly executed and recorded Line Agreement) made between the affected landowners.

Many boundary disputes result from poor description of the properties in question. Most of us have seen Deeds which use, as a starting point in the legal description, reference to "a large oak tree". Eventually that tree will die, and through the passage of time there will be no evidence of its existence. This is problematic. Even worse, I have on occasion seen reference, in Deeds, to a starting point which is identified as " a small spruce tree" . In such cases confusion is bound to occur: it is a certainty that the small spruce tree will either become bigger or it will die! In neither case will the starting point be identifiable in years to come.

The difficulties associated with establishing boundaries are discussed in detail in a book entitled *SURVEY LAW IN CANADA, A COLLECTION OF ESSAYS ON THE LAWS GOVERNING THE SURVEYING OF LANDS IN CANADA*. At page 121 of that book, the following statement appears:

> *"At all times, the location of a boundary of a parcel is a question of fact to be based on evidence. The orders of reliability of evidence that are definitive of a boundary reflect those things which the Courts have found least likely of error, namely first preference to the natural boundaries of parcels; second preference to original monuments placed or recognized by survey; third preference to features of possessory evidence that can be related in time to the original survey (this is not adverse possession) and fourth, preference to measurements".*

It is not safe to assume that because your Deed calls for one hundred acres, that you in fact have title to one hundred acres. In fact, in one Nova Scotia case [Aberg v. Rafuse (1979), 36 N.S.R. (2d) 56], the description of the lot called for 374 acres. A survey carried out after the property had been sold determined that only 58.53 acres existed. The purchaser was not happy, and he sued. He lost, primarily because he did not have a survey carried out before buying the property.

Once the boundaries of the property have been properly identified, it is vital that they be maintained. This is a case of an ounce of prevention being worth a pound of cure. It is simply common sense to take the time and effort to renew the lines from time to time while it can still be done by the landowner, having reference to clear evidence as to the location of the boundaries.

A surveyor friend of mine once described the ancient English practice of "beating the bounds". The landowner, recognizing the importance of marking and preserving one's boundaries, would take his child, and heir apparent, on a walk around the boundaries of the property, and at each corner he would physically discipline the child. The theory was that this would mark forever upon the child's mind the exact location of the boundaries. No doubt it was effective, although very cruel. Having said that, I believe that it is important that we involve our children, at an early age, in the task of identifying and renewing boundary lines. This can serve to avoid unnecessary expense and difficulty in the years to come.

It should be remembered that a Deed describes land and not the buildings which may have been erected on that land. Similarly, the Deed contains no reference to driveways (unless the access happens to be by way of a right of way specifically described in the Deed), fences, wells, or other improvements made to the lands. The only way to determine, with certainty, the location of the buildings and other features is reliance upon a survey plan or a surveyor's location certificate. Banks and other mortgage lenders recognize the fact that a lawyer's Certificate of Title is subject to survey, and thus approval of mortgage financing has traditionally hinged upon provision of a surveyor's location certificate or a survey plan.

It is important to understand the differences between a survey plan and a location certificate. A survey plan is more detailed ( and consequently somewhat more expensive) as it involves surveying the outside perimeter of the property and placing survey markers at each corner. The surveyor ordinarily prepares a survey plan, and this plan shows the location of the buildings and it also shows other significant features. A survey is almost always required when creating a new lot of land.

In cases where an already existing lot is changing hands, a survey is not required although it may still be recommended. Instead the prospective purchaser may choose to have a surveyor prepare a location certificate. A location certificate is a sketch prepared by a sur-

veyor, and it provides a general indication of the size and shape of the land according to the plan or legal description upon which title to the property is based. Bear in mind the fact that it does not involve a full survey of the outside perimeter of the property, and this service does not include the placing of survey markers. However, a location certificate will show buildings, easements, rights of way and other significant features affecting use or enjoyment of the property.

A prospective purchaser might be lulled into a false sense of security when buying a property which supposedly includes a house and outbuildings. The present owner may be maintaining an area of land which appears to coincide with the description contained in the Deed, and which encompasses the land upon which the buildings and driveway are located. However, there are many, many cases where the present owner is occupying a piece of land which does not coincide with that to which he holds title. Many difficulties of this nature stem from the days, in the not too distant past, when it was possible to create a new lot of land without a survey and without going through the formalities of the sub-division process. Typically the buyer and/or the seller at the time of creation of the lot in question would simply conduct their own measurements on the ground, and a Deed would be prepared based upon those measurements. There was no process in place to verify the accuracy of those measurements. Accordingly, there have been a great many cases where the land, as described, does not coincide with that which has been occupied by the present and previous owners. This can give rise to serious problems, particularly if any portion of the house lies across the boundary line.

Difficulties of a different kind can arise even in cases where a lot was properly surveyed at the time of creation. Sometimes home builders are careless or act based upon erroneous information when choosing the location of a house or other buildings. Many municipalities have building set-back requirements which dictate the location of a house relative to the street or road and relative to the side-lines. Failure to comply with these requirements can give rise to serious problems. A properly prepared location certificate will identify such a problem, if indeed it exists.

This article may sound like a paid advertisement for the Association of Nova Scotia Land Surveyors. It is not. Rather, it is an attempt to illustrate the complementary roles of a lawyer and a land surveyor, and to identify some of the pitfalls that lie in wait for those who do not recognize the importance of a surveyor's location certificate or survey plan.

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*Ian H. MacLean is a lawyer practicing with the firm of MacLean and MacDonald in Pictou, Nova Scotia. He has a special interest in real estate law, and in matters involving real property.*

## *Letter to the Editor:*

For those members interested in reading books having a flavour of surveying, I would recommend three paperback mysteries written by Norman Valkenburgh, a land surveyor in upstate New York. *Murder in the Catskills, Mayhem in the Catskills* and *Mischief in the Catskills* all feature Ward Eastman, PLS as the protagonist.

Valkenburgh's books hold a special appeal for those of us in the land surveying profession, as the stories have to do with the land and the people who occupy it. The author uses genealogies, chains of title and survey descriptions to create plots familiar to most of us who, from time to time, have found evidence of old family jealousies and rivalries while researching various land survey records.

These three books are available through Purple Mountain Press, PO Box E3, Fleishmanns, NY 12430 or by telephoning 914-254-4062.

Dave Clark - November 1999

# DIMENSIONS

BY F.C. HUTCHINSON, BA, NSLS, CLS

An important part of surveying is the ability to determine the length of a boundary line. A review of deeds, plans and physical evidence is necessary to determine if any conflict or agreement exists. Is an area stated? Are the distances in chains, feet or metres? Does the deed even make reference to a distance? These are serious concerns for the surveyor in the establishment of existing boundaries.

The deed may only describe a property as being one acre more or less. This would produce a plot of land 43,560 sq. ft. that might measure 208.71' x 208.71' or it could also measure 66' x 660' (1 chain x 10 chains).

The chain is an interesting unit in that it can be divided into an acre evenly. Ten acres would therefore be 10 chains by 10 chains. Ten chains also equals 220 yards or one furlong. There are 8 furlongs or 80 chains to a mile (5280'). A chain is made up of 100 links that measure 7.92 inches long. One perch, pole or rod equals 16½ feet or 25 links.

The foot was determined by the actual measurement of a man's foot or, as some reports suggest, it was the average of the left foot of the first 16 men out of church on a particular Sunday. The cubit, an ancient and obsolete unit, was derived from the distance between the elbow and the tip of the middle finger and is considered to be 18 inches. The Bible cubit was 21.8 inches. This would mean that Noah's Ark was 545' (300 cu.) long, 90.8' (50 cu.) wide and 54.5' (30 cu.) high.

There have been many forms of measurements throughout history and most differed from country to country. Today's surveyor has the benefit of a standard unit of measure that is accepted worldwide but he or she still needs to have an understanding of the measurements described in an old deed.

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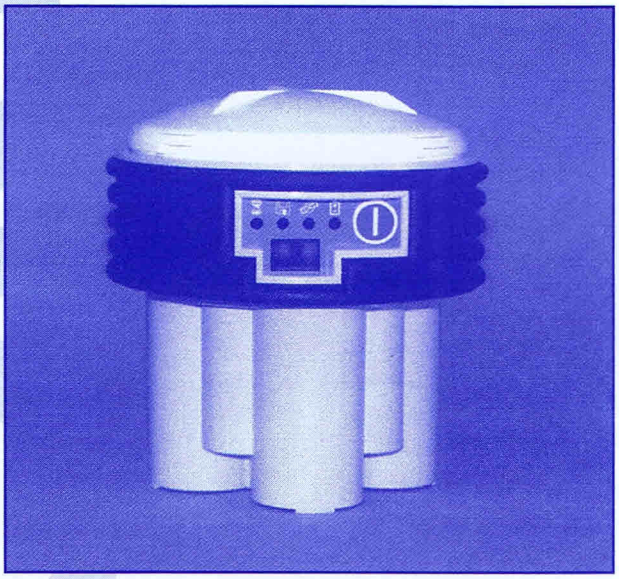

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# *A QP2 Be or Not To Be - That is the Question!*

*by James Gunn, NSLS, CLS*

As of April 17, 2000, inspectors of the Nova Scotia Department of the Environment (NSDOE) ceased to provide the public with free soil analysis and design of on-site sewage disposal systems. This activity has been downloaded to a select group of qualified persons in the private sector.

There are two categories of persons qualified to undertake this activity; QP1 and QP2. Simply put, a QP2 is limited to selecting pre-designed systems from a set of published guidelines for residential applications. A QP1 is a P.Eng. who designs systems for any and all applications. The operative word that distinguishes one from the other is "design".

At present, there are seventy-four QP2's listed on the government's web site http://www.gov.ns.ca/envi/DEPT/qpersons.htm. Of these, 18 are Nova Scotia Land Surveyors. For the most part, the other fifty-six QP2's are either licensed installers or former employees of NSDOE.

For a person to become a QP2, he/she must be from one of the three groups mentioned above (ie. NSLS, licensed installer or former NSDOE employee).

Candidates must take a QP2 course, pass a test, pay an annual fee of $250, carry suitable professional liability insurance and participate in a mentoring process. The first QP2 course was offered in 1997 by senior management from NSDOE and professional educators from Dalhousie University. Only 20% of the candidates passed this challenging course. Since then however, subsequent courses have been contracted out to a private firm and pass rates are 100%. If the QP2 course is to have any credibility, NSDOE must find some middle ground in the examination process.

It is certainly logical that land surveyors who work in rural areas should become QP2's. For example, a soil analysis is now required each time a property is subdivided. Since the lot size is determined by the soil analysis, it is best done at the same time as the survey. In other words, analyzing soils has become part of the subdivision process. It only makes sense that the procedure be done by the land surveyor.

By the same token, it is also logical that QP2's should be land surveyors. How else can a QP2 certify that a system is no closer than 3 metres from a boundary if the QP2 is not a land surveyor? In most cases, the title documents must be examined and the location of the boundaries must be known before a system can be configured on a property. This usually entails a site survey to locate the boundaries and all the other controlling factors (ie. wells, slopes, watercourses, foundations, etc). Only then can the system be positioned properly.

QP2's are also responsible for inspecting the system and issuing certificates of installation. The NSDOE has created a potential conflict of interest in allowing installers to become QP2's with the ability to inspect and certify their own work. This is highly irregular because, as a rule, only members of self-regulating and self-governing professional groups, such as land surveyors, chartered accountants and lawyers can certify their own work. Until the QP2's attain this level of professional status, it would be in the public's best interest if the installation and inspection were performed by different people.

Surveyors should pay particular attention to the fact that many of the QP2's activities cannot be delegated to subordinates. The QP2 must personally conduct the soil analysis and inspect the system on completion. Furthermore, everything the QP2 does is still subject to approval by the NSDOE and this approval can be slow in coming. Applications are long and detailed and we are told they may be returned if not complete in every detail.

The QP2's most important resource in this whole process is the local NSDOE inspector. It is absolutely essential to develop a solid relationship with this person. For the most part, these inspectors are experienced and knowledgeable and they can be extremely helpful and supportive. Many situations will require minor variations from the regulations and your local inspector can stick handle them through the system or stop them dead in their tracks.

Even though the government has officially turned this activity over to the private sector, things are far from settled. Procedures within the NSDOE and between NSDOE and the QP2's are still being developed. Paper is not yet flowing smoothly throughout the system. The best thing surveyors can do to help develop these new services is to provide a highly professional product. Each application should have a detailed sketch drawn to scale and showing offsets to the boundaries. Our product would soon become the standard that NSDOE expects from a QP2.

One last word of caution: although the CCLS / ENCON insurance policy for surveyors covers QP2 activities, not all insurance policies do. If you are with another insurer, make sure that your activities are covered and make sure the pollution exclusion clause is removed from the policy. Otherwise you may not be properly covered for QP2 work. Check your policy. If is has a pollution exclusion or if QP2 activities are not covered in the insuring agreement, you should consider another policy. There are a couple of insurers offering a specific package for QP2's for $750 per year. For this additional insurance you get a lower deductible and a higher limit. If you do decide to carry an additional policy, make sure you understand the "other insurance" clause in each policy.

## *One Man's Junk is Another Man's Treasure*

Jim Gunn, NSLS, CLS

You will never guess what has become a highly treasured collectible. You probably even have a couple in your junk drawer. The most treasured is an HP 35 working or not! One fetched more than $500 US on eBay recently!!! Can you believe it?

# HISTORY OF SURVEYING: HOW THE ROAD GOT ITS NAME

*From "Public Roads of the Past", by Albert C. Rose, Washington, DC: America Association of State Highway Officials, 1953. As seen in The Association of Manitoba Land Surveyors' periodical "The Quarter Post", Summer 1993.*

The guttural source words for ***road***, uttered in primitive Europe long millenniums ago at the beginning of the Stone Age (? BC) and even at the dawn of the Bronze Age (3,500 BC) or the Iron Age (1,000 BC), perhaps will remain secreted forever in the womb of time. The modern Indo-European languages into which these words or their derivatives became embedded include the principal speeches of Europe as well as the Indo-Iranian and other Asiatic tongues. The most familiar early types of these languages are the Latin in the West and the Sanskrit in the older East, where we find the first intimation of a word for *road*. In the Sanskrit, as early as the fourth century before the Christian era, as well as in the later Latin, the meaning of these original words was dominated by the idea of *movement* in one of its aspects, such as: (1) The character of the motion; and (2) the mark left upon the ground by the moving person or object. Many names of vehicles were derived later from these basic names for the path of travel.

The most ancient and generic term of all seems to be an antecedent of our word ***way***. It means the track followed in passing from one place to another. Our modern word stems from the Middle English, *wey* or *way*, which in turn branches from the Latin word *veho*, I carry, derived from the Sanskrit *vah*, carry, go, move, draw or travel. Our twentieth-century words *wagon* and *wain* may be traced back to the Middle English *wain*; Old High German *wagan*; Dutch and German *wagen*; Anglo-Saxon *waegan*, from *wegan*, to move, rooted in the Latin infinitive *vebere*, to move or carry. The modern word *vehicle*, from the Latin *vehiculum*, also has *vehere* as its ancestor and before that, the Sanskrit *vahana*, a vehicle.

The word *highway* harks back to the elevated *agger*, the mound or hill of the Roman road formed by earth thrown from the side ditches toward the centre. In old England, these raised, or high, ways were under the protection of the King's peace and open to public, unrestricted travel as distinguished from byways or private roads.

Our familiar word *road* is of comparatively recent origin. It is used only once in the King James version of the Bible (translated 1604 to 1611) and then in the sense of a raid or foray (1 Samuel 27:10). William Shakespeare (1564 - 1616) uses the term in the sense of a common road only three times out of a total of sixteen. The other meanings are a raid, a riding or journey on horseback, or a roadstead where ships ride at anchor. The word is derived from the Anglo-Saxon *rad* from *ridan*, to ride, and the Middle English *rode* or *rade*, a riding or mounted journey. It means usually a rural way, as contrasted with an urban street which originated in the Latin *strata via*, a way spread or paved with stones.

The second group of source terms may be illustrated by our words *trail*, *track* or *trace*, describing a mark left upon the ground by sled runners, feet, wheels or other means from the Latin *traho*, *trahere*, *traxi*, *tractum*, translated draw; the Middle English *trailen*; and the Old French *trailer*, to tow.

The Anglo-Saxon *pacth*, akin to the Dutch *pad*, gives us our modern *path* and probably takes its origin from the manner in which the earth is beaten by the foot, Sanskrit *pad* and Latin *pes*.

Our words *route* and *rut* are the survivors of the Latin *via rupta*, meaning a way cut through the forest or broken by a plow, wheel or other means.

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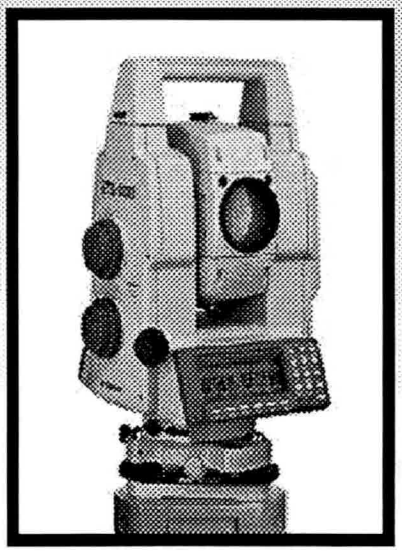


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# SOME INTERESTING CASE LAW

*BY JAMES GUNN, NSLS, CLS*

A recent survey produced some very interesting case law that may be of interest to our members. About fifty years ago, my client's father decided to convey a portion of his property to a neighbour. He went to his lawyer who made up a deed for the piece to be sold. Unfortunately, the lawyer inadvertently omitted a reservation for the remnant. Consequently, title to the entire property changed hands even though separate occupations continued over these many years.

This oversight recently came to light and everyone, including the neighbour, wants to correct the error. The problem being: the remnant portion of the property on which my client's family resided is not large enough to qualify under today's subdivision regulations.

I was surprised to learn from my client's lawyer that he only requested a quit claim deed from the neighbour, accompanied by an affidavit or two from local residents. He did not feel that subdivision approval was required and he based this reasoning on recent case law in Ontario and Nova Scotia. In the Ontario case of MacMain v. Hurontario Management Services Ltd., the judge concluded that: "The portion of the vendor's landholding that was not included in the proposed conveyance had been acquired by adverse possession of the vendor's neighbour. The proposed conveyance simply recognized this fact and was tacit admission that the adjacent landowner had acquired title to the omitted property. Consent under the Planning Act is not required where the description in a conveyance simply makes the paper title coincide with the actual possessory title."

This case was recognized by a Nova Scotia Court in a quieting of titles application where the vendor had obtained a confirmatory deed which described his lot as occupied by various owners since 1958. The purchaser objected to the title, arguing that subdivision approval was necessary since the configuration of the lot had been changed and other land included. Sanders, J considered the wording of the Planning Act and the case of MacMain v. Hurontario Management Ltd. and, being satisfied that the purpose of the applicant was to correct an error in conveyancing and not any improper purpose to defeat the provisions of the Planning Act, ordered that subdivision approval pursuant to the Planning Act was not required for a valid conveyance to the purchaser. [1]

[1] Nova Scotia Real Property Practice Manual, C.W. MacIntosh, chapter 8, Subdivision and building control, issue 24, Buterworth Publishing Co.

## QUOTES TO CONSIDER

The money you save each month after the mortgage is finally paid off can be found in the same place as the cash retained after giving up cigarettes.

There's always a good crop of food for thought. What we need is enough enthusiasm to harvest it.

It's interesting. Some citizens are of the opinion that society rather than the criminal is responsible for the crime. They think that right up to the time that society breaks into their car and steals their CD player.

There are approximately 200,000 useless words in the English language. It seems that we hear all of them every time an election rolls around.

# EXCERPTS FROM A SURVEYOR'S DIARY

## as seen in *The Nova Scotian Surveyor*, Volume 3, No. 8, August 1956.

*'From the Journal kept by Valentine Gillis during the course of surveys for the Shubenacadie Canal System.'*

**Monday, 25th July, 1814**

Began with a circumferenter subdivided and a statute four pole chain, at Ervines Bridge over a smart stream that turns a bark mill six perches on the left. Ervines house also on the left four perches and to the road.

**Monday, 20th February, 1815**

Continued the survey of Lake William. From this proceeded to Cormers House on side of lake having walked twenty miles and being much fatigued expected the consolation of a good fire and a good soft plank to stretch upon, but how great our disappointment and surprise on entering the Hut I found the Old Man John Shane who had been left to care for the place dead, he was frozen to death I suppose three weeks before that, his face and hands being much eaten by mice. There was no alternative so I took my abode this night with John, and early next morning Tuesday 21st continued the survey at Lake William.

**Monday, June 26th, 1815**

In order to complete the survey of the Shubenacadie River:
Bought a small flat bottom boat for twelve dollars. Paid for repairs of boat, 2 dollars.

**Wednesday, August 9th 1815**

This afternoon much threatened for a storm, encamped on the bank of Keys Meadows and being out of bread, sent to Keys for some, but could not get neither bread, flour, or potatoes so we continued to fast.

# DESCRIPTIONS!!

The following are portions of descriptions contained in registered documents in the province of Nova Scotia:

- Agreement recorded Sept. 14th, 1923 at 9:00 am in Book 32 at Page 649 in the County of Inverness: *"until it reaches the top of the hill above Wash Brook, where the bear tore the blanket or to a point directly opposite the said road".*

- Deed recorded April 28th, 1970 at 10:30 am in Book 94 at Page 754 in the County of Inverness: *"Also one acre of land at the head of the hay field which is now a cow pasture at the present time for William Ivy; Also reserved one acre of land at the same place at the head of the hay field for Delore Ivy."*

- Deed recorded April 14th, 1983 at 11:18 am in Book 3673 at Page 637 in the County of Halifax: *"Beginning at a wood stake located at the high water mark at Clam Harbour in the County of Halifax, approximately (40)* miles from Dartmouth in the Province of Nova Scotia along the Eastern Shore Highway".

# "LET'S MAKE A DEAL"

BY F.C. HUTCHINSON, BA, NSLS, CLS

Have you ever thought of why you sign an agreement of purchase and sale when buying or selling property?

Well, once upon a time, 1066 AD to be more precise, William the Conqueror paid a visit to "Merry Old England" with about 1500 barons and their supporting armies. Following the English defeat at the Battle of Hastings, William declared himself King of England and claimed ownership of all the lands. He then granted large areas of land or estates to his barons as a reward for their loyalty. Absolute ownership, however, still remained with the King while the "feudal lords" had the right to manage and tax the people who lived on their estates. The Lord of the Manor even had the say in who could marry whom.

During the next several hundred years, the feudal system eroded to the extent that many commoners were favoured by the Crown and allowed to possess property. Eventually the power of the Lords was reduced and the Crown allowed title to be inherited and transferred by the general public. Even today the buying and selling of land is an everyday occurrence but ultimate title is still vested with the Crown, thus the ability to expropriate. Illiteracy was very common during the Middle Ages and, more often than not, property would be sold by a verbal agreement with only witnesses and no written record. With a high mortality rate and the lack of documentation, the climate for title problems was ideal.

In 1677 AD, the Statute of Frauds was passed by the English government. The new law stated that all transactions dealing with land must be in writing. Now, at least, a purchaser had a dated document to support his land claim and hopefully the person selling the property was the legal owner.

Nova Scotia was a British colony and was bound to adopt the historical laws of England. Even the laws of the United States of America are rooted in British history. Today the Nova Scotia Statute of Frauds states that in order for an agreement to buy or sell property to be recognized by the courts, it must be in writing. You can still make a verbal agreement if you wish, but if either party changes their mind your contract is not binding. The transfer of land, under section 3 of the Act, must be in writing just as in 1677.

Now you have a deed! Do you hide it away in a closet so your neighbours and the tax man don't know what you own, or do you record it in the registry office? The Registry Act of Nova Scotia does not compel you to record your deed. The Act, however, does state that the first person to record the deed of a particular parcel of land is the legal owner.

In other words, if I sell Tom a piece of land and then fraudulently sell Bill the same piece of land the next day, who owns the land? Why, Tom of course! But wait a minute, Bill didn't know that his deed was invalid and assumed he owned the property. He then proceeded to the Registrar of Deeds and recorded his document. Under the Registry Act and in the "eyes of the court", Bill is now the legal owner of the land. Tom will probably commence legal action against me for damages or come looking for me with his favourite baseball bat.

So the next time you are involved in a land transfer or are thinking of buying your first home, realize that an agreement of purchase and sale is standard practice, supported by the courts and usually involves a deposit. Filing your deed in the Registry of Deeds office is for your own protection and allows any future owner to check the quality of your title.

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# Canadian Institute of Geomatics
# Association Canadienne des Sciences Géomatiques

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The Canadian Institute of Geomatics is seeking a highly motivated, professional individual to perform the duties of Executive Director. This is a full-time position at the Association's office in Ottawa, Ontario. Reporting to the Executive Committee, the Executive Director is responsible for managing the affairs of the Institute and for the development of policies and strategies that will create and maintain growth in Association membership.

The successful candidate will meet the following mandatory requirements:

- Have the ability to competently manage a voluntary non-profit association
- Have strong written and oral communication skills
- Have strong inter-personal skills, including the ability to work effectively with senior members of government, industry and academia
- Have strong budgeting, analyzing and financial reporting skills;
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- Having a CAE designation
- Being a member of, or significantly involved in, the Canadian Geomatics community
- Fluency in both official languages

Salary will be commensurate with the successful candidate's qualifications. The position carries a customary benefits package.
Please reply in confidence, before **July 31, 2000,** including your résumé and indicating how your experience and qualifications meet the above stated requirements. Mail reply to:

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For additional information concerning the position and its responsibilities, please contact the Association office at the above address or at Tel: 613-224-9851.

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