# The NOVA SCOTIAN SURVEYOR



JANUARY 1977

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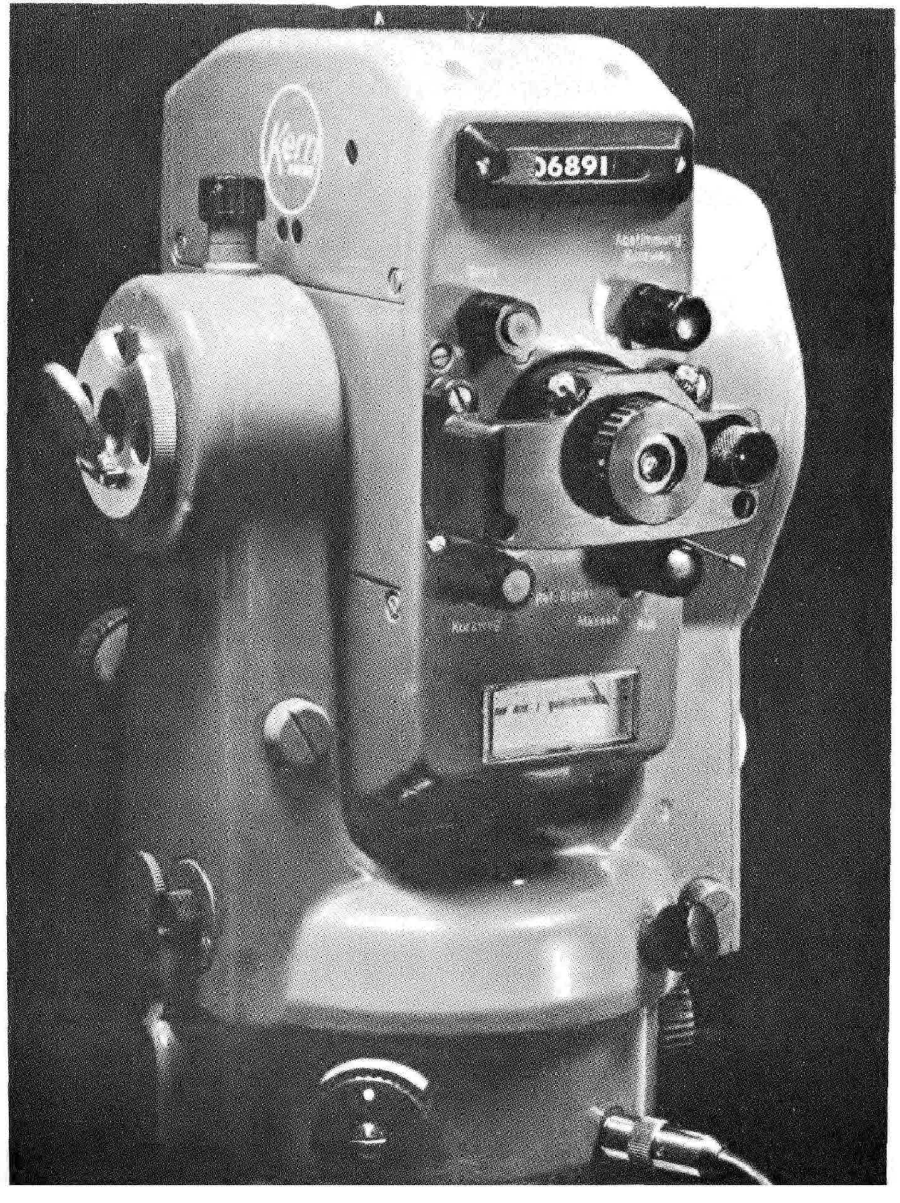

# The NOVA SCOTIAN SURVEYOR

*Published four times a year by*

**THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS INCORPORATED**

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1977 EXECUTIVES

# - C O N T E N T S -

*Views, expressed in articles appearing in this publication, are those of the authors and not necessarily those of the Association.*

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# THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

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## ** PRESIDENT'S PEN **

The Editor of our Nova Scotian Surveyor, Burt Cain, has not only kindly consented to allocate space in this issue for the President's Pen, but, has managed to motivate me enough, and just in time, to have this article ready for our first issue of the upcoming year. I expect that I will have a very busy year in 1977, however, with dedicated and hard working members such as Burt Cain, Bob Daniels, Vice-President Murray and many, many others, proding me at every turn, I feel assured that most of my deadlines and responsibilities will be met according to schedule.

The first item that I would like to bring to your attention, and it is with great pleasure that I make this announcement, is, that effective January 1st, 1977, Allison B. (Al) Grant, N.S.L.S. was appointed to the office of Executive Secretary of the Association of Nova Scotia Land Surveyors, replacing the now defunct position of Business Manager. Al will be working in a part-time capacity from our Association's new office location at 5450 Cornwallis Street in Halifax and, as part of his daily routine, will be looking forward to hearing from or meeting with any of our members who may require assistance or direction from the Association. In light of his recent appointment, Al has officially resigned as Councillor for Halifax County and as a replacement for the duration of his term, Lee Johnston has kindly consented to serve on Council in his absence.

As an aid to Council in dealing with its usually heavy agenda, the Executive Committee of Council, being the President, Vice-President, Secretary-Treasurer and Immediate Past-President, plans to meet on a more frequent basis in an effort to handle the steadily increasing volume of Association Business. Council held its first regular meeting on January 15th and is proposing three more meetings this year on March 19th, June 4th and September 19th. Should anyone have queries or subject matter that would warrant Council consideration, please keep these dates in mind so as to ensure that your request will be placed on the agenda.

It has been very encouraging indeed to see the exceptionally good attendance and participation by our membership at our last two Annual Meetings. When a professional organization is advancing and improving its status as rapidly as our Association has during recent years, the level of success that we have achieved can be attributed, for the most part, to the participation of our members. Individual involvement in the Regional Meetings and educational seminars will definitely be encouraged this year. This level of contact and participation is intended for the general membership and on behalf of your Councillors and Committee Chairman, I invite you to use these sources as an information vehicle between yourself and the Association. In addition to the planning of Regional seminars, consideration is presently being given to the conducting of a one day seminar on the Thursday before our 1977 Annual Meeting. This seminar would be on a topic of interest to all and it would be well worth your while to attend.

Our Committee Coordinator for this year is your Vice-President Murray Banks and I am extremely pleased with the enthusiasm he and his Division Directors have shown to date. Re-organization and re-appointment of some committees are presently being considered and it appears that the restructuring of our organizational chart will lend more of an air of efficiency and participation than we were able to enjoy in the past.

It has been my pleasure to share the past few moments with you and I am looking forward to subsequent issues when I hope to bring you further comments and information regarding Association activities.

* * * * *

PAUL C. BOIRE

EXECUTIVE DIRECTOR

METRIC COMMISSION CANADA

Addresses the 26th Annual Meeting of the Association of Nova Scotia Land Surveyors held at the Chateau Halifax on November 17, 1976.

In his keynote address entitled "Metric Conversion Update" he reviewed the role of the Metric Commission established by the Government of Canada in 1971 to coordinate and stimulate metric conversion throughout the economy.

He expects that by the end of 1976 some 30 Sector Plans out of a total of 114 should have been approved and readied for publication by Metric Commission Canada. The Metric Conversion Plan developed by Sector Committee 5.5 - Real Estate, Land Surveyors and Town Planners - was essentially a coordinated response to the plan developed by the Construction Industry Sector Committee 5.1.

The following comments on Sector 5.5 Conversion Plan are quoted directly from Mr. Boire's address:

"The Plan advocates uniformity in Federal, Provincial and Municipal Legislation, Regulations and Practices, for example, a flexible approach to dimensions of street widths is recommended rather than a rigid insistence on fixed dimensions. Rounding of numbers in the preferred SI units is primarily to be incorporated in the various Federal and Provincial statutes and regulations as 'In-House' practices. Conversion to whole metric values is recommended wherever possible.

It is also the policy of the Sector not to change archival records, but to convert to metric only as required for use.

To allow site plans to be prepared in metric for construction projects that will be awarded after January 1978 Section 5.5 has prepared a plan which calls for registration of Land Titles in metric sufficiently in advance of this date.

Practices associated with the description of property and registration of Land Titles vary within the Provinces as well as between Provinces and the conversion to metric provides a unique opportunity to establish standards in this regard.

Regarding national standards as they relate to mapping and surveying, the following have become National Standards of Canada: Standard for Scales (Ratios) for Charts, Maps, and Plans, in the Metric System and Standard for Graduations and Markings on Linear Measuring Instruments for Construction and Surveying, International System of Units (SI).

Legislative changes at the three levels of government have been identified as a key event in the Sector Plan and it is important that the schedule for these changes be met. Federal and Provincial statutes having measurement sensitive clauses and related to Sector 5.5 are being identified and the clauses are being listed in order of priority with respect to timing and passed to the applicable responsible government bodies.

It is considered that the conversion process with respect to this Sector will go more smoothly and result in fewer problems if the transition period is kept to a minimum. It is not the intention to incur resistance by creating an image of compulsion; however, legislation requiring the registration of Land Titles and related matters in metric after a certain date, or allowing either Metric or Imperial for a transition period of 1 or 2 years, is considered more effective to the conversion process than leaving the transition period open ended."

In reviewing the progress made in other important Sectors of our economy Mr. Boire made reference to Highway Conversion, an area of interest to most surveyors.

"In the area of road design and operations, October 1977 is the scheduled date for two more key events: Calls for Metric Highway Construction Tenders and the requirements for metric building and construction materials. In the United States, two highway metric construction pilot projects have been completed in Ohio and our neighbour has published a manual entitled "Highway Metrication" in April of last year."

Mr. Boire's closing remarks made reference to developments in the United States and the rest of the world:

"Now that the U.S. Metric Conversion Act is law and nominees for the United States Metric Board have been named, we are confident that individual Sectors of the U. S. economy will continue to work closely with their Canadian counterparts to firm up the Scheduling Phase of metric conversion so that all participants are fully prepared to implement the changes on a planned basis. Last year I predicted that by 1980, the world in which we live will be largely a metric world. We in Canada, hope to continue to work closely with the ANMC and the U. S. Metric Board to ensure that it is. To plan now is to opt for present effort over future shock."

* * * * *

# SOME RAMBLING THOUGHTS ON "ACCURATE" SURVEYS

*- by a Practicing Surveyor -*

In the context of land surveying, when we speak of "accurate" surveys we must recognize and give due regard to the two accuracy components which collectively produce the desired end result.

The first accuracy component, in ascending order of importance, is the mathematical accuracy with which the technical aspects of the survey were executed. New instruments and better techniques have recently enabled us to make great strides in improving this accuracy component. In fact, from listening to some surveyors, one would be led to believe that these developments alone have finally enabled us to produce truly accurate surveys.

The second, and infinitely more important accuracy component, is the accuracy with which the boundaries are well and truly established or re-established on the ground. No matter how precisely the field work and calculations are done or how accurately the notes, plans, descriptions and reports reflect that field work, all is for naught if the boundaries are not where they legally should be.

This is not to suggest that the precision and accuracy of the technical exercise is of little importance, it is ultimately most essential to a sound land tenure system. I simply wish to emphasise the above order of priority of the two components.

I will forego further discussion of the first component at this time as it is already a very topical and much debated issue; however, I feel we should all direct more of our attention to the second component and hence would like to briefly explore the question of accuracy as it relates to boundary determination.

As a general definition, accuracy may be defined as "nearness to the *truth*". Having established "*truth*" as the benchmark for accuracy, it obviously follows that to discuss, analyse and evaluate the accuracy of surveys it is a tremendous advantage if we know, or can ascertain, the aforesaid "*truth*".

With regard to the technical aspects of surveying, while we never know the absolute value of any dimensional quantity, we can approach accuracy evaluations in a reasonably scientific manner. Instruments and techniques, properly handled and executed will produce results with a known (within tolerable limits) degree of precision, repeatability, reliability and freedom from gross errors. Thereby enabling us to deduce with reasonable confidence our degree of "nearness to the *truth*".

Unfortunately, when we attempt to analyse our other accuracy component the exercise becomes far less scientific and a great deal more difficult. The "*truth*" we are now seeking, to use as our benchmark, is obviously the exact location, configuration and extent of a parcel of land. And all too often, in our attempts to identify and isolate that "*truth*" we find ourselves confronted with not one, not two, but three potential "*truths*":

(1) That which was intended to be surveyed
- agreements, deeds, etc.;

(2) That which was actually surveyed
- physical evidence; and

(3) That which was claimed to have been surveyed
- descriptions, plans, reports, etc.

Item (3) almost unfailingly alleges that items (1), (2) and (3) are in perfect register and seduces our hapless conveyancer into enshrining all three, expressly or by inference, into title documents.

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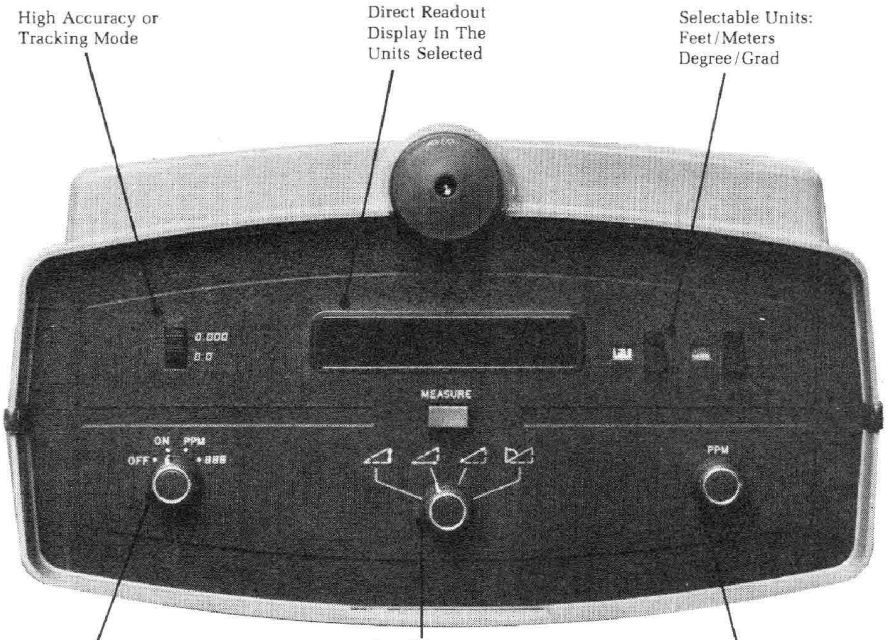

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To further compound the problem, if the survey is a second or third generation re-survey we find ourselves confronted with a whole chain of "*truths*", three eminating from each generation.

Since we are naturally charged by our client to provide him with an "accurate" survey it now becomes our task to isolate that elusive *truth of truths*. Once having done this the balance of our work is (exactly as perceived by the layman, solicitor and engineer) a simple technical exercise.

Therefore, it is really this search for the *truth* that is the essence of an accurate survey. In many cases the search is straight forward and the *truth* obvious, but far too often the search follows a twisting, tortuous path. A path dimmed by unknown intentions, poor conveyancing and vague descriptions; rutted by a lack of physical evidence, or perhaps worse by a multiplicity of inconsistent evidence; eroded by missing title and survey documents and plans; violated by encroachments and undocumented or unregistered, adverse interests; and lastly, confounded by gross errors and low or erratic standards in technical execution.

To follow this path to a successful conclusion, without being waylaid, mislead or defeated is in itself no mean feat. Unfortunately, as suggested earlier there are at least three possible *truths* to identify, consider and reject or embrace. At times, only one of these will provide us with the criteria for an accurate, legally defensible survey. In other circumstances, two or perhaps all three of them will play a role in our decision-making process.

Whatever the case, if the surveyor is to perform his role correctly and efficiently he must be armed with the following "tools of the trade":

- integrity
- a sense of justice
- common sense
- an analitical mind
- tenacity
- diplomacy
- experience
- sufficient academic training
- an adequate system of compulsory land registration
- adequate statute law
- adequate survey regulations
- knowledge of relevant common law, and
- a strong, dynamic professional Association.

The above list is not exhaustive by any means, only the bare minimum required by surveyors to assist in the creation and maintenance of a sound, reliable land tenure system.

No matter what the efforts of the State, any system of land tenure will fail if it is not predicated on accurate surveys which are the foundation of the entire system. Governments and government agencies can assist us by providing effective statute law and proper registry, mapping and referencing systems but only we can provide the essential element - an accurate survey.

Are we providing the public with accurate surveys at the moment? - In all too many cases the answer is a resounding No! If not, to what extent is the individual surveyor, the Association, the public and the government to blame for this sorry state of affairs and what is the solution.

In subsequent issues of the Surveyor I propose to put forward my opinions on both questions. How about joining in by submitting your opinions and with very little effort I'm sure we can generate a raging and possibly informative debate.

* * * * *

# THE CASE AGAINST COMPETITIVE BIDDING BY CADASTRAL LAND SURVEYORS

*(prepared by Vernon C. Goudal, B.C.L.S., for C.C.L.S.)*

"This position paper is intended to clarify the rationale used for the existence of the "no tender By-laws" in the Code of Ethics of the legal Land Surveyor Associations across Canada. This posture was unanimously endorsed at the most recent meeting of the Presidents of the said Associations at Ottawa in October of 1975, and will become one of the first motions of the newly formed Canadian Council of Land Surveyors. The C.C.L.S. membership is comprised of all commissioned land surveyors of all ten provinces.

We, as Land Surveyors, appreciate that anyone assembling a project study must have knowledge as to what the legal surveys connected with that project are going to cost, our problem is, until the evidence available is discovered and the consistency of how it fits together is researched, we have no method of arriving at final cost. It is absolutely essential that if an incontestable result is to be the product of the survey, then no economic reason can be used as cause for termination of the field or registry research required for such result. A judgment based on economics will surely result in doubtful titles and expensive litigation; therefore, the surveyor must be allowed to satisfy himself as to his evidence and the interpretation of same without any external influence. The bid system eliminates this freedom of research completely and endangers the validity of the various systems of titles across Canada. A substitute for the reliability obtained by our Code of Ethics could be found in expensive title insurance which, at best, is a poor substitute for what presently exists.

It is interesting to note where the pressure for a bidding system arises. The profession is being exposed to such pressure from government agencies at various levels, and from large scale developers and speculators, whose only desire is to make a fast buck. This pressure from government is usually generated by a pious desire to protect the public purse - perhaps, in the first few instances there would be a saving to the public but once our deeply rooted regard for our present Code of Ethics was eroded by the inevitable economic losses, then the blacklash would generate such a mess of litigation that this saving would soon become a huge shortfall. I think it can be said without fear of contradiction, that a Code of Ethics and a bidding system are impossible companions. The enforcement of any Code of Ethics by a governing body would be an absolute impossibility.

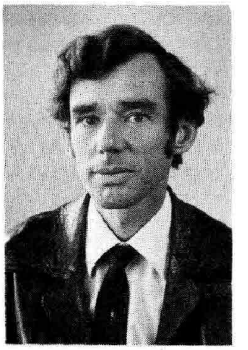
Another faction who express considerable desire to enter into a bidding system are those firms who are in reality large corporate bodies but who operate under the guise of private survey firms. Very often these firms have salaried lobbyists whose sole purpose is the wooing of national and international contracts from large corporations or government agencies. If a "no bidding system" was abandoned, these corporates would eventually be the only survey firms doing survey work and the inevitable cartel would then plunder the public and private purse.

A further consideration of a bidding system is that, at present, there is very little organization of the labour employed by private land surveyors, therefore, no common denominator is possible when estimating survey costs; however, on a bidding system, need for such a common base would soon become imperative. The result of this would be the complete unionization of the industry with the inevitable spiralling cost of organized labour. Most certainly the final result of this development will be much higher survey costs to public and private sectors.

The various provincial associations of land surveyors have been created by Statute, which empowered them to govern their members through rigorous pursuit of a Code of Ethics. This has generated an industry which zealously guards their "clients' interest", both as to cost and validity. Any disruption of such a climate would be a grievous mistake with undoubtedly the client, both government and private, being the most injured.

The only rationale that could possibly be used for the abandonment of our present "no bid" system is a justified complaint of overcharging. A complaint of this nature, if laid before a Board of Management of a Provincial Association is dealt with by the accused' peers and if justified, is considered unprofessional conduct with punitive and remunerative correction of the offending surveyor - in this area, the public is usually and justifiably overprotected by the Provincial Councils."

## PETER NORMAN McCARTNEY
## JOINS STAFF AT N.S.L.S.I.



The Nova Scotia Land Survey Institute is pleased to announce the appointment of Peter Norman McCartney as an instructor in the two-year surveying program.

Mr. McCartney joined Imperial Chemical Industries in January 1961, and then attended Cambridge University, obtaining an honour BA in Mechanical Sciences in 1964. He left ICI and went to Bolivia as an United Nations Association Volunteer in 1965, where he lectured in mathematics and strength of materials at the Universidad Mayor de San Andrés, La Paz.

Returning to U.K. in March 1967, he joined the Directorate of Overseas Surveys, and completed the survey course at the Army Survey School, Newbury, in August 1968, and obtained his MA from Cambridge University.

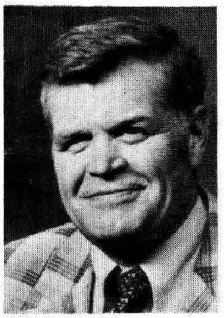
He spent 12 months in Northern Nigeria and then 14 months in British Honduras, (Belize) providing control for 1:50,000 mapping. This was followed by a year on the island of St. Helena, providing an original control network for a 1:10,000 map to be plotted from photographs obtained by helicopter. Detail plans of development areas, and property surveys were also undertaken.

The academic year 1972-1973 was spent at Glasgow University, where he obtained a Diploma in Cartography, and also completed his thesis for membership of the Royal Institute of Chartered Surveyors.

The next three years were spent in E. Malaysia, on secondment to the Sabah government. He held the post of District Surveyor, in the Lands and Surveys Department. This involved the control of survey from field work up to issue of title under a Torrens System, as well as urban and rural planning, and some computer programming.

* * * * *

## J. R. GEORGE, PRESIDENT
## CANADIAN COUNCIL OF LAND SURVEYORS



"After many organizational meetings the Canadian Council of Land Surveyors has officially arrived".

With its arrival comes the need for much effort from all of us to make it a worth while organization. As you know representatives from each Provincial Association are working on a number of issues to be implemented on a national basis, e.g. Education, Code of Ethics, etc.

The Maritime Region has experienced great expansion of its Land Survey Profession in the last few years. So has the rest of Canada. It is the principle aim of the C.C.L.S. to unite the efforts of Land Surveyors in all Provinces so that they may receive national recognition as a truly deserving Professional Association.

May your Association have continued success in the coming year.

# HISTORY OF THE CANADIAN COUNCIL OF LAND SURVEYORS

*- by L. Robert Feetham -*

The Canadian Council of Land Surveyors is an Association of Associations and Corporations. Conceived by a Past-President of the Association of Nova Scotia Land Surveyors, John Pope, who in 1968 suggested that it would be a good idea if the Provincial Presidents got together once a year, during the annual C.I.S. meeting to discuss mutual problems. Prodded on by one, Francis J. S. Pearce, from Stratford, Ontario, John never got a chance to look back; nor did the Presidents. I received my initiation to the Presidents' Meeting from our then President, Col. George Streb, during the C.I.S. annual meeting at Halifax on April 17, 1970 and some six years and fourteen meetings later, I had the privilege of journeying to Ottawa in May 1976 and signing the final application leading to the issuance of Letters Patent that created the "Canadian Council of Land Surveyors". The other signatures to that document were Francis J.S. Pearce of Ontario and Rejean Blanchet, Secretary to the Corporation of Quebec Land Surveyors. We three were the parties listed in the original application. In reviewing all the minutes and written correspondence that led to the creation of the C.C.L.S., one's mind becomes dizzy with the work that was involved.

The C.C.L.S. was born out of a need for Land Surveyors to be able to express themselves on major issues without compromising their statutory credibility. This need could not be satisfied within the framework of the Canadian Institute of Surveying.

It was agreed at an organizational meeting on February 6, 1969 in Ottawa that the chairmanship for the Presidents' Meetings would pass successively from one Provincial President to another, commencing from the east to the west. Thus Carl Grantor, President of the Newfoundland Association, chaired the meeting held during the C.I.S. annual meeting in Halifax on April 17, 1970.

Some of the best survey brains in Canada were attending these meetings. The Presidents were usually accompanied by the Vice-President in order to provide better continuity. The interest in these meetings was very keen. It seemed, for the first time in Canada, the Survey Profession was really coming of age and wanted to be united in one voice.

During the first years it was obvious that the Presidents wanted to organize, but how should it be done? The Canadian Institute of Surveying was sponsoring the main meetings during their annual meetings and many of the Presidents did not want to see C.I.S. hurt in any way.

During the fifth meeting held at Toronto on October 22 and 23, 1971, Professor Oscar J. Marshall, P. Eng., O.L.S., presented a report on the self-governing professions in Ontario. It was a very strong presentation and resulted in the writer being nominated to organize the continuous investigation into the means of achieving a permanent coordinating body.

At the seventh meeting held in Toronto on September 22 and 23, 1972, L.M. Nadeau, P. Eng., General Manager of the Canadian Council of Professional Engineers, presented the history and structure of the C.C.P.E. The problems they encountered in organizing were very similar to those the Land Surveyors were experiencing. This presentation related concerns that the C.C.P.E. had with the Engineering Institute of Canada in the earlier years. Very much the concerns the Survey Profession was having with the multi-discipline C.I.S. By this time the Presidents were pregnant with enthusiasm, and I was instructed to proceed with a final draft of application for Letters Patent.

This provided for one province - one vote as well as a small stipend to be paid C.C.L.S. for each member in an Association or Corporation.

The Letters Patent for the creation of the Canadian Council of Professional Engineers was used as a guide in the preparation for our own Canadian Council of Land Surveyors.

The C.I.S. must be given credit for sponsoring the initial meetings of the Provincial Presidents; and many of the great Past-Presidents of C.I.S., such as Dr. J.M. Zaryzcki and the late Hans Klinkenburg, gave dynamic support to the Presidents in the efforts to structure the C.C.L.S.

Some members again raised questions about what effect the C.C.L.S. would have on the C.I.S. It was hoped initially to have C.I.S. representatives on the C.C.L.S. but Quebec and Ontario did not agree with this and a special Memorandum of Agreement between the two organizations was prepared and considered at the C.I.S. annual meeting in Fredericton on June 23, 1975. This guaranteed each organization protection from infringement by the other and provided a structure by which the Survey Profession would be enhanced in Canada by both groups working together.

Some of the western provinces were advising caution about proceeding too fast with incorporation and perhaps rightly so. When it came to executing a consent form for the use of the name "Canadian Council of Land Surveyors", Manitoba raised the question of what effect the new organization might have on the C.I.S. This led to the Memorandum of Agreement and provided the safety for C.I.S. that we were all looking for.

The Land Surveyors in Canada, possibly because of their small numbers and their lack of university training in some cases, also their dependence on related professions, such as engineering and forestry, have not been known for their aggressiveness. We Surveyors now recognize the fact that we are directly accountable to the public by virtue of our various provincial Acts. Presence at a Provincial Presidents' meeting readily discloses the fact that the profession has innumerable interprovincial problems which require attention. The formation of an autonomous C.C.L.S. free from outside influence is a practical solution to meeting our public trust at a national level. We cannot show any sign of being timid if we are to achieve the true professionalism we crave. We must stand independently with a firm sense of direction. Thus, the reason for the creation of the C.C.L.S. Over the past six years, this was heard from the various presidents time after time. It was very difficult for them to contain their frustrations at times.

Nova Scotians have reason to be proud of their contribution to the profession right across Canada. I have counted anywhere from two to six members of the survey profession at every one of the fourteen meetings held during my period of involvement that were graduates of the Land Survey Institute at Lawrencetown. These surveyors were spread right across Canada and the list of presidents often read like a list from the latest graduation class of Jimmy Church's Survey School.

We are now incorporated with Letters Patent and By-laws. Due to the pressures of work at Wreck Cove I had to relinquish any further participation in C.C.L.S. in early 1976. E. P. Rice served as Nova Scotia representative for several years. Ed has now stepped down and our immediate Past President, Ivan P. Macdonald, is most ably representing Nova Scotia. Within a few short years, results of efforts by the C.C.L.S. will start to become evident, slowly at first, but they will come. Likely a permanent secretary and office will be established and one day the Surveyor from any Province of Canada (barring Quebec's separating) will be eligible to practice in any other province in the same manner as other professionals do.

In retrospect, I must thank the various Presidents and members of our own Nova Scotia Association for their financial and moral support over the years - it was most gratifying.

* * * * *

Approximately a year ago a select committee of C.C.L.S. from the province of British Columbia, under their President, Mr. Vernon Goudal, was set up to prepare a case against competitive bidding by Land Surveyors (printed on page 11 ). Work began immediately and was well underway, when in July 1, 1976, the Combines Investigation Act was proclaimed. The select Committee then turned their attentions to the effects of the Combines Investigation Act on Cadastral Land Surveyors, and submitted a report to the October meeting of the Canadian Council of Land Surveyors. The following is a condensed version of that report:

## EFFECTS OF THE COMBINES INVESTIGATION ACT ON CADASTRAL LAND SURVEYORS

*by Vernon C. Goudal, B.C.L.S.*
*President, Corporation B.C.L.S.*

On July 1, 1976, Section 32 of the Combines Investigation Act was proclaimed. This Section prohibits agreements to lessen competition, and applies to services. The meaning of the word "service" in the Act is "a service of any description whether industrial, trade, professional or otherwise".

The proclamation of this Section has now made all commercial activity in Canada subject to the provisions of this Act. Services which did not formerly apply and which are now subject to its provisions include:

> The Professions such as:
> Architects, Physicians, Engineers, Surveyors,
> Lawyers, etc.

As reported in the Department of Consumer and Corporate Affairs explanatory booklet "The list is by no means exhaustive, ...". The explanatory booklet goes on to say:

"While it is important that the public be aware that the law now entitles them to competition in such industries, it is equally important that the groups involved be aware of the new conditions under which they operate". . . .

"It may be quite difficult for members of these groups to appreciate the fact that the rules have changed, and that behaviour that was formerly perfectly legal may now amount to a criminal offence." "The Office of the Director of Investigation and Research is making a concerned attempt to reach such groups, with the very important cooperation of industry organizations, and put before their members information which will assist them in keeping clear of the pitfalls that exist to the new environment.

Prohibited Behaviour

The Combines Investigation Act prohibits outright certain behaviour that limits competition. The provisions in question are:

> Section 32 which prohibits agreements or arrangements to limit competition unduly.
>
> . . .

The Act is administered by the Bureau of Competition Policy and is headed by an Assistant Deputy Minister who is also the Director of Investigation and Research.

An inquiry into an alleged offence is put in motion when one of these things happens:

(1) A direction by the minister.

(2) A formal application by six citizens.

(3) Initiation by the Director when he has reason to believe a violation of the Act has occurred. Most inquiries are begun in this way.

. . .

The following is a direct quote from the Department of Consumer Affairs explanatory booklet which states the department's interpretation and stand on Section 32 and how they are going to apply it.

Section 32 - Agreements or Arrangements to Limit Competition Unduly

The most usual violation of this Section involves a price-fixing agreement among those supplying a product to a market. If, for example, lawyers in a particular area agreed among themselves not to undercut a schedule of fees for real estate work or the settlement of estates, the situation would be likely to give the Director reason for the initiation of an inquiry, and, if evidence were produced to show that this in fact was done, the participants could be found quilty of an offence. Similarly, if the television repair firms in a city agreed on a minimum charge or series of charges, the same process could ensue.

. . . The Courts have held, however, that it is not a defence to a charge of unduly lessening competition to show that the arrangement was advantageous or necessary to the business interests of the parties to it.

Subsection (2) of Section 32 makes it clear that certain activities are not in violation of the Section provided they do not lessen competition in certain respect set out in subsection (3). For example, an agreement to restrict advertizing is not an offence provided it does not restrict prices in other ways. Advertizing can, of course, promote competition by offering information about such things as prices (fees), and an agreement to restrain publication of such information could be held contrary to the Section. In the United States, the American Medical Association ban on advertizing by doctors has been challenged under antitrust law. Also, the American Bar Association, under prompting from the Justice Department is considering changing its rules to permit advertizing by lawyers.

When does an arrangement to restrict competition become undue? One of the recent amendments to the Combines Investigation Act clarifies this. . . . The Act, as amended, states that it shall not be necessary to prove that the arrangement, if carried into effect, would be likely to eliminate competition in the market completely or virtually. No mathematical formula has been laid down, but, if parties to an agreement to restrict competition control as much as half of the market, and even less in some circumstances, their agreement might be found undue, and consequently amount to an offence.

The penalty for conviction under Section 32 of the Act is that a person convicted is guilty of an indictable offence and liable to imprisonment for five years or a fine of one million dollars or to both.

The foregoing has been a brief review of the Act, and indicates how the Department in charge intends to deal and interpret the Act, and deals only with the Sections most likely to concern our profession. . . .

A study of the Act and the explanatory booklet published by the Department of Consumer and Corporate Affairs leaves little doubt that the survey profession is indeed covered by this Act. A legal opinion sought by the Corporation of British Columbia Land Surveyors confirms the fact that we are subject to the regulations of this Act.

The Director, Mr. Robert Bertrand, some 4 weeks before Section 32 was proclaimed made it perfectly clear as to how the Department was going to treat the survey profession, by issuing an ultimatum to all survey associations, that they do away with their schedule of minimum fees or else he would start an inquiry. His letter of May 31, 1976 states that his staff reviewed their complaint files for the past several years and that "the particular anti-competitive practice alleged in the complaints reviewed concerning your industry involved the establishment and maintenance of a schedule of minimum fees". He goes on to say "If, after application of Section 32 of the law to services on July 1, 1976, I was to receive information indicating that an anti-competitive practice referred to in that Section was continuing I would be obliged to look into the matter. If the facts were such as to provide me with reason to believe that a provision of that Section had been or was about to be violated then I would be required to institute a formal inquiry under the Act".

. . . the following is a quotation from his letter of July 16, 1976, and his reply to our concern of lack of specifics in the Combines Investigation Act.

. . . I can only say that the intent of Section 32 is to prohibit all agreements and arrangements to limit or lessen competition unduly. While offences most commonly arise from agreements to fix prices, it is envisaged that other activities such as agreements to impose restrictions on advertizing or to create barriers to entry could have the same effect of unduly lessening competition. . . . Specifically, in regard to the use of a tariff of fees, my position is that I would have reason to believe that there had been a violation of the Act and would be required to commence an inquiry if I were to possess information that a significant number of persons engaged in a profession were adhering, by arrangement or agreement, to a fee schedule adopted by their professional association.

He goes on to say in his letter that he has received a letter from a member of our Corporation, asking for information on application of the Act regarding restrictions on advertizing . . . He now wants a copy of our by-laws to see if we are contravening the Act as far as advertizing is concerned.

I note in his letter that he makes a casual comment "to barriers to entry could have the same effect of unduly lessening competition." Is he trying to tell us something? and where will be stop?

We now must consider several questions. Every Association is governed by a set of standards and rules of survey set down by their particular provincial government and in some cases by the Federal Government. These standards and regulations of survey are surely necessary to maintain our title system at the high degree of respect it holds today. With no guidelines on fees, jobs will be underbid and the standard of work will deteriorate. Once the standards are gone, so is our title system. Can we continue to maintain our standards of survey set by ourselves and government regulations without some sort of schedule or guide of fees. Without a schedule of fees or guide to charges are we not in a position of competitive bidding? . . .

The Combines Investigation Act is probably the most serious piece of legislation enacted in many years towards all professions. It will take a great deal of thought and compromise to maintain our professional associations in the position that they have enjoyed over the past 100 years. It will need all of our efforts combined under the C.C.L.S. if we hope to survive.

* * * * *

# THE IMPACT OF MODERN CADASTRAL SYSTEMS ON ATLANTIC CANADA

by

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No. 1

## P R E F A C E

It is becoming increasingly apparent that many of North America's environmental, legal, social and political maladies are inextricably linked to the manner in which our society has dealt with the land. Our disregard for the land has precipated a dearth of accessible and reliable information about the tenure, topography and use of the land. This void has severely inhibited the efforts of government, the professions, academics and individual citizens concerned with sustaining the quality of life.

The root causes of this problem have been nurtured and sustained through a myopic adherence to a frontier economic philosophy. The early tenure arrangements, and the concomitant cadastral facilities such as the deed registry and public land systems, were designed for a comparatively simple economic and social order. Land throughout much of North America was often regarded almost as a free good and neither the quality of the cadastral facilities nor their subsequent maintenance were deemed of significant public importance. Our society is now presented with a collage of adversity created and perpetuated by a lack of information about the land, due in large measure to the inadequacy of the existing cadastral facilities. This is perhaps most visibly evidenced in the high social and economic costs of the land transfer process; but it is also evidenced in the concern for adequate tenure information for the equitable and efficient assessment of real property and, perhaps in the long run most importantly, in the urgent requirement for land tenure information in environmental planning and the implementation of environmental control legislation. As Dr. Denman of Cambridge University has so forcefully argued, if "we fail to recognize the land use is a function of property rights in land, our cognizance of the truth is deficient by a whole dimension of reality."

Our efforts to develop new cadastral systems (of which L.R.I.S. is an example) address these issues by providing a new, and in some ways radically different perspective for ascertaining and responding to the land tenure registration and information requirements of a community. It is based in large measure upon a systems engineering approach for creating and continually maintaining a record of information for each and every parcel of land within the community. It is based upon systems designed to provide direct accessibility, without need for undue reliance upon professional agents, to these records by each and every citizen in the community; and it is based upon a systems approach which views the necessary technological innovations as being of no more importance than the review and reform of the present tenure institutions.

In this series of articles I would like to explore with you how these ideas may affect the practice of land surveying in Atlantic Canada. I would also like to comment briefly on the future educational requirements in the area of cadastral surveying (with special mention at the end on some new cadastral courses being offered at U.N.B.) and also on some of the pressing research needs in this area. Your comments on any of the articles would be much appreciated.

## 1. An Introduction

A cadastre or cadastral system may be succintly defined as a record of interests in land, encompassing both the nature and extent of these interests. An interest in land may be narrowly constructed as a legal right capable of ownership, but it may also be more broadly interpreted to include any uniquely recognized relationship amongst men with regard to the use and enjoyment of the land. The essential nature of the property institution as it relates to the land is embodied within these relationships. The reality of the property object consists of both the land and the relations, or property rights, which define man's relationship to the community with respect to the land.

According to the French etymologist Blondheim, the word "cadastre" is derived from the medieval Greek term "Katastichon" meaning notebook.[1] The term graduatlly evolved in the Latin "capitastrum", or register of the units of territorial taxation into which Roman provinces were divided for the purpose of land taxation.[2] Precursory cadastral arrangements may be traced back to the earliest agricultural settlements along the Nile, Tigris and Euphrates rivers.[3] With the appearance of the first agrarian communities came a need for a system of recording tenurial rights and privileges. Similar developments in land recording can be traced to ancient China. Both the Greeks and the Romans created land survey and land recording systems primarily in support of land taxation policies.[4] In a somewhat similar vein, Louis VI provided for the first measuring and assessing of French lands in 1115. Perhaps the most famous of these early efforts was the Domesday Book of Norman England. In the remarkably short period of one year (1085-1086), a comprehensive survey was made of all land holdings within the domain of William the Conqueror.

The origins of what has come to be accepted as the modern cadastre concept are to be found in the development of the fiscal or land taxation cadastres of Continental Europe during the eighteenth and nineteenth centuries. One of the earliest efforts to establish a fiscal cadastre was the Milanese cadastral mapping program carried out between 1720 and 1723.[5] This program provided a series of estate maps at a scale of 1:2000 for the Italian provinces of Milan and Mantua acquired by the Austrians. Somewhat later, Emperor Joseph II ordered a cadastral survey for the entire territory encompassed within the Austro-Hungarian empire. The survey was made over a period of four years (1785-1789) and consisted of individual plans and descriptions of all landed parcels in the monarchy.[6]

Some scholars have suggested that the European efforts to develop fiscal or land taxation cadastres during the eighteenth and nineteenth centuries were motivated by the economic principles of the Physiocrat movement.[7] The Physiocrats had argued that the earth is the basis of all riches and that the revenues for the maintenance of the community should be derived from taxing the land. The concept was widely accepted in continental society, and most state revenues came to be obtained by "levying a ground tax, ultimately based on the taxable revenue of the separate ground parcels, and buildings, subdivided according to their different use like agriculture grounds, meadows, orchards, woods, houses, factories, workshops, etc."[8] The "ground tax" concept gradually evolved into complex differential tax assessment systems, based in part upon different land uses, which required complex land parcel information arrangements. Karl Dobner has argued that almost all of the early European cadastres were established in response to this need for fiscal information.[9] Nevertheless, there appears to have been an appreciation as early as the seventeenth century of the potential usefulness of the cadastre concept for other purposes. J.L.G. Henssen, for example, has traced the evolution of the judicial or legal cadastre concept to this period.[10] The judicial cadastre was conceived as a system for recording information about the tenure interests in the land. As with the fiscal cadastre, the judicial concept required the identification of the people holding interests in land and the location of these interest; however, the judicial cadastre concept was based upon a more rigorous delineation of these interests such as to provide for the secure transfer of the land.

## 2. North American Cadastral Arrangements: The Problems

In the settlement of North America the land was often regarded as a free good and neither the quality of the cadastral arrangements, nor their subsequent maintenance were deemed of significant public importance. The result has been remarkably little change in the functions and arrangements of the cadastral facilities over the past 200 years. Indeed the basic statutes regulating the form of the land records "have remained essentially unchanged since the time of the (Revolutionary period)"[11]. While some concern has been voiced as to the problems associated with these arrangements, particularly during periods of economic stress, it is only within the last decade or so that an awareness has surfaced as to the magnitude of the economic and social costs incurred by the continued public reliance on these outmoded arrangements. While these social and economic costs have been incurred in many areas of human activity, they have become most apparent in the land transfer process; in the real estate assessment, land management, urban and regional environmental information fields; and in the quest for a better understanding of the land tenure institution itself.

The land transfer process in North America is founded upon the principle of publicity, the concept that all pertinent information relating to the nature and extent of interests vesting in a legal parcel of land must be available for public inspection. (In some jurisdictions, however, a searcher is required to demonstrate a legitimate interest in the records). The cost of acquiring this information, the subsequent negotiations based upon each party's interpretation of the information and the enforcement of the consummated transactions constitute land transfer costs which must be borne by the parties to a transaction. It has been estimated that in the United States these costs amount to over $7 million annually.[12] The creation and maintenance of public land records must also be viewed as a cost factor in the land transfer process. Statistics compiled from the National Survey of Real Estate Transfer Records in 1971 indicated that these costs at that time were in the order of $137.5 million per annum.[13]

Much of the cost, together with subsequent social and economic costs attributable to deficiencies in the transfer process, is the product of the current methods employed in ascertaining the validity of the title to a parcel of land and in defining the bounds of the parcel. The deed registry system, used for transferring real property in almost all North American jurisdictions (the most notable exceptions being the Western Canadian Torrens Systems), has been described by a Canadian lawyer as being: cumbersome, expensive, time-consuming, delaying, deceptive, defective, inadequate, incomplete, inept, imperfect, uncertain, unprofitable, undesirable, unsuitable and downright stupid!"[14] A major source of difficulty with the registry system lies in a theory of title which has evolved in North America based upon the principle that a marketable title is one that includes a good record title back to its inception in an original grant from the sovereign (although, of course, a distinction must be made here between "nature" of title and "extent" of title).

Professor John Payne has argued that:

> A theory of title based upon search back to the state is ultimately unworkable in the face of a constant increase in the physical volume of the records. As the volume goes up the task of perusal becomes more and more onerous and ultimately reaches a point where the labour which must be expended is out of proportion to the economic interests involved. Even more important, the probability of the records containing error increases in direct proportion to the volume. The continuing multiplication of such errors in a record which never forgets will result in the long run in one of two contingencies. Either the number of unmarketable titles will increase beyond a tolerable limit, or the land buying public will be put to a very large expense and trouble in bringing action to remove clouds upon title.[15]

Other major sources of difficulty in the land transfer process are related to costly searches resulting from inadequate parcel indexes and to the costs incurred from faulty descriptions. Several recent studies have highlighted the severity of these costs and have called for substantial reform to the existing arrangements.[16]

The importance of adequate cadastral information for the equitable assessment of real property has long been an area of concern. The cadastral record provides not only the frame work for the valuation of the land (based upon size, shape, location, tenure rights and restrictions), but also the means of ensuring complete and equitable assessment of the improvements to the land. Inadequate cadastral records contribute to the cost of carrying out the assessment mandate and increase the chances of error or omission. Serious assessment reform efforts aimed at improving the efficiency and equity of the valuation process, such as the recommendations of the Byrne Royal Commission in New Brunswick[17] and, the recent rulings of the state Supreme Judicial Court in Massachusetts[18], have focused attention on the inadequacy of the existing cadastral records. The Massachusetts Land Record Commission, in addressing this issue as it related to that state, concluded:

> Local real estate assessors typically must maintain the most extensive record of current conditions of individual land parcels of any single governmental agency, and in many cities have automated their files, both for their own purposes and for reference by other agencies of local government; however, their work has proceeded without the benefit of a standard, statewide format for coding, filing and retrieval of this data, and typically without a supportive role by the registry of deeds in providing machine-readable files regarding current ownership of the parcels. Where re-evaluations become necessary, the assessors must normally proceed without the benefit of a history of title and encumbrances to the land, given the cost of assembling this information from the present files of the registries of deeds.[19]

A similar need for improved land records is associated with the renewed interest in the problems of managing public lands. The increasing demand for the extension and protection of natural resources has enhanced the need to develop new programs for the acquisition, transfer and withdrawal of public lands; policies for the protection of public lands against vandalism and trespass; the planning and management of alternative (and often competing) uses; and the regulation of these uses. Effective public land management requires a complete and accurate inventory of all public lands pertaining to: boundaries, acreages, existing use, soil, vegetation type, and other parameters. Modern land records are necessary to satisfy these needs.

Perhaps the most urgent need for new cadastral initiatives lies in serving the growing demands for environmental data bases. The importance of land tenure information to the land use planning community was acknowledged by the Wisconsin Land Resources Committee in their report to Governor Lucey in 1973:

> "Contemporary concern with land use must always be mindful of the need to maintain a proper balance between the inherent rights of people in private property and the broader public interest in how land use affects the common good. It is a dynamic balance, changing as perceptions of societal needs change. Yet it is a balance that is always restrained by the limits of constitutional private property rights.[20]

The concept of the cadastre has several advantages as an information resource which makes it particularly attractive for environmental purposes. Some of these advantages include:

1) historical recognition of the cadastral facilities and procedures, such as the surveying and land registration systems, which have evolved over a very long period of time and which are universally acknowledged as part of the general public administration;

2) the dynamic nature of the cadastre with its responsibility for continuously maintaining current as well as a historical property files;

3) the high resolution criteria within which the system must function;

4) the rigorous spatial framework upon which it must be anchored;

5) the high level of public accessibility to the stored information.

The cadastre may also play a significant role in the implementation of the various land use regulatory policies. Regardless of the scale and the intent of such policies, their impact will be invariably felt at the individual proprietary land unit level - which might be described as the level of incremental change. The capability of implementing land use policies at this level (which will presumably entail some form of environmental management zones) can only be socially and politically justified once the proprietary effects of the policies are understood. The cadastre can make an important contribution to this understanding.

These then are some of the specific areas of concern which have fueled a renewed interest in the improvement of the cadastral arrangements. There is also a much broader area of concern, which encompasses both the environmental and transfer issues, related to the adequacy of the available information about the land tenure institution itself. Sir Bernard Binns, in a classic study prepared for the U.N. Food and Agricultural Organization, once argued that an accurate knowledge of the availability and control of the natural resources, and an accurate description and record of such knowledge are the first essentials to their rational use and conservation.[21] He very effectively showed, for example, that the need for a cadastral survey system arose primarily from the societal demands for securing the interests to property, information necessary for transaction and credit arrangements, and for public control over the property institution.

The fundamental importance of the cadastral facilities in the securing of adequate tenure arrangements has been perhaps most vividly illustrated in the land reform programs of Latin America. Doreen Warriner, in her seminal work on land reform, has described the cadastral survey as a fundamental task in any land reform program.[22] George Hill has shown that the lack of a cadastral survey system created serious obstacles to land reform and land development in Costa Rica.[23] Professor Felstehausen, in a discussion of agrarian reform in Columbia, has noted that "the lack of a reliable system of land measurement and registration has hampered every agrarian reform program instituted including that of the 1960's"[24]. Joseph Thome noted that the lack of secure rights respecting the land is often a disincentive to increased production, and that the public sector has been economically affected by title insecurity.[25] Tenure insecurity can also produce serious social repercussions, which in turn can affect agricultural production, as Ronald Clark has illustrated in Bolivia.[26] But while land tenure problems are usually identified with the less developed, agriculturally based countries, they can be equally severe in the more highly developed societies. In North America the more intensive use of limited land resources, a wider diffusion of holdings and the appearance of new forms of tenure have taxed the capabilities of a land tenure framework founded upon much simpler arrangements. The creation of new interests in land, such as the cooperation and condominium, leased airspace, subjacent storage rights, transfer development rights and a plethora of other rights and restrictions have strained the response capabilities of the existing public land record systems. Leary and Blake have noted that "although we are rapidly approaching the twenty-first century in the use, transfer, and financing of interests in land, we are struggling with an eighteenth century system for the recordation of those interests."[27] But the problems are even more basic than just the inability to cope with the transfer of these new interests. In general the public does not have adequate information with which to understand the manner in which the tenure system is evolving, and does not have sufficient information to effectively support or oppose any major policy initiatives in this area. Societal concern for such complex issues as alien and absentee ownership, the nature and extent of corporate ownership, the concentration of private property and the public versus private interest in the land are just now beginning to surface. These

are issues which will be increasingly in thepublic domain, but as Dr. Gene Wunderlich has stated:

> We have very poor information on the structure of rights, the identity of owners, the motivations of owners and the implications for alternative systems of rights holding.....we need to understand how ownership distributes benefits and burdens and influences decisions. Land ownership may affect the outcome not only of land policy but also of other policies for income and wealth taxation, welfare, and public investment.[28]

The impetus for reviewing, and where necessary reforming, the cadastral arrangements is coming, therefore, from a plethora of concerns relating specifically to environmental, transfer and land administration issues and more broadly to the land tenure institution itself.

- TO BE CONTINUED -

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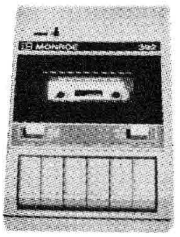

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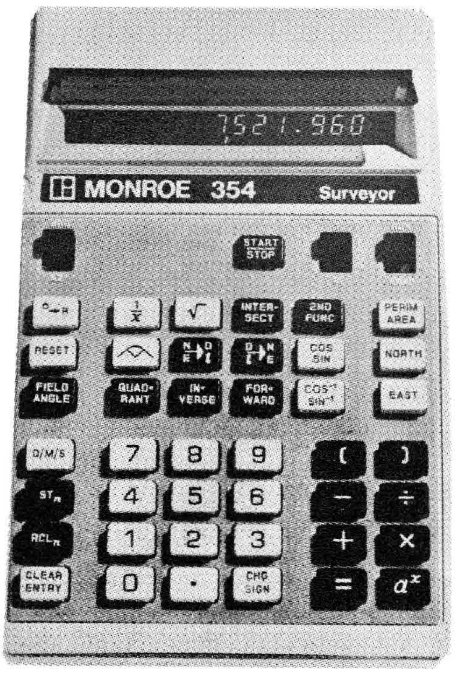
- All arithmetic operations are performed algebraically, just as they're written on paper. Plus parentheses four levels deep.
- It has both a printer and display, yet it takes up less room on your desk than the average in-basket.

A magnetic tape drive is included to allow you to read programs or data into the Alpha 325. The tape drive can as easily receive programs or data from the Alpha 325 and record them for future use. And your entire program library can be stored as a unit since a single 1-1/2 ounce cassette holds over 150,000 program steps or 4,000 data values.

# 354 Micro Surveyor




You're looking at the Monroe Micro Surveyor—the very first hand-held, battery-powered programmable micro computer specifically designed for the surveying professional.

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# EXCERPTS FROM "GENERAL INSTRUCTIONS TO DEPUTY LAND SURVEYORS FOR THE PROVINCE OF NOVA SCOTIA"

*Issued by Samuel P. Fairbanks*
*Commissioner of Crown Lands*
*September 19, 1859*

VII All lines on which are to be established legal corner boundaries are to be marked after this method, viz.: Those trees which may intercept your line are to be blazed ("fore and aft") and marked with three notches, made by striking the axe upwards. These are called sight trees, line trees, or station trees. The lines are to be well cleared and bushed out, the adjacent trees to be distinctly blazed on two sides diagonally, or quarterway towards the line, in order to render it conspicuous and readily to be traced. Due care must ever be taken to have the lines so well marked as to be readily followed. Take a back observation at each station.

IX After a true coursing and exact measurement of the lines the corner boundary is the consummation of the work for which all the previous labour and expenditures have been incurred. If, therefore, the corner boundary be not perpetuated in a permanent and workmanlike manner, the great aim of the survey will not have been attained.

A corner boundary, in a wooded country, is to be a tree, if one be found at or within a few inches of the spot; if not, a post is to be planted thereat (a hewed post is preferable) and the position of the corner is to be indicated by trees or large rocks adjacent (if there be any). Their angular bearings and distances from such corner are to be entered in your field book and reported with your return of survey. These marks are to be called corner witnesses. They are to be distinguished, if trees, by a large smooth blaze facing the corner, with a notch at the lower end, and marked with the marking iron C.W.

X Corner posts are to be made of the most durable wood you can find and not less than four inches diameter. About two feet of the top is to be squared. With a proper marking too cut the number of the lot concession, also the year. Where a tree stands in the place for a corner post, blaze it on four sides and mark it as you would the post. Where they can be had place stones around the corner post or tree. If the corner tree should be a beech or other smooth bark tree, the mark with the marking iron may be made in the bark and the tree notched below.

XI In many places, particularly in the Southern section of the Province, you will find it convenient to use stones for corner boundaries and even for marking lines. When stones are used to mark lines they will be put in piles of at least eight stones in a pile. When a remarkable rock comes on the line it is to be marked with three strokes, or notches, cut with a small pick for the purpose, thus 

When stones are used for corner boundaries, in lieu of posts, you will insert a stone, of at least 15 inches long about seven inches into the ground and build around it 15 other stones. When not practicable to insert the corner stone in the ground, let it rest on its end and build fifteen stones around it as above directed, so that the corner may be represented by 16 stones and the side lines by 8 stones. You will mark the top of the centre stone of the corner monuments with six strokes or notches, three in one and three in a contrary direction, crossing the first three, thus 

An extensive practical knowledge of the difficulties in perpetuating corner bounds has induced more to be said in reference to this subject than might at first appear necessary; but it must be remembered that the faithful execution of this portion of a Surveyor's duty is the great desideratum in surveying and permanently establishing boundaries.

Besides attention to the above directions, the Deputy Surveyor is recommended, when the season is suitable and circumstances favourable, to plant a circle around the corner with the seeds of white thorn, apple, plum or some other kind of tree likely to take root, but differing from those in the locality, so clumps of trees may possibly hereafter note the place of the corner bound. The facts of planting etc. with the kinds, are matters to be reported with the Return of Survey.

* * * * *

Our thanks go to Lee Johnston, N.S.L.S. for the material for the preceding article. It is presented in the hopes that the information may be of some benefit to those retracing old boundaries.

We would appreciate receiving material of historical, humorous or timely interest to our readers for future editions so rummage through your files and drop a copy of whatever you may have to:

Donald Parker
R. R. #1, Box 2,
Brookfield, Colchester Co., N. S.
BON 1CO.

* * * * *

** WHO SAID SURVEYING WAS EASIER IN THE OLD DAYS **

"Your field book is to be carefully kept. You will in the field book note the kind and quality of the soil and timber, the general nature of the face of the country - whether level, rolling, broken, or hilly, all marshes, swamps or meadows, lakes, ponds, brooks, rivers and springs, with a description of their banks and whether their waters be deep or shallow, pure or stagnant - also, all travelled roads or paths - the distances at which you intersected them, as well as every remarkable object you pass. Make a distinct entry of the mode by which you ascertained the distances across impassable obstacles; also the courses and distances to bearing trees or other witnesses to corner boundaries. Your field books are to be numbered and of a size corresponding with the specimen forwarded and to be considered the property of the Department."

from "GENERAL INSTRUCTIONS TO DEPUTY LAND SURVEYORS" 1859

* * * * *

FEES AND CHARGES FOR SURVEYING SERVICES

"You are authorized to charge fifteen shillings per day for Surveys of Crown Land, from the time of leaving home until you return, exclusive of Sundays, allowing twenty miles as a day's travel; if in making returns of surveys of small lots of Crown land, to charge seven shillings and six pence for the plan; and where the lots adjoin, or are within a short distance of each other, they are to be represented on the same plan, forms for which will be furnished you from this office."

from "GENERAL INSTRUCTIONS TO DEPUTY LAND SURVEYORS" 1859

*"The Nova Scotia Land Survey Institute, through various members of staff, will edit court decisions as a service to this publication and its readers. Hopefully, one case can be presented in each issue.*

*The principle followed in editing will be to present only what is directly relevant to the surveyor. This is obviously a matter of judgment; from time to time there could be legitimate differences of opinion.*

*Should the reader wish more details in any particular case, reference should be made to the full report.*

*The case reported in this issue has been edited by J. F. Wightman, M.Sc., B.Ed., P. Eng."*

EWING v. PUBLICOVER 13 N.S.R. (2d)

Nova Scotia Supreme Court, Trial Division
MacIntosh, J.
July 29, 1975

. . . THE VENDOR AGREED TO SELL TO THE PURCHASER A SMALL INN ALONG WITH WATERFRONT AT HUBBARDS, NOVA SCOTIA - A PUBLIC HIGHWAY RAN ALONG BESIDE THE WATERFRONT TO BE CONVEYED - THE CENTRE OF THE HIGHWAY WAS LESS THAN 25 FEET FROM THE MEAN HIGHWATER MARK THROUGHOUT THE LENGTH OF THE WATERFRONT TO BE CONVEYED . . . THE TRIAL DIVISION STATED THAT BY VIRTUE OF THE PUBLIC HIGHWAYS ACT THE WATERFRONT REFERRED TO IN THE AGREEMENT FOR SALE WAS PART OF A PUBLIC HIGHWAY AND COULD NOT BE CONVEYED BY THE VENDOR.

STATUTES JUDICIALLY NOTICED:

Public Highways Act, R.S.N.S. 1967, c. 248, s. 10(2), 14(1), 16 (para. 15).

. . .

1) MacINTOSH, J.: Counsel for the vendor and the purchaser under an agreement of sale of real property have made separate applications in Chambers for a determination of the issues arising from said agreement.

2) The vendor seeks a declaration that the purchaser is bound to complete the purchase.

3) The purchaser seeks a declaration that the agreement of sale has been determined and for an order that the monies paid to the vendor by the purchaser pursuant to the agreement be recovered.

4) By agreement of purchase and sale dated July 31, 1974, the parties contracted for the sale of "The Anchorage", Hubbards, Nova Scotia.

5) The Anchorage is a small Inn comprised of a central building, cottages, a wharf and waterfront.

6) The public highway runs between the main part of the property and the wharf.

7) The foreshore in front of The Anchorage property is of use solely as a location at which the wharf can be fixed. There is no beach or land area between the shoulder of the road and the water's edge. Throughout its length is the mean highwater mark more than twenty-five feet from the centre of the paved highway.

8) The agreement of sale is as follows:

. . .

> 1.03 The Purchaser shall be allowed twenty (20) days to investigate the title, which he shall do at his own expense and if within that time he shall furnish the Vendor in writing with any objection to title which the Vendor shall be unable or unwilling to remove, the Purchaser may cancel this Agreement . . .
>
> . . .
>
> 1.11 Time shall be of the essence of this Agreement.
>
> . . .

9) The memorandum filed by Counsel for the Purchaser, dated June 19, 1975, sets out the following facts as agreed:

> 1. 'The Anchorage' as described in the Agreement of Purchase includes the waterfront and wharf.
>
> 2. Timely objections were given.
>
> 3. There is no grant of waterlot or license under the Navigable Water Protection Act for the erection and maintenance of the wharf.
>
> 4. The availability of proof of possessory title was indicated shortly after objections were delivered, but no proof was delivered until after notice of cancellation . . .
>
> 5. The waterfront property in question is within the 66 foot roadway deemed by the Public Highways Act.

10) Having heard naught to the contrary, I accept these as agreed facts.

11) Whether or not the purchaser was entitled to cancel the agreement would depend on whether or not the vendor was able at the relevant time to convey the property known as "The Anchorage", free from all encumbrances.

12) It is acknowledged that the wharf and waterfront were intended to be included in the property to be sold.

13) In support of a claim of ownership Counsel for the vendor points out that commencing in 1910 deeds of conveyance of this property included the following words: "... together with all rights of the said devisee to the lands or foreshore in front of said herein described property." Subsequent deeds contained these words in more or less the same form. Where these rights arose if unknown and unexplained. There is no evidence of any Crown grant.

14) Two statutory declarations have been filed in further support of the vendor's contention, one by the vendor and another by the vendor's predecessor in title. The latter takes the following form:

> I, WHILIMINA D. DAUPHINEE, of Hubbards in the County of Halifax, Province of Nova Scotia, do solemnly declare:
>
> 1. THAT I am presently 89 years old and have lived in Hubbards all my life;
>
> 2. THAT my husband, Basil J. Dauphinee, purchased The Anchorage Property from Margaret Buckley in 1924 by Deed recorded in the Registry of Deeds at Halifax in book 576 at page 1097;
>
> 3. THAT my husband conveyed the property to me in 1931 by Deed recorded in the Registry of Deeds at Halifax in book 797 at page 149;

> 4. THAT I conveyed The Anchorage Property to Frederick T. Publicover in 1943 by Deed recorded in book 884 at page 921;
>
> 5. THAT from the late 1920's until 1943 I lived on the property;
>
> 6. THAT I always considered the land between the road and the water in front of The Anchorage Property to be part of that property and no one to my knowledge ever disputed that point;
>
> 7. THAT the wharf in front of The Anchorage Property extending into Hubbards Cove is the latest of a series of wharves at that location owned and maintained by the owners of The Anchorage Property;
>
> 8. THAT the Anchorage wharf has been in existence for as long as I can remember and according to the best of my information and belief has existed for over one hundred years.
>
> AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

15) The Public Highways Act, Chapter 248, R.S.N.S. 1967 contains the following provisions:

> 10 (2) Every common and public highway, together with the land within the highway's boundaries, is vested in Her Majesty the Queen, her heirs and successors.
>
> 14 (1) Every common and public highway shall, until the contrary is shown, be deemed to be at least sixty-six feet in width.
>
> 16 Possession, occupation, user or obstruction of a highway or any part thereof by any person for any time whatever, whether before or after the coming into force of this Section, shall not be deemed to have given or to give to any person any estate, right, title or interest therein, or thereto, or in respect thereof, but the highway or part thereof shall, notwithstanding such possession, occupation, user or obstruction be and remain a common and public highway.

16) From these provisions it becomes abundantly clear that a portion, at least, of the wharf and foreshore of The Anchorage are located on a public highway. Title by adverse possession is denied the vendor by Section 16 above.

17) Nor, in my opinion, is title in the foreshore the result of the above-mention quotation contained in the deeds of conveyance.

18) The vendor is, therefore, unable to convey the property contemplated by the agreement of sale, free from all encumbrances.

19) In the result the purchaser's application is granted and that of the vendor dismissed.

*Judgment for the plaintiff.*

The staff of the Surveyor has been strengthened with Mike Crant taking over as Business Manager; Bob Daniels and Lee Johnston taking on Association affairs; Don Parker, Historical; Doug MacDonald, Technical and the staff at the Nova Scotia Land Survey Institute, Legal.

Dr. John McLaughlin has agreed to do a series of articles, the first of which appears in this issue. Doug MacDonald also intends to prepare a series of articles and we anticipate that some differences of opinion may become evident, which, hopefully, will prompt you to express your opinion as well.

With the continued support of those who have agreed to contribute, we are optimistic that 1977 will be a good year for the Surveyor. There is one area, however, that I am disappointed in, that being letters to the EDITOR. In reading an issue of The Newfoundland Surveyor recently I noticed with envy several letters to the Editor expressing frankly and clearly matters of concern to them. Surely, you must have opinions on some of the many developments affecting our Association in particular and the surveying profession in general these days!

- from The Editor

* * * * *

" *CONGRATULATIONS* "

*Congratulations to Joseph 'Joe' F. Archibald, who became an Honourary Member of the Association of Nova Scotia Land Surveyors in 1976. The members of the Association wish to thank 'Joe' for his many years of dedicated service.*

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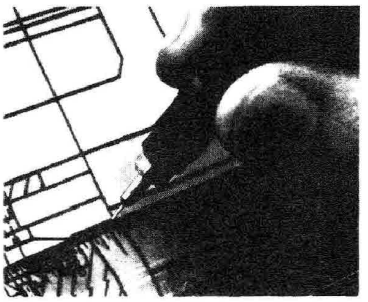

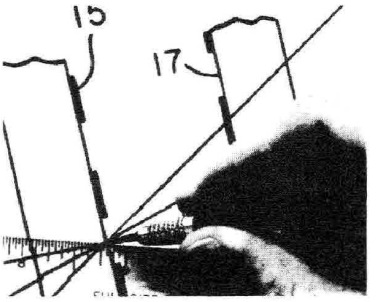


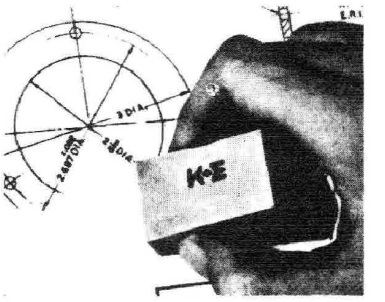


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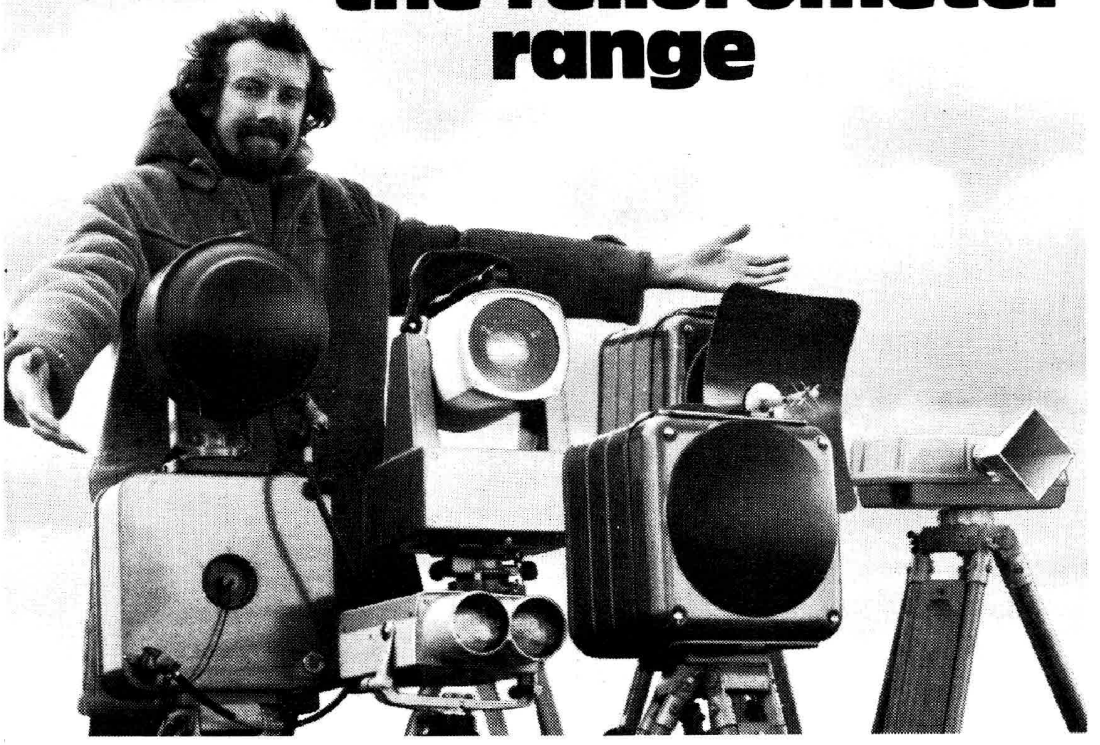

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