

The NOVA SCOTIAN SURVEYOR



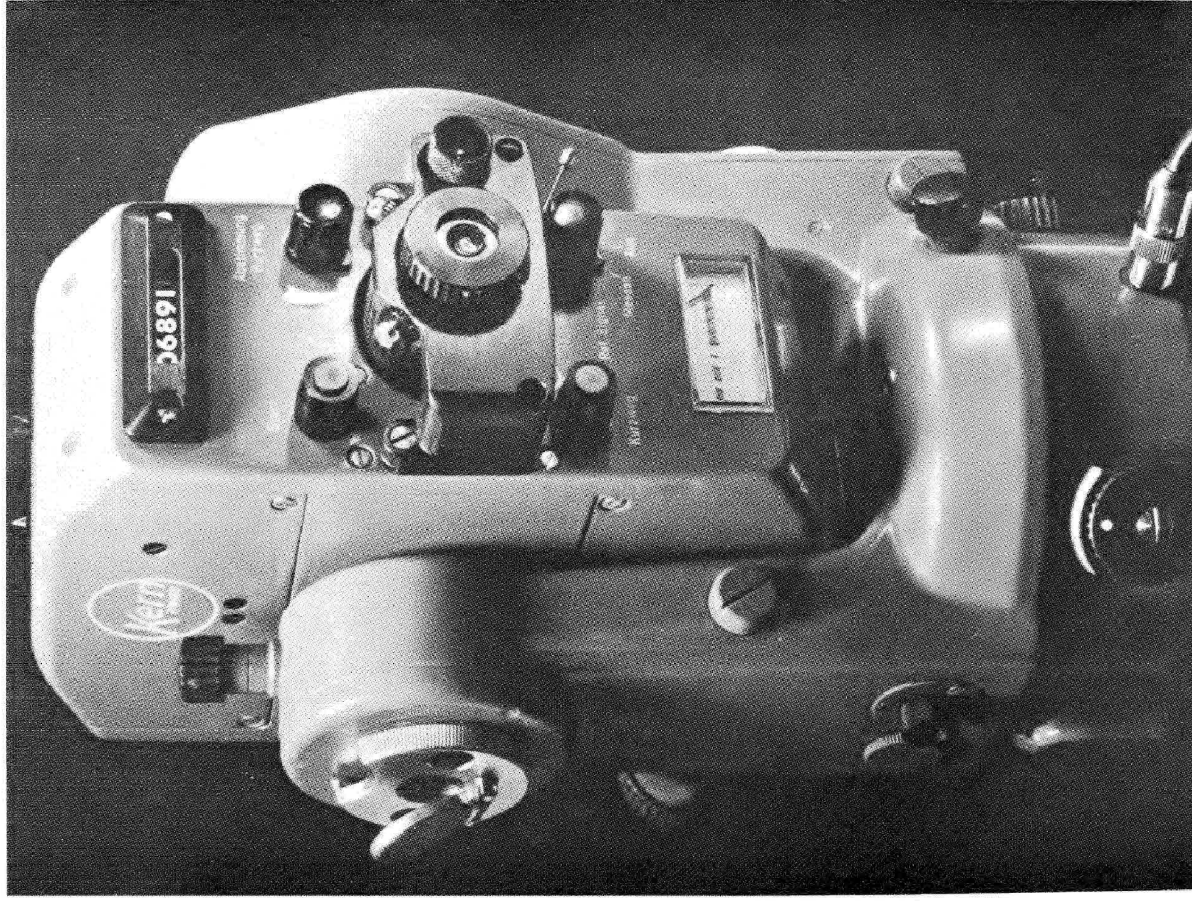
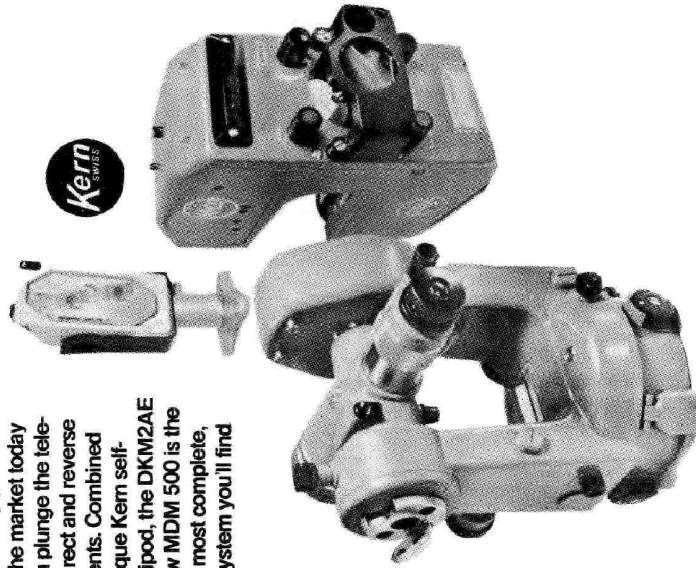
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N.S.L.S. CONVENTION
NOVEMBER 7, 8 & 9



The NOVA SCOTIAN SURVEYOR

Published four times a year by

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS INCORPORATED

James D. Chisholm
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Secretary-Treasurer

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OCTOBER 1974

No. 77

HOW IS THIS FOR EVIDENCE?



- 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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B O R D E R V I E W

CONVENTION 1974

- by Walter C. Rayworth -

The 24th Annual Meeting of the Association of Nova Scotia Land Surveyors will be held on November 7, 8, 9, 1974, at the Fort Cumberland Hotel in Amherst, Cumberland County, Nova Scotia.

This location has been chosen to honour this year's President, James D. Chisholm and his wife, Dorothy. This will be the second time in the history of our Association that the Annual Meeting has been held outside the Halifax-Dartmouth area; the first time having been in Sydney in 1972.

Our first organizational meeting has been held and I would like to point out a few of the highlights of this Convention, as we on the BORDER plan to make it the most successful and interesting yet to take place.

A display of older survey instruments, plans and articles relevant to the history of our profession - an Antique Committee of J.C. Sherren (114 Milner Road, Moncton, New Brunswick) and David L. Crooker (P. O. Box 23, Oxford, Nova Scotia) has been set up.

If you have an interesting older survey instrument, etc. and would be willing to exhibit it, please contact one of the above. Necessary safeguards will be taken to ensure that all exhibits are properly taken care of throughout the entire Convention. This promises to be an exhibit of great appeal to the entire survey profession - be you 21 or 91.

A display of Mortgage Certificates - I noticed last year at Convention that someone had posted the following suggestion on the wall: - Next Year Let's Talk About Mortgage Certificates. This year we intend to do just that and you will be contacted requesting a copy of an actual mortgage or Survey Certificate to be displayed in much the same manner as the wall display of plans last year; however, we hope to go one step further and have a session on the pros and cons of Mortgage Certificates during the meeting.

XXX
 X
 X
 X *This must be confusing to others as well and perhaps we need some further*
 X
 X *education on this point.*
 X
 X
 X *One day while in consultation with Canada Manpower staff, I mentioned the*
 X
 X *problems of training rod and chainmen and the various skills a man must acquire to*
 X
 X *be a valuable employee to a survey firm. They suggested that Manpower would be*
 X
 X *quite willing to stage a course, of any duration, for survey assistants, anywhere*
 X
 X *in the Province, for either persons already in the industry or those hoping to*
 X
 X *find employment with a survey organization. Has this ever been done in the Pro-*
 X
 X *vince? With the proper guidance from the Association this idea could have a good*
 X
 X *deal of merit.*
 X
 XX
 "REMEMBER LAST YEAR"

These are some of the people you heard and met



Hon. Glen Bagnell
M.L.A.



Al Daykin
Dartmouth



Ches & Lesley Gehue
British Columbia



Lew & Millie Schofield
Cape Cod



W. S. Crooker	B. Macdonald	Jim O'Neil
President	Halifax	C.I.S.
A. of N.S.L.S.		Ottawa

"OLD BOY" James B. O'Neill

at

Graduating Ceremonies

Nova Scotia Land Survey Institute

Each year, on the occasion of your graduating and closing ceremonies, your guests state that they are pleased to be here, and possibly even honoured to have been invited. I would like to go a step further and say that having this opportunity today is the most rewarding honour I have ever received and, I would like to take a few minutes of your time to tell you why. Although it is very much a personal matter, it does have a direct relationship to this Institute.

People of my age spend considerable time discussing the so-called "youth problem". We shake our heads in wonder about long hair, far out clothes, loud music, varying and new social activities. We are prone to say that "it wasn't like this when we were young". What we tend to forget is that there was an era in our generation when a similar phenomena existed. This was at the termination of the Second World War, when close to one million people were released almost overnight from the Armed Forces into civilian life, for the most part they were young people, as confused, frustrated and morally uncertain as youth today.

Young people at the end of the war were structured much like young men and women today with a specific division between those who were, and are, prepared to strive for, and work for, the opportunity to make something of themselves and those who feel that the world owes them a living and society isn't worth the time or effort to maintain.

In both eras, it was fortunate that the first group outnumbered the second. Unfortunately, in both cases, the stigma of the second spread to almost overwhelm the first. More fortunately, for me personally, was the fact that I was a dedicated member of the second group, as irresponsible and uncaring as any so-called hippy of today.

I came to this Institute quite by chance or more correctly, by accident. I accepted it as a lark, and certainly had no intentions of developing my usefulness to anyone or for anything.

My first day here, October 16, 1946, was without doubt the most traumatic and stimulating experience of my life - I met Major Church.

Major Church was the kindest man I have known in my life. He was dignified, tolerant and understanding - understanding of everything except laziness, arrogance or lack of faith in mankind or this country. These he would not accept and each student was made aware of this the moment he entered these portals.

The Major explained the student-Institute relationship as I might expect to see it develop:

1. This was not a place where outside influence, political or otherwise, or arrogance would be tolerated.
2. Neither the world nor society owned me anything.
3. I could not live a life of isolation in the midst of decent, hardworking people and at the same time expect recognition as a man.
4. Surveying and mapping was an honourable profession in need of people with professional goals and objectives.

5. If I was to become a surveyor, there was considerable work to be done by both of us.
6. I would start to work then and there - or get to hell out!

This was an introduction for which I shall be forever grateful.

Everything that I may be, in a positive sense, I owe to Major Church and this Institute. Everything that I possess in life, including my family, I owe to Major Church and this Institute. That is why, when I tell you that being here today is the most rewarding honour of my life, I mean it sincerely. Please be assured that I am not an isolated case, there are many spread across this country and a number here in this auditorium who could attest to a similar experience.

This Institute throughout its history, from the 1940's, through the 50's, 60's and into the 70's, under the tutelage of Major Church, George Streb and Jim Doig, has always recognized that the development of the individual character is as important as any training or teaching of cartography, surveying or photogrammetry. In this, this Institute was well ahead of its time in the development of such a philosophy.

We frequently speak of the uniqueness of the Institute in view of the fact that it is the only such institution in Canada, in North America and in the British Commonwealth of nations, specifically and totally devoted to surveying and mapping. This indeed does make it unique. But is that of any significance? At best it is a statistic. What is important is what type of product does it produce or develop.

Does this Institute produce well qualified people? People well disciplined in their specialty? People with a devotion to the development of this country? People with leadership qualities?

Anyone can be trained to level a theodolite, set up a model in a plotter or distinguish between a contour line and a grid line. What is required is a person who can think, plan, organize, direct and advise. The question is, does this Institute develop such a person?

We see graduates of this Institute in positions of responsibility in all levels of government, municipal, provincial and federal. We see graduates in the private sector as some of the most respected and successful surveyors, photogrammetrists and cartographers in the country. I would like to emphasize that the surveyors and mappers in Canada have a reputation of excellence that is second to none in the world. I have had the opportunity over the years to attend meetings of Provincial Land Survey Associations or Corporations in nine of the ten provinces of Canada. In no less than seven of the provinces have I seen graduates from the Institute sitting in the chair of the President giving leadership and guidance to over 1000 professional land surveyors.

As the cartographers join together in national professional organizations and as the photogrammetrists take similar action, we shall see graduates of this Institute emerge into the most responsible of positions.

So the answer is "yes", this place of learning does develop to the standards required.

To those of you graduating today I say that very high standards have been established. It is up to you to not only maintain these but also to upgrade them further.

If I have a message for you today it will be a word of caution about taking lightly the words professional or professionalism. Words which have been so misused that they have practically no relationship to the original definition.

We hear of professional hockey players, football players and exotic dancers. In this context it implies a degree of proficiency or excellence in a particular activity which is 95% physical, and the misused adjective disappears with age. It is not in this context that you aspire to professionalism

An accumulation of money, newspaper clippings or academic honours will not make you a professional. Graduating from this Institute or any other place of learning will not make you a professional. You can receive a degree in photogrammetry from Ohio State, ingeodesy from U.N.B., in cartography from institutions in Europe - and you are not a professional. You can become a member of the Association of Nova Scotia Land Surveyors, a Chartered Cartographer, an accredited photogrammetrist - and you are not a professional. At best you will have achieved the right to associate with professional people - at worst you will hold a licence to make money.

You have been given a mind capable of development, by God. Your character has been molded to a large degree by your parents at home. The specific training to fit you for your role in life has been passed on to you by the primary and secondary school system and by this Institute - and now it's up to you.

The achievement of professionalism is by individual endeavour, attained only when you have made a positive contribution to your fellow man. You must know inwardly that you have made this contribution before you can expect others to recognize you as a professional.

Surveying and mapping in Canada needs, not only to maintain its professional image but to enhance it. This will not be accomplished by wishful thinking or by a public relations program, but by you - you, conducting yourself with dignity, integrity, loyalty and industry.

There is no such thing as a half-professional.

If you are searching for a definition that will allow you to establish a goal, I suggest you consider the quote from Mr. G.W. Smith writing in the Australian Surveyor and reprinted in the March 1973 issue of the Canadian Surveyor. "Professional stature is the respect of society. It is a way of life. It is bestowed gradually, as it is earned by an individual. When enough surveyors, individually, gain the respect of all with whom they have dealings, both in their practice and in their private lives, surveying will be a true profession."

Now a few words about your responsibilities.

Your future work is primarily related to property and land, the measurement of it, the calculation of its size, the definition of its boundaries, the interpretation of its physical properties and the depiction of it in various forms.

Land and property are very valuable commodities. As the late Will Rogers, an American humorist, stated in 1928: - "If you want any land you had better get it now, they aren't making any more". That may have been very funny in 1928, but since that time the population of the world has more than doubled and "they" still aren't making any more land.

To the individual, the possession of property is second in importance only to his family. To man collectively, the land mass on which he lives; with its life giving resources; its beauty of lakes, rivers, forests and coastline; is something which, throughout history, he has been prepared to fight and die for and he will continue to do so.

Your responsibilities are not to be taken lightly. You aren't dealing with cars or ski-doo's, neckties or shirts or chickens and eggs, but with land. Given a reasonable tolerance by man, it will be here for quite some time.

You will be involved (or should be) in town planning, urban and rural development, resource development, transportation routes, recreational development and possibly national defence. Prepare yourselves to know the problems in all their magnitude and complexity and to contribute and give good advice. The man or woman engaged in surveying or mapping who ignores good land and property use is performing a disservice of his community and to this country.

You by the very nature of your work, more so than in any other profession, will have the opportunity to see the dangers of ruthless environmental desecration. You will see on the ground, interpret from aerial photos, and portray in map and plan form, man's misuse of his forests, farm lands and water reservoirs. Having the opportunity to see this and know this, places a responsibility on you to do something positive about it.

Finally, I would like to remind you that when you leave this Institute - do it with pride. Leave it with the knowledge that you are a graduate of a respected institution and also with the knowledge that its continued good reputation is in your hands. Last, but not least, keep in mind that the disciplines of surveying, photogrammetry and cartography are interrelated and as time goes on will become more and more dependent upon each other. The day when the land surveyor can operate in isolation is quickly passing. Keep up with the latest developments and techniques in the work of your fellow graduate and recognize him as part of the total need.

I must end this talk on a note of sadness. Tomorrow you will be leaving Lawrencetown and the Annapolis Valley and in some cases, possibly Nova Scotia. As you grow older in years, experience and travel, you will realize that the years and months spent here were probably the best in your lives. You are leaving one of the loveliest places on the face of this earth, inhabited by the finest people. I recommend that you return often for a visit - it is not only refreshing but it is good for the soul.

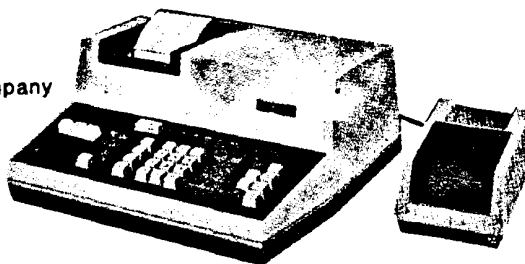
I wish each of you every possible success and happiness in work which I'm sure you are going to enjoy. Always be serious in your efforts but don't neglect to lead a pleasant and fun-filled life.



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**** CLASSES RESUMED AT LAND SURVEY INSTITUTE - LAWRENCETOWN ****

The Nova Scotia Land Survey Institute resumed classes on September 3, 1974 with an enrolment of 77 students. Thirty-four registered for the first year Land Surveying Course. As this is double last year's class, two separate classes were formed. Fourteen have registered to take second year Land Surveying. For Cartography 11 students have enrolled, and for Photogrammetry there are 13 new students and 7 taking the second year course.

As usual the majority of the students come from the Maritime Provinces, and with Nova Scotians in the lead, Cape Bretoners comprise the usual high percentage. About 14 per cent of the students are from New Brunswick.

Principal, James F. Doig, reported about the same staff as last year, except the appointment of Mr. G.C. Brathwaite replacing Mr. James Hogg, and the addition of Mr. V. G. Oliver to the staff. Those teaching Surveying are Mr. Philip Milo, Mr. William Chambers, and Mr. V. G. Oliver; teaching Photogrammetry are Mr. Léonard W. Telfer and Mr. G. C. Brathwaite; and Cartography is taught by Mr. John F. Wightman and Mr. Walter K. Morrison.

There are plans for introducing a new class the middle of October. At that time 14 more students will be registered for a course in Property Mapping designed to meet the needs of the Regional Assessment Office and the Land Registration and Information Service of the Council of Maritime Premiers.

The increased registration has stretched the facilities to capacity. When the new class registers there will be real congestion but hopefully the new building will be ready by the end of November to relieve the situation.

Nova Scotia Land Survey Institute

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PHOTOGRAMMETRY (2 years)
SURVEYING (2 years)**

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Lawrencetown, Nova Scotia.

** JOINT C.I.S. - N.S.L.S. METRIC CONVERSION COMMITTEE **

- by D. K. MacDonald -

The following is a brief summary of the Committee's first report to the National Chairman of the C.I.S. Metric Conversion Committee. (See Metric Newsletter No. 5 printed herein).

By means of this report we have gone on record as favouring:

1) Hard conversion of all standards affecting surveying.

2) The following preferred S.I. Units:

- a) - degree, minute and second (angle)
- b) - square metre and hectare (area)
- c) - metre (length)
- d) - Kilopascal (pressure)
- e) - degree celsius (temperature)
- f) - day, hour, minute, second, millisecond, microsecond, nanosecond (time)
- g) - cubic metre (volume).

3) The following preferred ratios (scales) for charts, maps and plans:

1:1000	(1" = 83.3')
1:1500	(1" = 125')
1:2000	(1" = 166.7')
1:2500	(1" = 208.3')
1:3000	(1" = 250')
1:5000	(1" = 416.7')

and multiples thereof in powers of 10.

If any of our members are strongly opposed to any, or all, of the above recommendations, we would appreciate receiving their suggestions and constructive criticism.

D R A F T L E T T E R

"Dear Sirs:

Re: Metric Conversion

By means of this letter, we would like to introduce our Survey Committee on Metric Conversion, jointly sponsored by the Association of Nova Scotia Land Surveyors and the Canadian Institute of Surveying.

As our name and sponsorship would suggest, we are primarily concerned with those aspects of Metric Conversion normally associated with surveying; however, it is obvious that the ramifications of our work extends to Government Departments, Municipal Agencies, Public Utility Companies, other Professional Associations, Registrars and the General Public. If a large measure of confusion and consternation is to be avoided in land dealings, planning, construction surveys and other survey/measurement sensitive undertakings, our conversion must recognize this interdependency and be broadly and generously conceived. It would be ludicrous for every organization to strike off on its own with the inevitable result that we would end up with a proliferation of different standards and incompatible data. In areas of survey standards, by-laws, zoning regulations and similar regulatory and operational

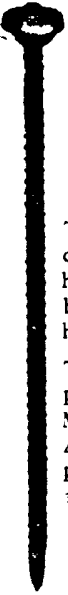


matters, our Committee feels that it can play a significant role in avoiding the pitfalls mentioned above.

It was, with this in mind, that we felt it essential to contact your Department (Association) (Agency) (Organization) with a view to establishing continuing lines of communication on matters of mutual concern. If you are in agreement with the above, we would be pleased to hear from your "Metric Representative" at his earliest convenience.

Yours truly,

Chairman,
Survey Committee on
Metric Conversion."

The above draft letter was sent to Mr. A. H. Millman, Chairman of the Nova Scotia Government Metric Commission, Department of Development, for distribution to all Nova Scotia Government Departments concerned.

The new survey marker consisting of a corrosion resistant aluminum head threaded to a sharpened carbon steel rod and ribbed for better holding characteristics.

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METRIC NEWSLETTER NO. 5

- by George W. Slee, Chairman -
Metric Conversion Committee

Concerning preferred chart, map and plan scales (ratios) for ultimate metric (SI) use, there appears to be a growing consensus in favour of rational scale-ratios conforming to the 1, 2, 5 series, i.e. 1:1, 1:2, and 1:5 and multiples thereof in powers of 10. There also appears to be a growing consensus that the series 1:1 250, 1:2 500, 1:25 000, 1:250 000 be phased out as quickly as possible following metric (SI) conversion.

It is worth noting that Technical Committee 8.1.2 - Forest Inventory and mapping of the Metric Commission's Steering Committee No. 8 - Forestry and Wood Products, has approved of the rational scale ratios conforming to the 1, 2, 5 series and their multiples in powers of ten, with the proviso that the irrational scale-ratios of 1:15 000 and 1:12 500 be retained for forestry use.

Concerning subdivision plans in Metric (SI) Units, the Ontario Association of Land Surveyors Committee on Standardization in the Metric System recommended a start should now be made toward the standardization of areas in future subdivision plans, in particular with respect to the size of a subdivision lot. With the Metric (SI) system, Canadian usage will be restricted to the square metric (m^2) and the hectare ($10\,000m^2$). The Committee felt that to express the size of a subdivision unit in hectares ($1\text{ ha} = 2.471\text{ acres}$) would be out of reasonable proportion. The Committee recommended the following rationalized lot sizes upon conversion to Metric (SI):

<u>Present Lot Size</u>	<u>Recommended Metric Size</u>
40' x 100'	12.5m x 31m
45' x 100'	14m x 31m
50' x 100'	15m x 31m
50' x 120'	15m x 37m
60' x 100'	18m x 31m.

Concerning new dimensions for front, side and rear yard clearances presently called for in zoning by-laws of the municipalities, the Committee recommended the following:

<u>Front and Rear Yards</u>	
<u>Present</u>	<u>Metric (SI)</u>
20'	6m
25'	7.5m
30'	9m
35'	10m

Side Yards

<u>Present</u>	<u>Metric (SI)</u>
4'	1.2m
6'	1.8m
10'	3m

Street Widths

<u>Present</u>	<u>Metric (SI)</u>
50'	15m
60'	18m
66'	20m
86'	25m
100'	30m
120'	37m

Widths of Easements

<u>Present</u>	<u>Metric (SI)</u>
5'	1.5m
10'	3m
15'	4.5m

It would be of interest to both the C.I.S. Metric Conversion Committee, and the C.I.S. Membership generally, to learn of other recommendations concerning subdivision design upon conversion to metric (SI). Please submit your comments in this regard for publication in a future newsletter.

The Metric Commission has advised that establishing a single date for Metric (SI) is not practical, and has, therefore, established dates for the following four phases of Canadian Metric (SI) Conversion:

- 1 - Investigation - to be completed in 1974.
- 2 - Planning - to be completed by the end of 1975.
- 3 - Scheduling - to be completed by the end of 1976.
- 4 - Implementation - to start 1976, where not started already, peaking in 1977/78 and completed in 1980.

A function of C.I.S. related to the investigatory phase, is informing the C.I.S. Membership, and the public, of complete information as to what is happening in each survey jurisdiction; Federal, Provincial and Municipal, in respect to planning, preparation, and implementation of Metric (SI) Conversion and the establishment of national surveying and mapping Standards for Canada. Of particular interest is the matter of necessary amendments to existing legislation and statutory regulations governing surveying and mapping, the development of new standards where appropriate, and definitions as to how existing standards will be converted.

C.I.S. is committed to the preparation of a Metric Practice Guide for Surveying and Mapping. Work on this can be started as soon as the C.I.S. membership advise as to preferred SI Units, what existing formulae and tables, including field and office tables, should be converted for use by both the student and practitioner. What advice can you, the reader, advise in this regard?

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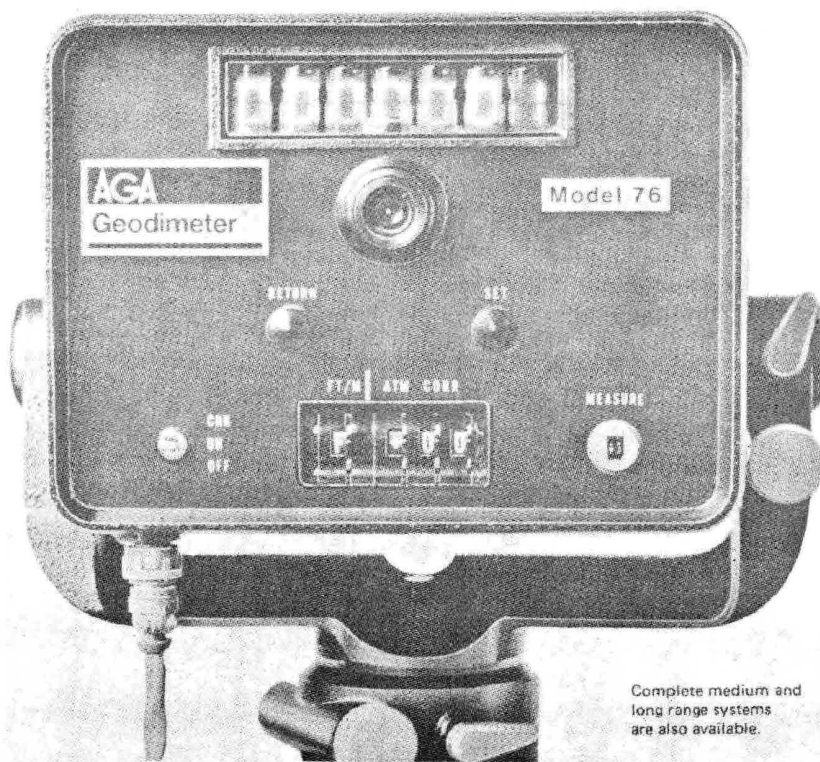
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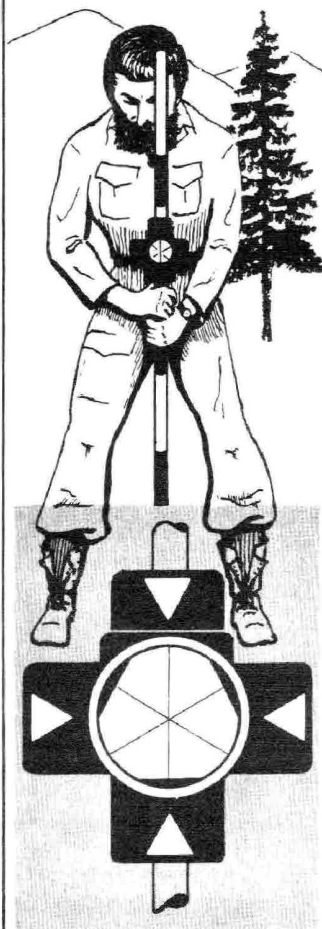
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LEGAL ASPECTS OF LAND TITLES ACT

by Charles W. MacIntosh, Q.C.

In the western provinces, and in parts of Ontario, where the Land Titles Act has been implemented they have what is called the Land Titles System, whereby transfers of property are made, not by deed, but on the registry of the Master of Titles. In other words, if I buy a parcel of land in Alberta and take a transfer document from you, I am not the legal owner of that land until I take it into the Land Titles Registry, and the Master of Titles looks at it and checks it for form, makes sure that there is no previous commitment and gives me a Certificate of Title. Whereas in Nova Scotia, if I were to give you a deed of property, upon you taking delivery of the deed, you own the property and that is it. There is no obligation on you whatsoever to record it.

The System of Land Titles in Ontario ties down the property to the specific recording of land, and over the past few years the number of areas in the Province which were not under the Land Titles System, showed a Registry System somewhat similar to ours, but it had the advantages that all the properties were tied into a registered plan. In the Ontario process they are considering changes in order to bring their system entirely on a Land Titles System and put the whole thing onto a computer, somewhat similar to what we are contemplating here. The Ontario Law Reform Commission went into this whole question in 1971, under the Chairmanship of Mr. Justice LeCore and delivered a very elaborate report and recommended that this be done. We can feel sure that the Ontario Government will act upon that, in spite of the immense cost, in the very near future. The Federal Government, of course, would be paying part of the cost of this, as the Ontario Government would hope. This is not really an entirely new departure because the State of Maryland and Vermont have had a similar system for a number of years, and they have gone on computer systems of various types, where they tie in the corners of the lot to a co-ordinate grid.

The thing that I found lacking to some degree, in the Ontario Law Reform Commission, was the study of the surveying implications of what they were doing. Their report is some 150 pages long and there is about two pages dealing with the survey implications. I would suggest that we are perhaps considerably more advanced in this, either that, or else we have an even more horrible problem than they have, I am not sure which it might be. In any event, a number of years ago about 1967, or 1968, the Department of Regional Economic Expansion, as it now is, entered into a study to see if the Titles System of the three Maritime Provinces could be brought up to date and what would be the best system for use. A number of studies were conducted and they came up with the solution that a computerized Land Registration System, based on a coordinate grid, would be the best way to update and modernize our system.

This would involve a number of alterations to the surveying procedures. It would mean having to monument the whole three provinces and a complete change in the subject of law. The scheme roughly, as it was agreed upon, works in four phases, but the end result of it would be that, upon coming into the course of the Act, let us assume that some miracle happens and the Act comes into force the 1st of January 1976, then everybody who is the assessed owner of property would be entitled to receive from the Master of Titles a "D" Class of Certificate.

This "D" Class of Certificate does not confer any rights upon them at all, it merely indicates the registered owner of the property. If you go to transfer that property he has to surrender his certificate to the purchaser at the time of transfer. The Registry Offices all close December 31, 1975, and all transfers subsequent to that date will take place under the new Land Titles System; however, what the quality of title being conveyed was depended upon, of course, was the person owned at the time. The assessed owner of the property was merely acting as the assessed owner and there were twelve other heirs by law of his late father who also

had equal interest in the property at the time of sale of the property. This would come to light and the purchaser would have to get documents executed in the usual manner by the other eleven people who owned the property. In order to determine just what quantity of property he is acquiring, the purchaser would have to go to the Registry of Deeds and search the title there. The Registry of Deeds is closed as far as the registration is concerned but still there is what they call the archives for the storing of documents up to that date.

The "D" Class title is not very good, it merely states that you are the assessed owner of the land and you can top grade that to a "C" title by production of the deed or document of title. You can further upgrade that by referring to a satisfactory plan. If a plan has been made of the property by survey, it is somewhat unclear in mind as to what is contemplated in this regard, whether any old survey which has been made at any time in the past would be sufficient, or whether the survey must be tied into the coordinate grid in order to classify first for a Class "B" Certificate of Title. That may be and we will have to have a Class "D"-1 or Class "D"-2 Certificate of Title, depending upon what type of plan is involved. As you are probably aware the alternate intentions are to have every survey and deed description in the Province tied into the coordinate grid. Once this has been achieved, if the person buys a lot of land, he has certainty of location.

In addition to this, if a person does have a certainty of location tied in with the plan and a "B" type of Certificate, he can further upgrade this to a Class "A" Certificate filed with the Registrar of Master of Titles, an Abstract of Title which the Master of Titles approves, indicating that he is, in fact, the owner of the interest of the property which he claims. Upon complying with all of this, he receives a Class "A" Certificate of Title which is, in fact, a certificate of ownership. The certificates may be subject to various interest, i.e. mortgage on the property (this would appear on the certificate), any easement against the property, (this would also appear on the certificate), along with other outstanding claims against title.

It is contemplated that this system is to be brought into course in the Maritimes in four phases:

Phase 1, which is already well underway, is based on the geodetic survey which is prepared by the Department of Energy, Mines and Resources. The second order, the Control System of Coordination is to be established throughout the provinces. The set-up is for thirty-five controlled monuments per square mile in the Dartmouth areas and one per square mile in rural areas. It is considered that in this manner accuracy in urban areas of one tenth of a foot will be achieved and in rural areas one-half of a foot will be achieved.

Phase 2, is the mapping of the properties by photo or by reproduction. In Nova Scotia it is intended that it be 1-10000 and 1-20000, but in urban areas it will be 1-100 feet and 1-400 feet. The completion date for this is set for 1979. There are, we understand, some seven hundred and fifty thousand legal parcels in the three Maritime Provinces supposed to be identified in the Maritimes on the map and it is estimated that eighty thousand parcels being done per year would take until 1979 to do this. It is possible that these will be done as required and the completion date may be extended considerably beyond that time. Actually, it is not until the property is being transferred or mortgaged that anybody is interested in it.

Phase 3, is the new registration system which goes under the title of L.R.I.S. (Land Registration Information Service). It was hoped that this would be functioning in April, 1973. The problem with respect to this is that laws are required making it legal for people to record documents, and unless this is done, the new system is defeated from the very beginning. A number of changes in property law are required as a result of this and I will be dealing with this later.

Phase 4, of course, is putting the results of Phases 1, 2 and 3 on a computer in some meaningful manner so that it will be available to the public.

I think that this particular system is better than the one in Ontario. The standards set for the surveyors would appear to be somewhat higher. The only thing there that would give some thought for concern is that it might result in dictating as to what the surveyor must do when he surveys property. In addition, to determining a boundary between two adjoining owners, which a survey now does, the surveyor will be locating the location of the property and is certain where the property is located. There may be a few new rules and regulations as to what things you are going to have to check before you can call a survey completed. This may increase the cost of surveys and, up to a certain point, the availability of information and the usefulness of the previously established coordinate points will reduce the time involved. The system is the U.T.M. grid and I believe that is six degrees.

Prince Edward Island already has an Act in force which was drafted by their Committee under Willis Roberts and a Professor at U. N. B. Law School. The recommended Act, as it went to the Province of P.E.I., was a pretty good system. They omitted some of the things. Some of the reforms that were suggested in the draft Act did not manage to pass the legislature and I find it somewhat deficient in this regard and, where we are to have a uniform system in the three Provinces, it may be that Prince Edward Island may have to reconsider some of the changes which they did not make to the Act when they first passed it. In Prince Edward Island there are three types of Certificates - the "C", "B" and "A". The "C" is a preliminary certificate which merely indicates that the fellow is the assessed owner. You get a "B" Certificate if you have an abstract of title and the property is "sufficiently described". Sufficiently described is at the discretion of the Master of Titles. If he feels the description is adequate, it is okay. If he doesn't I guess you have to go back and get a survey. If you have your "A" Certificate and if you have the abstract of title and a sufficiently described parcel, and it ties within a survey plan, I don't see where the survey plan has to tie in with the coordinate grid, but it may be that other legislation supplementing this may be in force in Prince Edward Island which would require the surveyors tying in to the coordinate grid on that aspect, and I must admit I am not knowledgeable about this.

Adverse possession has been abolished under the new Act. After first registration of property, under the new Act, nobody can get an adverse of title by squatting. This may be okay as far as title is concerned but it gives me a problem as far as boundaries are concerned, because boundaries and title are two different things. I am sure that surveyors are familiar with this problem but the lawyers are considered to be more porous. Most cases involving disputes over land are really boundary disputes but there are about forty per cent with respect to the degree of ownership. Now those are two separate and distinct questions. In the first case, the question is where is the boundary and, the second question is, what is the quality of the title? Who really owns it? They don't care where the boundary is or they are satisfied where the boundary is, but it is the title they are not happy with.

Adverse possession is covered completely, we do have a problem here where the boundary fence is disagreed upon by neighbours and it has been there for quite a few years but, has not been recorded as such and, low and behold, it turns out that it is not the boundary at all. By accurate survey the boundary is three feet this side of it. This is particularly disturbing if somebody has built an improvement on the encroachment, so this is one problem which will have to be dealt with, I would suggest, on first registration and in our legislation.

It is not entirely up to the poor property owner in the Prince Edward Island Act because a fund was set up and if anybody is having trouble establishing his title, and his boundaries, he can apply to the Master of Titles for money and money will be forthcoming in an appropriate case from the fund to pay for the cost of doing the necessary work.

Another new type of creature which was reported from the Western and Ontario Land Titles Act is the caution. This is necessary because a transfer, absolute transfer, is title to the property. If I walked in today with a transfer and put

it on the Master of Titles' desk he should give me a certificate of title. I own the property, notwithstanding what the rights of the matter may have been. So anybody who, for proper reason, claims that the property should not be sold to me or shouldn't be sold, it should be tied up and a caution filed. This freezes transfers on that particular parcel for ninety days. Within ninety days I commence action to protect my position, then the caution remains. If, however, within ninety days nothing is done then it collapses, so at the end of ninety days the property may be transferred.

They do not have certificates of judgement under the new Prince Edward Island Act but executions, which have to be filed within ten days after judgement are obtained, and will bind the property. I find this a rather peculiar provision because as I read the Act, it must be filed within ten days after judgement, if you go into the eleventh day you are too late and you must file it against a particular property. This would mean that you would have to search the records to find out what property the fellow filed judgement against owned and come up with that necessary document within the ten days or else you lose rights against his property.

They considered some system similar to this in the Ontario Law Reform Commission and discarded it, and agreed that a system somewhat similar to the one which we have, whereby we have a separate judgement book and upon filing your judgement with the named individual, applies to all his lands. They recommended a system somewhat similar to that adopted in Ontario. I would think that there is merit to both systems and that the two can properly co-exist.

There is one section in the Prince Edward Island Act that I would like to read to you: "The description of any parcel of land and any certificate of title is not conclusive as to the boundaries or extent of that parcel of land unless a certificate of title expressly so states." So having gone through the whole exercise they end up with a Section saying that the boundaries are not sound. This appears to defeat the whole purpose of the exercise and the soundness of boundaries, accuracy of location and certainty of title should be the objectives of such legislation. One further criticism I have on the Prince Edward Island Act is that they did not tie in on the computer and I understand that this was for financial reasons and they have the whole thing on paper and, I understand, that they can as soon as one other province goes on the computer which then will be financially feasible. The paper is in such an order that it can readily be converted to the computer on fairly short notice.

There is an Indemnity Fund set up under the Act for people who lose their property by reason of something which has been done pursuant to the Act. They first have to sue the fellow who did them wrong and if they can't recover from him they have six years to go against the Indemnity Fund. The Indemnity Fund is built up by a surtax on registration fees but, in the first instance, every province is backing it.

The proposed Acts create a number of problems which are going to have to be dealt with. Some of these problems that you are going to run across are surveyors and some are probably lawyers. Another thing is expropriations. Under the Expropriation Act the Federal or Provincial Government, or other expropriating authority, can go in with a plan of description of land they bought at the Registry of Deeds and bang the property is invested in the Crown. There is no requirement that the expropriation plan should tie into the coordinate grid, but yet title is absolutely vested in the Crown immediately after the expropriation document is filed. There is no notice to the public upon this unless the expropriation is checked. This is presently affecting our Registry Act and, unless some provision is made for it in new legislation, it will still have that affect.

Another problem is with those intestacies. A Will will often read I deed my property to my dear wife, if she survives, or otherwise it is up to my children to survive. There is no names on that at all, we don't know who the owner is. Something is going to have to be done by way of a decree from the Probate Court indicating who is the owner of the property.

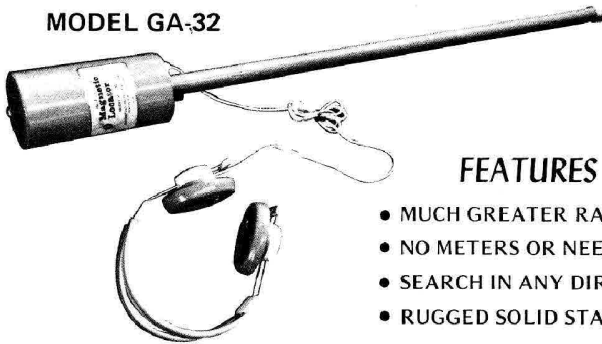


INFORMATION

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Introduction

The GA-32 is unequalled for locating iron markers, monuments, and even P-K nails.

The GA-32 provides greater range than our phenomenal Model GA-22 which essentially solved the iron marker location problem for the land surveyor. Although our GA series locators were designed primarily with the land surveyor in mind, they have been found to be superb for locating valve boxes, manhole covers, iron curb boxes, etc. With a GA-32 you can search an area much faster than you ever could before. You can search in any direction and sweep a wide area as you walk along. Magnetic objects are pinpointed by an increase in frequency of a 65 cycle idle tone heard in the headphones.

The GA-32 retains the same simplicity of operation as the GA-22. It has no needles or meters to watch and can be poked into brush, shrubbery, and snow banks. Asphalt, concrete, water, snow and ice do not affect its performance.

The GA-32 is unlike many other metal locators in that it detects the magnetic field of the marker. It will not respond to aluminum, brass, copper or other nonmagnetic materials. When the locator comes within range of an iron pipe or monument, a signal generated in the headphones guides the operator to the exact location. The GA-32 has a control so that its sensitivity can be adjusted over a very wide range to suit various situations.

The GA-32 is powered by four C-cell flashlight batteries and is painted a high visibility orange color.



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The locator is turned on by connecting the headphones.

Search is conducted by grasping the locator as illustrated in the photograph and sweeping with the small end of the locator near the ground. When the magnetic field of a marker is detected, the 65 cycle tone in the headphones increases in frequency. This signal is at highest pitch when the locator is directly over the marker so the latter can be easily pinpointed. Unquestionably, our magnetic locators are the simplest to operate of any kind of locator.

The GA-32 is similar to our Model GA-22 which land surveyors have found to be unequalled by any other locator for finding iron pipes and monuments. The GA-32 has the additional features of greater range and a frequency modulated tone in the headphones.

Ranges

The detection range is dependent on the state of magnetization of the marker. A 3/4" diameter iron pipe, 18" long can be detected at a distance of 1-1/2 to 3 feet.

The GA-32 has two magnetic-field sensors (flux gates) spaced approximately 20 inches apart. The two sensors are precisely matched and aligned so that when the instrument is exposed to a uniform magnetic field, such as the earth's magnetic field, the voltage generated by one sensor is balanced by the voltage generated by the other sensor.

When the small end of the instrument is brought near an iron pipe, one sensor experiences a greater magnetic field than the other sensor. The

output voltages of the two sensors are no longer balanced with the result that the tone in the headphones increases in frequency.

For normal and low sensitivity operation, the locator has a threshold level of magnetic-field difference between the sensors which must be exceeded before the signal frequency changes in the headphones.

When operating on high-sensitivity, the threshold level is reduced with the result that frequency changes appear due to misalignment and mismatch of the sensors. The reduction of the threshold increases the range of the instrument. A magnetic object is detected by the change in frequency of the tone in the headphones.

Superior performance is assured by Schonstedt's patented HeliFlux® sensors and over 20 years experience building the world's finest space age flux-gate magnetometers.

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The GA-32 will pay for itself many times over because:

1. Ground-level markers can be found quickly.
2. Markers too deep to be located by other means usually can be found with the GA-32.
3. Costly excavation for markers can be reduced to a minimum.
4. The GA-32 can be used in heavy brush or snow where other locators are difficult, or practically impossible to use.

SPECIFICATIONS

(Specifications subject to change without notice.)

Input Power:	Supplied by four C-cell batteries (1½ V each).	Weight:	Approximately 3 pounds including headphones.
Battery Life:	50 hours of intermittent operation.	Operating Temperature:	0°F. to 120°F.
Output:	Approximate 65 Hz idle tone in headphones. Tone frequency increases with gradient-field intensity.	Length:	42 inches.
Power Switch:	Power is turned on when the head-phone jack is plugged in.	Construction:	Rugged, all solid state.
		Finish:	High visibility orange color.

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Another one of concern to you people is highways. As you know the statutes say that every highway in the province of Nova Scotia shall, unless otherwise, be 33' from the centreline on either side. Highways have a tendency to roam from time to time, depending upon where they happen to be, and who does the paving work and who does the survey work before that. Perhaps the only answer to this would be that after a highway is built they are going to have to survey it and somehow correct it under the new system. I have already discussed the problems relating to adverse possession and that there are really no problems there, one is to title and the other is to boundary. This is going to have to be dealt with in the new Act and there is no ready solution to either of these except to set up some procedure whereby some fair means of arriving at who is entitled to what at the present time. The time coming into force of the Act can be determined and abolish adverse possession from that date, but there has got to be some qualifications there to protect people.

Another problem which worries lawyers is what about the bona fide purchaser who dies without notice. Let's say that I am a real sharpie and I own a property and I sell it to Bob Feethan at eleven o'clock and to Walter Servant at eleven thirty, both have checked the records and find that I am the owner of the property and Mr. Servant gets there first and records the property - he is the owner of the property. The Master of Titles gives him the certificate of absolute title. Mr. Feethan who bought the property first would be out in the cold. His recourse would be against me, his rights would be cut out under the new Act entirely. The Assurance Fund as set up, I would suggest, if not properly run would be to give a blank cheque to the people who are dealing with the system, they could set up a system such as I just described and claim against the fund, where actually they have not suffered a real loss. Under the Prince Edward Island Act I doubt it whatsoever, under the Ontario Act and our suggested Act, it is contemplated that a limit of \$5000 could be payable by the Master of Titles but, if you are claiming more than that, you have to go to Court to prove it.

Another one of our problems is the restricted covenant. Under the Prince Edward Island Act, in the draft legislation, restricted covenant can be cancelled after forty years. Restricted covenant, if you are not familiar with the term, is the covenant in the deed saying that you shall not use the property except in a certain way.

Another big problem is the one which has involved Ontario for years and is the so-called overriding interests. These are things which cannot be registered but yet which you use in the enjoyment of land. Zoning - you may own a beautiful bit of land but you can't build on it because it may be a water resource area - that doesn't show anywhere on title. There are in Ontario sixteen overriding interests, and I made a calculation here one time and came up with at least twelve: Zoning, by-laws, ordinances, improvement charges and a number of other things which affect the value of property, and the title of property, under our present system, nowhere appear on record. Under the Ontario Act a lot of these overriding interests are of such a nature that they can't properly be tied into any specific parcel.

Another one is the woodland fire tax, which we have in this province, where a parcel over one hundred acres is taxed and a parcel under one hundred acres is not.

The real big headache, of course, is dowry. This is the interest a wife has to her husband's property, unless she signs it off, he can't sell his property. A number of different suggestions have come up as to how to deal with this; going so far in some cases as to abolishing dowry altogether and others requiring a widow or partner to indicate that she does claim dowry, and within so many days after first registration would work in this manner: Let's say that I buy a property as an investment. My wife would get a letter in the mail from the Master of Titles, saying that your husband bought a property down on Granville Street. Do you want to claim dowry on that property - you file against it within thirty days. If she didn't, then I would be free to sell it without her concurrence; however, if she did file, then I would have to get her signature every time I want to mortgage or sell that property.

One other problem, which I don't know if anybody has the answer to, is the Registry Office, Master of Titles and other government offices receive plans of property. How do they properly store these? How do they categorize them?. How do they index them? How do they protect them against loss? Perhaps there is no alternate answer to this, but microfilming and intensive indexing may be the only answer.

With respect to the system as a whole, it is my opinion that this system could be implemented and in force in two years. Does it require immediate going forward on the part of the governments involved to ensure that this is done, as a tremendous amount of thought has to go into this Act before it is proclaimed as law for Nova Scotia and New Brunswick.

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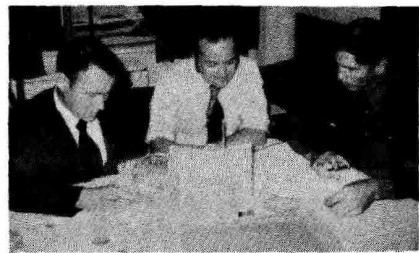
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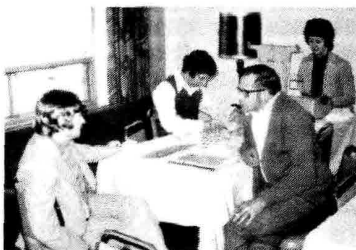
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"Yes Garnet"



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**** W O R K S H O P ****

JUNE, 1974

LEGISLATIVE COMMITTEE REPORT - by F. W. Roberts, Chairman

Our Legislative Committee had very useful and successful meetings today with the following Committees:

1. Private Practice
2. Education
3. Complaints
4. Regulations.

Discussions with the Private Practice Committee were very lively and interesting. Their Committee agreed to clearly define the problems centering around the Schedule of Minimum Tariffs and to draft up solutions and alternatives to resolve those problems and to formulate some legislation regarding Competitive Bidding. They agreed to prepare and submit a definition of those problems and a brief supporting their recommendations to our Committee by the end of June.

The Education Committee agreed generally that the basic Regulations with respect to Educational Qualifications are fairly adequate as they exist. Their Committee agreed to formulate:

- (a) Qualification standards respecting the admission of students into the surveying profession.
- (b) Review the area of Articling of Students and the Terms of Articles.
- (c) To review Regulations as they apply to the surveyor providing articling to students - standards of requirement for the surveyor.

The Complaints Committee is reviewing Codes of Ethics from other countries in their review of our existing Code. Some specific items we discussed which seem to form part of the Code of other Associations:

- (a) Methods of Advertising and
- (b) Competitive Bidding or Underbidding.

The Complaints Committee agreed to have a report for submission to the Legislative Committee by June 10th.

Mr. David Clark of the Regulations Committee has presented a draft of their revisions of Regulations under Section 8, 9 and 10, to the Legislative Committee, and we are hoping to be able to review it shortly and get together with the Committee further thereafter.

One of the conclusions we arrived at in our deliberations today was that, as we pointed out at the beginning of this Workshop this morning, we need help and input from the individual Committees set up under the Council's Committee structure. Our comments may not be well received but it is apparent that the Committees have not seriously disciplined themselves to meet regularly and work conscientiously on their projects. It is essential to do this if any productive effort is to be achieved. The Legislative Committee for example has met religiously every week since last fall. It is however, now evident from the commitments that have been made by these Committees here today, that they have recognized the responsibilities which have been thrust upon them to help further the surveying profession in this Province.

** WORKSHOP NO. 3 **

The third Workshop was held at the Citadel Inn on September 14, 1974. Twenty-four committee members out of twenty-nine were in attendance, 83%. Excellent turn-out.

Objectives -

The main objectives of this Workshop were as follows:

- 1) Prepare formal presentations of items to be submitted to Annual Meeting.
- 2) Identify 1975 projects.
- 3) Prepare 1975 committee budgets.

Interface Meetings -

Due to lack of time at the second workshop, some of the committees were unable to have interface meetings with the Legislative Committee. The following interface meetings were held:

Legislative Committee	- Regulations Committee
Legislative Committee	- Education Committee
Complaints Committee	- The Nova Scotian Surveyor
Professional Status	- The Nova Scotian Surveyor
Private Practice	- Professional Status.

Stenographic Services -

For the first time, stenographic services were available during the workshop. This service will continue to be provided in the future.

Reports for 24th Annual Meeting -

This year the Convention Committee is attempting to have all Committee Reports available for the members as they register. The Committee Chairmen are, therefore, requested to have their reports to Mr. James Chisholm, P. O. Box 310, Amherst, on or before October 23, 1974, for reproduction.

The membership will be given time to question the reports during the meeting.

The 4th Workshop is scheduled for January 18, 1975. Notification of time and location will be given at a later date.

Respectfully submitted,

E. P. Rice.

LEGISLATIVE COMMITTEE REPORT - by F. W. Roberts

Remember the Standing Legislative Committee you established at the Annual Meeting last November. Perhaps you have been wondering what they have been doing since that time. Except for a short adjournment during the months of July and August, when the pressure of competition for time from vacations and other summer-time activities easily won out over the drudgery of Committee work, the Committee has met weekly since its formation.

Most of you, especially those who have been involved in the Association Workshops, already know that the Committee's efforts have been primarily directed toward the objective of developing a new and improved Land Surveyors Act, which will hopefully be tailored to the needs of contemporary surveying. Contemporary surveying legislation must not only recognize the needs of Land Surveyors but more importantly must always effectively protect the interests of the public.

The Legislative Committee has plodded diligently, albeit slowly, over the past months and have now completed a very preliminary first draft. Our first meetings in September have been held with a solicitor to review and revise this first draft, to obtain clarification on certain legal points and to redraft the Act in a proper legislative form.

The Committee had hoped and still does plan, to be able to submit at least a preliminary draft of the revised Act for discussion at the Annual Meeting. Previously, we had planned to attend Regional Meetings where we had hoped to be able to discuss the draft with a larger number of the Association members, in a more informal setting in preparation for more detailed discussion at the Annual Meeting.

It now appears that the draft will not have progressed to the point where it can be intelligently discussed at Regional Meetings prior to the Annual Meeting; however, we are hoping that a revised draft will be available for circulation to the membership prior to the Annual Meeting, and your Committee will welcome the opportunity for detailed discussion during the sessions. We also hope to have our solicitor available at that meeting.

We will still propose to attend Regional Meetings to discuss the proposed draft, but it now appears this will not take place prior to this year's Annual Meeting. We propose to make our Committee available in whole or part for these Regional Meetings.

In terms of timing this in effect means, that no formal decision can be taken at the next Annual Meeting, and if a presentation is to be made to the spring setting of the House, a Special Meeting of the membership would be required sometime next spring. This undertaking is a complete revision of the existing statute as it applies to land surveying and also involves many changes, as yet unmade, in Regulations and By-laws and your Committee would not wish to prejudice the whole presentation by imposing too rigid limits on its study and preparation.

COMPLAINTS COMMITTEE - by Burnie Smith

The Complaints Committee is concerned by an increase in the number of complaints by the public against members of our Association. While some of these complaints are justified, because of poor quality of work, others are prompted by a lack of communication between surveyor and client.

Of course, we all know that a few people would not be satisfied if the surveyor worked free of charge, placed stainless steel markers, and provided a plan engraved in gold. A few complaints reflect this fact of human nature. Unfortunately, however, the greater number of cases indicate that the surveyor has not handled the situation in a professional manner.

A quick breakdown of complaints would show the following types:

- 1) Surveyor fails to produce detailed statement of client.
- 2) Surveyor refuses to answer telephone calls or letters from client.
- 3) Surveyor does not do proper survey and plan (incomplete, inaccurate, incorrect).
- 4) Surveyor takes retainer and does not do any work and will not return retainer.
- 5) Surveyor disregards evidence.
- 6) Excessive charges.

It might be noted that usually a complaint of over-charging is not so much because of the amount of the bill, but that the surveyor will not provide a detailed breakdown of the account, or explain what work was involved.

One recent complaint ends with the following paragraph: "The purpose of this letter is to seek to obtain an explanation or review of the account and to see whether the work is done by a qualified person in accordance with the standards of your Association".

Another reads: "Although I have no knowledge if.....performed this assignment contrary to that required by the Survey Act, or the required ethical practice of your Association, it is my opinion that, at the very least, he displayed a lack of professionalism in this matter which is a reflection on the profession as a whole."

The main problem in the above two cases, in our view, is a failure on the part of the Surveyor to communicate in a manner becoming a member of our profession.

The problem we think, is clearly defined. There can only be one solution. We, as members, of the Association must examine our position and improve our attitudes. If we conduct ourselves and work by the Regulations and the CODE OF ETHICS of our Association, then there will be no basis for any complaints by the public.


REGULATIONS COMMITTEE REPORT - by David C. Clarke

The Regulations Committee has been busy this year on two major projects: the preparation of Regulations under the Surveys Act and the revision of the Regulations of the Board of Examiners under the Nova Scotia Land Surveyors Act.

On the Surveys Act project the Regulations Committee worked in co-operation with two delegates from the Department of Lands and Forests designated by the Director of Surveys. Several meetings were held and a set of Regulations were drafted, closely patterned after existing Regulations in the province of New Brunswick. Survey Instructions to accompany the Regulations were also drafted, and both Regulations and Instructions were sent to the Director of Surveys for his perusal and revision.

The second project of the Committee, has been the compilation of Regulations on survey standards to accompany the revision of the Nova Scotia Land Surveyors Act by the Legislative Committee. Several Committee Meetings have been held on this project over the summer and, Regulations have been prepared revising Sections 8, 9 and 10 of the old Regulations, as well as utilizing excerpts from the Regulations of other provinces and states. The first drafts, of the Regulations under this project, are presently with the Legislative Committee for its study and recommendation.

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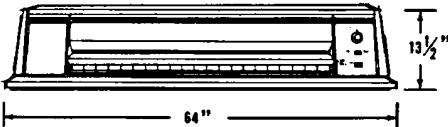
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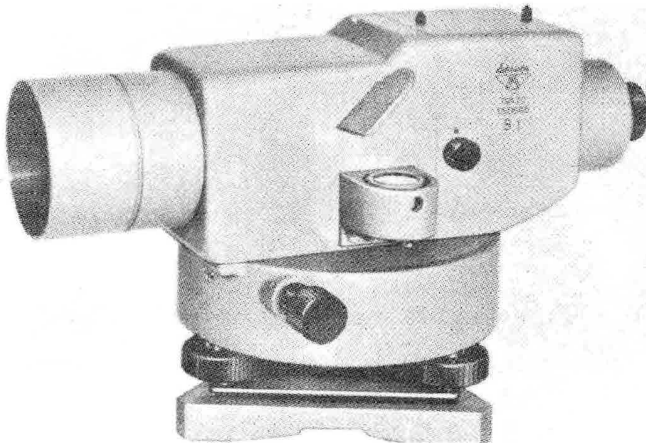
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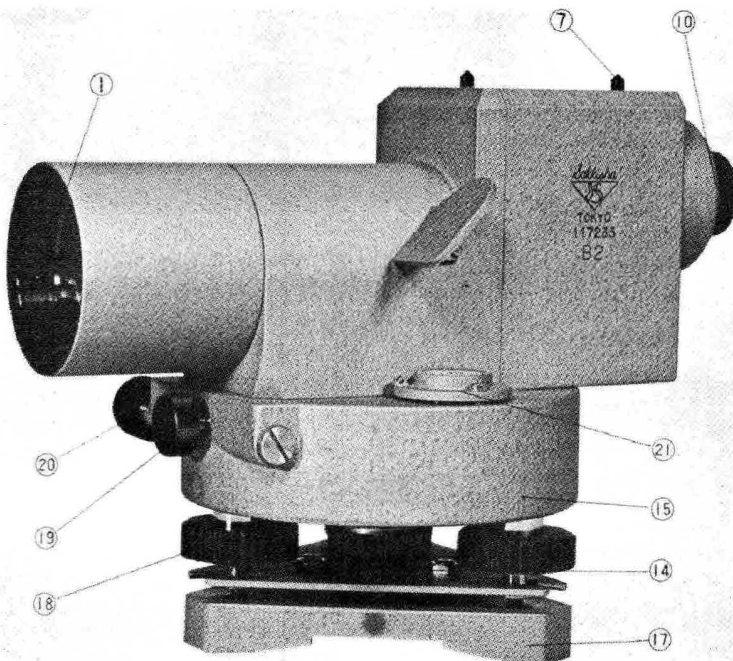
Telescope:

Length	: 250 mm
Image	: Erect
Objective aperture	: 45 mm
Magnification	: 32 X
Resolving power	: 3"
Field of view	: 1° 15'
Minimum focusing distance	: 1.8 m
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- 7 Gun sight
- 8 Reticule adjusting screw
- 9 Reticule
- 10 Eyepiece lens
- 11 Hanging wire
- 12 Slant mirror
- 13 Horizontal circle
- 14 Micrometer knob
- 15 Leveling head
- 16 Inner center
- 17 Base plate
- 18 Leveling screw
- 19 Clamp screw
- 20 Tangent screw
- 21 Circular level

"PROFESSIONALISM, PROFESSIONAL IMAGE, PROFESSIONAL ATTITUDE"

- A. F. CHISHOLM -

At the Annual Meeting of the Association of Nova Scotia Land Surveyors last year in Dartmouth I made a few remarks about the above topic, and immediately was appointed to a committee to investigate.

What is involved - what are the problems - are land surveyors "professionals" - do we behave as "professionals" and if not how do we change our attitudes to improve our position and our "professional image".

First, definitions - a professional is one who is "of, or pertaining to, a profession, especially a skilled or learned profession conforming to the technical or ethical standards of a profession or an occupation regarded as such". Another definition defines a profession as "a self-disciplined group of individuals who hold themselves out to the public as possessing a special skill primarily in the interest of others".

The key phrase above is the last one "...primarily in the interest of others".

Surveyors have a monopoly, generally speaking, and as such in order to protect themselves from governmental intervention must conduct themselves, singly and collectively, in a manner that serves the interests of their clients and the general public, because it is obvious that unless they prove themselves to be responsible, and to maintain high standards, not only of technical ability but high moral standards as well, the privilege for the group to be self-governing, granted by an Act of Government, could be revoked. Indeed, in some areas of this grand country of Canada, self-governing powers of professional groups are being eroded away by governmental action. I see the word "action"; perhaps "reaction" would be more suitable, some may feel "interference" would describe the situations better but I assume that there must be a reason for the governmental action.

What must we do to show to governments - to the public - to our clients that we are behaving as true professionals, indeed that we are in fact professionals? There can be no pat, easy answer to that question - one cannot set down simple guidelines or give a seminar on how to become a "professional" in one easy lesson.

Some measures that can be or have been undertaken include the production of a code of ethics but deep within our own consciences I suspect that all or most of us have either knowingly or unknowingly broken, or at least bent some of the sections of a code of ethics.

Perhaps the most important factor of becoming a professional comes from a part of one of the definitions quoted above - "A profession is a group of individuals ... who are prepared to exercise their skill primarily in the interest of others".

"In the interest of others" - means to me that we are not working to further our own ends; that our functions as surveyors is to serve others and in a similar fashion the doctor, the lawyer, the dentist exists to serve others. We surely will encounter situations where clients are difficult, where every bit of technical skill is required, where more diplomacy and tact are needed than you believe you possess is essential, where your patience is tried and the demands on your time are excessive and it seems to me that the professional, under these circumstances, is the one who does not quit, who perseveres, who enlists aid from any conceivable source, who perhaps ends up with a financial beating but who leaves a satisfied client with a completed job.

In no way am I suggesting that we, or the people in other professions, should not receive adequate compensation for our efforts - we must be paid but we must also enjoy our work, we must feel a sense of accomplishment, have a feeling of pride in work well and efficiently done and know that we are heavily involved in the progress of our communities and our country. Perhaps the following illustrates the point:

Sir Christopher Wren was supervising the construction of St. Paul's Cathedral and came across three workmen cutting a stone. He asked each what he was doing and obtained three answers:- the first man replied that he was cutting the stone; the second that he was supporting his family. The third workman said: "I am helping to build this Cathedral". All three motives were realistic but to which workman would you rather be compared?

.....first of a series

* * * * *

TENDERING VERSUS NEGOTIATIONS

HALIFAX (IPM) - Regional Treasury Board of the Council of Maritime Premiers agreed at their August 1974 meeting that the procedure for arranging land surveying contracts should be changed from calling for tenders to direct negotiations, provided suitable arrangements with the three Maritime Land Surveyors' Associations can be reached.

The agreement was first announced to this reporter by a long distance telephone call on August 10, 1974, from Willis F. Roberts, Executive Director of L.R.I.S., who on the same day made the same announcement at St. Andrews, N.B. where the NBLS Association was holding a summer convention. A few days later the telephone call was confirmed by a letter from R. Larry Simpson, Regional Treasury Board and Assistant Secretary of the Council of Maritime Premiers. To give you some background which helped to bring about the announcement, let's start back a couple of Annual Meetings. There seemed to be an increasing dissatisfaction among our private practitioners with respect to control surveys tendered out by the Land Registration and Information Service. Particularly during the 1973 Annual Meeting several practitioners made their views known to representatives of L.R.I.S. Nothing seemed to be happening until March 1974, when a meeting was held in the office of Mr. Charles W. MacIntosh, Legal Researcher for L.R.I.S. in Halifax. Five Halifax area survey firms were represented as well as the Surveys Division of the Department of Lands and Forests. The meeting was held to discuss the impact of the L.R.I.S. program to date. It soon became obvious that the program was acceptable but not the tendering procedures or the communication channels. Mr. MacIntosh reported the dissatisfactions to L.R.I.S. staff.

The same subject was discussed more formally at the May meeting of Halifax-Dartmouth and County Land Surveyors' Regional Meeting. Members of the Private Practice Committee agreed to make a study of tendering and report to Council.

Allison B. Grant was appointed Chairman by the other members of the private Practice Committee and under his direction a sub-committee would be formed to make the study. Al used the old army volunteerings technique to form this study sub-committee.

Walter Servant and Ivan P. Macdonald were volunteered to assist Al and Forbes Thompson, both regular members of the Private Practice Committee.

During the month of May this sub-committee met many times searching and drafting reports for our Council. One letter was sent out to all members pointing out several sections in our Land Surveyors' Act, in particular, the definition of Land Surveying and our Code of Ethics with respect to answering tender calls. Another letter was sent to the Secretary of the Council of Maritime Premiers. It soon became obvious that Representatives from L.R.I.S. senior staff met in a special meeting with our Association's Council (June Meeting) to review the procedures which were used to award two contracts for the reconnaissance construction and survey of control monuments in Hants and Colchester areas. The survey firm that eventually was awarded the two contracts did not normally reside in Nova Scotia, this seems to be contrary to the Maritime concept.

This is all water under the bridge now and the events which followed become very meaningful to both organizations. The events are as follows:-

- a) Al Grant and Ivan Macdonald, Association Representatives, presented a brief to the L.R.I.S. Board of Directors' meeting in Summerside, P.E.I.
- b) Representatives of each of the Land Surveyors' Associations of the Maritimes met in Halifax with Willis Roberts, Neil Fleming and Karel Fila all L.R.I.S. staff.
- c) Interim procedures for negotiations were presented and accepted.
- d) A standing committee of representatives of the three Maritime Associations were invited to appraise the interim procedures and help draw up suitable arrangements for future negotiations.

The announcement which started this article is, in part, the result of a lot of hard work and time spent by your representatives. Let your Council representative know of your ideas and suggestions.

SURVEY & MAPPING PROGRAM IN THE MARITIMES

- by Neil Flemming -
Presented at 1973 Annual Meeting

As most of you are aware the Department of Lands and Forests reorganized and relocated their Surveys and Mapping Staff on the 1st of April 1973, and the other two Provinces did the same. This permitted the Department of Lands and Forests to practically triple their capabilities in survey and mapping and still retain control of their program. Day to day administration was handed over to the Council of Maritime Premiers, but control of the organization regarding staff, budget and program, and the work to be carried out, and where it is to be carried out, was retained by the Province through the Board of Directors.

The staff of the Survey and Mapping Division, along with myself, are now in reality working for your Director, Mr. Bert Robertson. This new organization is called the Land Registration and Information Service, at which the Surveys and Mapping Division is one component. The Survey and Mapping Division Headquarters is located at Summerside, and our telephone number is 902-436-2107. The mailing address is P. O. Box 1660, Summerside, P.E.I.

The organization is made up of three Sections:

1. *The Control Section*, responsible for the Control Surveys and Photo Control with the head of the Section being Mr. Karel Fila.
2. *The Topographic Section*, responsible for the production of topographic maps, distribution of maps and aerial photos with the head of the Section, Mr. Clark Beatie.
3. *The Property Mapping Section*, responsible for the production of property maps and the Section head of this is Mr. Roger Gaudet.

The program for the fiscal year 1973-1974 in Nova Scotia amounts to the monumentation and survey of Halifax County, Guysborough County, parts of Pictou, Antigonish and Colchester Counties and approximately fifty monuments required surveying in the Town of Yarmouth.

The program in New Brunswick includes the survey of approximately six hundred monuments in Victoria County, placement and survey of forty monuments at Campobello Island and inspection and densification of fifteen hundred monuments in York County. Numerous other control projects were undertaken in both provinces.

In tendering, the procedure we have adopted consists of compiling a mailing list of firms or persons interested in quoting on the jobs. The specifications are mailed to these firms when each tender call is issued. We felt that this would be an asset to firms in private business so that anyone interested would not have to keep checking the papers. If their name is on the list they would automatically receive a copy of the specifications. The tender call, in addition, is placed in four newspapers in the Maritimes: - The Halifax Herald, The Telegraph Journal in Saint John, The Guardian in Charlottetown, and The Evangeline in Moncton. These tenders are advertised in the newspapers to ensure that anyone not on the list has a chance to notification. All a company has to do to be placed on the mailing list is to write the Division a letter, or notify us in some fashion, and we will see that the firm's name is added to the list.

The lowest tender is the sole determining factor in deciding to whom the work is awarded. This policy is set up by the Management Committee and the Board of Directors. It leaves nothing to the discrimination of the Manager or the Division or anyone else. We assume that all firms tendering are capable of doing the work within the time specified and in accordance with the specifications. If a firm is issued a contract and is found negligent in either time or reading of

specifications this will be considered when quotes are received from the next job. If a tender is issued to a company and the work is supposed to be completed, say at the end of August and it comes in at the end of November, we will take this into consideration the next time that tenders are called. Our only requirement is that the job must be done in accordance with the specifications, that it should be done on time and, that we can prove to auditors or accountants or anyone else, that we are getting the cheapest price possible for the work. We are certainly open to any suggestions of procedure which will provide these three conditions, and I suggest that if changes are felt necessary by your Association, or any individual member, then please submit an outline of procedures that you would expect us to follow. We do not mind changing them as long as we can tell somebody else that we guarantee them that they are getting the cheapest price for the job, that it is done according to the specifications and time period required.

The philosophy which we have adopted, in carrying out the Control Survey, is one where the Division's permanent staff will do the reconnaissance and supervise the construction of the monuments. Horizontal control will be done by contract; vertical control partially by contract and partially by our own staff, depending upon the size of the job.

We have a five year program to complete the Maritime Provinces, that means all the controls should be in the Maritimes by the next five years. The five-year program will see the adoption and placing control on a county basis. That means we want to put the control in throughout the Maritime Provinces county by county. The program has been established for the control in Halifax. The next year the mapping will be completed and in the third and fourth years the property mapping. When the property maps are finished and the information catalogued on a computer, it is then transferred to the Land Titles Office.

The preliminary schedule by counties is as follows:

In 1974-75 Halifax, N.S., Kings, N. B., Pictou, N. S., Charlotte, N. B., Antigonish, N. S., West Albert, N. B., Kings, N. S., Guysborough, N. S., Kent, N. B., Colchester, N. S., Gloucester, N. B., and Hants, N. S.

In 1975-76 the completion of Hants County, Northumberland, N. B., Inverness, N. S., Restigouche, N.B., Cumberland, N.S., York, N.B. and Annapolis, N.S.

In 1976-77 completion of Annapolis County, Queens, N.B., Lunenburg, N.S., Sunbury, N.B., Cape Breton, N.S., Carleton, N.B., Richmond, N.S., Victoria, N.B., and Victoria, N.S.

In 1977-78 completion of Victoria, N. S., Madawaska, N. B., Queens, Yarmouth, Shelburne and Digby, N. S.

It is hoped that by March 1978 the Maritime Provinces will be completed. These priorities by counties are selected by the Provincial Coordinators of the Program in Nova Scotia and New Brunswick. We are attempting to schedule our work program so that field surveys under contract could be completed before mid December to avoid all the complications of winter surveys.

Copies of all control monument cards for Nova Scotia shall be placed on file at the Director of Surveys Office at Halifax.

The Topographic Section has the responsibility of producing maps and is responsible for the distribution of maps and aerial photographs. The only new function which this Section will take on will be in the line of aerial photo reproduction. We anticipate having stored in Summerside all negatives for aerial photography in the Maritime Provinces. We hope also to have the capability of reproducing the colour prints, which the Department of Lands and Forests of Nova Scotia are presently supplying.

At present approximately fifty per cent of the mapping is done in shop and fifty per cent goes out to contract. The reproduction copies of all map sheets produced and copies of all aerial photography produced for the Province will be placed on file at the Director of Surveys Office in Halifax.

Property Mapping Section is responsible for the compilation of property maps, assigning property identifiers and coding information for the computer. Property mapping will proceed on the county basis.

During the present fiscal year 1973-74, offices have been set up in Kings County, N.B., West Albert, N. B., and we are starting one in the City of Halifax, to begin the mapping in Halifax, City and County. We have two offices that have been transferred to the Land Titles Division, the one in Charlottetown and the one in Saint John, N. B. The personnel to carry out the property mapping in these offices will consist of a Land Surveyor and Property Mapping Technicians. When property mapping has been completed for the county, and information has been computerized, the maps are handed over to the Land Titles Division which will be responsible to maintain the on-going system. They will not only take over the registry system, but would also have a group there to maintain the control of the monument systems as well.

I hereby solicit your Association's cooperation within the next few years to see the completion of the program. If any individual or your Association as a whole feels that a better approach can be used in any matters with respect to Surveys and Mapping, please notify us of the changes and we will see if we can incorporate those too.

* * * * *

WE ARE CREATING A SERIOUS PROBLEM!!!!!! - *by Marcellin S. Chiasson*

I note that many of us are drafting deed descriptions and are not adding recitals in these descriptions. This problem has been discussed many times at our regional meetings, however, the problem still exists because many surveyors find it difficult to attend some of these meetings. By recitals, I refer to the paragraph which should be added to the end of a deed description prepared by a surveyor which indicates from which lot of land the parcel you have surveyed originates.

Example: -

"And being a portion of land conveyed to John L. Smith by Thomas J. Jones by deed dated January 25, 1974, and recorded in Registry Book 125 Page 53 at Port Hood, N. S."

By adding this paragraph, you are assisting to tie down the lot you have surveyed. This would perhaps not be a serious problem in a numbered subdivision; however, it sure is serious when you have the original owner being in possession of several lots of land, especially in rural areas. I know that in the past, we blamed local magistrates, etc. for doing this type of thing, however, I find that recently surveyors are causing more serious problems by doing exactly this type of thing as well as not accurately defining their starting points. Remember that it is not sufficient to say "Starting on the southern side of the main highway at the intersection of lands retained by Joe Blow," especially if Joe Blow owns the balance of the land around which you are surveying. Where possible, the survey should be tied into the original grant or at least some permanent and identifiable monument, whether natural or artificial, and this tie shown on the plan.

Let's just try a little harder.

- A SURVEYOR'S PROFILE -
by
Ronald Chisholm

Hoyes Cameron was born in Bridgeville, Pictou County. He worked for different outfits in the forest industry and was a woods boss at an early age for Scotia Lumber Company.

Following this, he worked in Forest Engineering in British Columbia engaged in mapping, road location, surveying, etc.

When World War II broke out he enlisted as a private in the Canadian Army, saw service in Canada, Britain and Northwest Europe. He was discharged in 1946, as an Officer, arriving home on New Year's Day 1946, after a rough six days at sea. According to the testimony of his fellow officers, he gained the distinction of being the most sea-sick passenger aboard.

He attended the Nova Scotia Land Survey Institute and was a member of the first class to graduate and shortly thereafter he was commissioned a Provincial Land Surveyor. About this time he married Kay Fraser of Bridgeville, Pictou County and started a career with the Department of Lands and Forests, which lasted almost 25 years.

He began his career with the Department working for V.P. Harrison, P.L.S. in the St. Margaret's Bay-Eight-Island District. In camp with him that summer was Joe Archibald and Bob Murray. The following year he set out with his own crew and worked in the Halifax area. The following year he surveyed the Country Harbour area, a complicated and difficult job, which settled many problems of long standing. His reputation as an exceptionally able surveyor was now well established and he went on from job to job in many different areas. Indian Harbour - Goldboro, Upper Baddeck River, North Gut St. Anne, Gairlock and Crowdis Mountain, Lake O'Law, Scotsville, West Bay, Eskasoni Indian Reserve, etc. These areas are probably the most difficult to survey in the Province due to topography and many other reasons. For the most part the survey parties lived in tents and worked from May to November six days a week.

For many years he worked during the winter in the Halifax office which included some time in the Crown Lands Office. Following a period of illness he worked mostly in Pictou, Antigonish, Guysborough and Colchester Counties. The many new advances in surveying came during his last few years with the Department, especially in the field of Electronic Surveying instruments and the introduction of a co-ordinate survey system in the Province. It says a lot for him that his plans were used for examples as to how the job should be done.

The Camerons have two children, Cathy a math major, graduate of St. F.X. University and Brian, a graduate of the Nova Scotia Land Survey Institute and at present working with Crown Land Surveys.

Hoyes is a member of the Association of Nova Scotia Land Surveyors, member of the Canadian Institute of Surveying and the Royal Canadian Legion.

Hoyes Cameron retired from the Surveys and Mapping Division of the Department of Lands and Forests on November 30, 1972, after almost twenty-five years with the Department.

It is the wish of all that he will have many years to enjoy his well-earned retirement.

* * * * *

JOINT ENGINEER/SURVEYOR COMMITTEE

- ENGINEERS - Don Baker (Council Appointee)
Art Chisholm (Committee Chairman)
Art Abbott
Alan MacDonald
Jack Bateman.
- SURVEYORS - Doug MacDonald (Committee Vice-Chairman)
Al Daykin (Committee Secretary)
Murray Banks
Errol Hebb
Council Member (to be appointed).

This Committee was formed and held its first meeting on March 26, 1974, in the APENS Board Room as a luncheon meeting. Charles Campbell (APENS President), Jim Murwin (Executive Director of APENS), J. Doug Fraser (Registrar of APENS), and Walter Servant (Chairman of ANSLS Communications Committee) were also in attendance at the first meeting.

It was agreed that the Committee's terms of reference should be kept relatively simple. They are as follows:

- FUNCTION: To deal with mutual problems concerning both Associations and their memberships.
- REPORT TO: To Council of each Association.
- DUTIES: Study and define the separate activities of Engineers and Surveyors. Deal with matters of mutual interest and concern. Prepare an annual report, and budget if required.

The Committee does not want to become involved with insignificant or individual problems but rather with principles, or matters of overall concern to both Associations and their total memberships.

It was agreed that the term of office of members should be for one year, corresponding to the Association year.

It was also agreed that the Committee would meet monthly with the possible exception of the summer months, or more frequently if business demanded. Meetings will be held as a luncheon meeting on the fourth Tuesday of each month in the APENS Board Room.

All correspondence may be sent to the Joint Engineer/Surveyor Committee, c/o Association of Professional Engineers, P. O. Box 129, Halifax, N. S.

STRETCHING THE TAPE - - - -

A night nurse is the one that wakes you up to ask if the day nurse gave you your sleeping pill.

* * *

There is only one difference between learning to drive a car and learning to play golf. When you're learning to play golf, you don't hit anything.

* * *

A man is known for the company he thinks nobody knows he's keeping.

* * *

Better go on a diet if you want your shape to come in.

* * *

Punctuality is the art of guessing how late the other person is going to be.

* * *

Economy is a way of spending money without getting any fun out of it.

* * *

When we hit middle age, why does it have to hit back?

* * *

A bore is someone who boasts about his accomplishments when he should be listening to yours.

* * *

The mother of a four-year old boy works from son up to son down.

* * *

All of those in favor of saving gasoline, raise your right foot.

* * *

If you look like your passport photo, you probably need the trip.

* * *

The older a man gets the further he had to walk to school as a boy.

The 4-year old daughter of a used car salesman, attending her first church wedding, watched as the bride walked to the altar on the arm of an elderly grey-haired man. She stared in amazement after the ceremony ended and the bride walked back with her young groom.

"Mother", the girl whispered rather loudly, "is that how weddings are? You trade off an old man for a nice, new model?"

* * *

The fellow wrote the Agriculture Dept., "I've got dandelions in my lawn. I've tried to burn 'em out. I've used gasoline, I've used weed killer. I've still got dandelions. What do I do now?"

The department wrote back: "We suggest you try to learn to love them."

* * *

A lady received a phone call and a small voice said, "Mother, come and get me. The movie's out."

Mentally checking her own kids' whereabouts, she told the wee caller that she wasn't his mother.

His response: "You have to be my mother, because this is the last dime I have."

* * *

The owner of a summer cottage was so perturbed by the tax increase on it that he wrote on his cheque in paying the taxes: "Cottage for Sale."

On the tax receipt from the county treasurer's office was the notation:

"Don't want your cottage - taxes too high."

* * *

Tommy - "Mother, let me go to the zoo to see the monkeys?"

Mother - "Why, Tommy, what an idea! Imagine wanting to go to see the monkeys when your Aunt Betsey is here."



MICRORANGER

Range: 3 feet to more than 1 mile



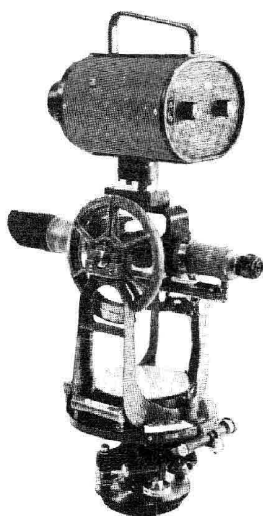
The new low cost MICRORANGER is the latest device to be offered as part of the growing family of K&E EDM systems. The low cost and simplicity of the operation of the MICRORANGER now make it possible for any surveyor to use an electronic distance measuring unit. The operational cost savings will more than pay for the instrument cost in a short period of time. Only a few seconds are required to measure any distance from three feet to more than one mile with an accuracy of ± 0.02 ft. ± 2 ppm.

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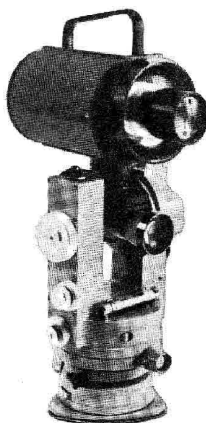
The MICRORANGER is physically contained in two units. A head unit houses the transmitting and receiving electro-optics. This unit is designed to conveniently mount on most theodolites, transits and levels. A control unit houses the display, controls and computer circuitry. The two units are interconnected by a cable.

The uniqueness of this design is a decided advantage to users. It is not necessary to make an angular sighting through the telescope of a theodolite or transit, then remove it from the tripod, and remount a distance measuring device. By securing the head unit directly to the telescope, not only is there an appreciable improvement in measurement speed, but an attendant reduction in the possibility of measurement inaccuracy.

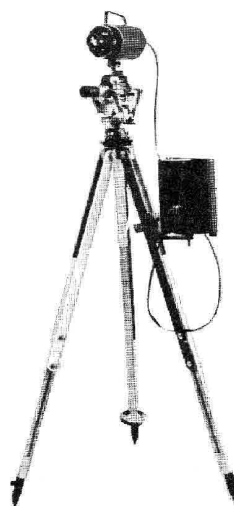
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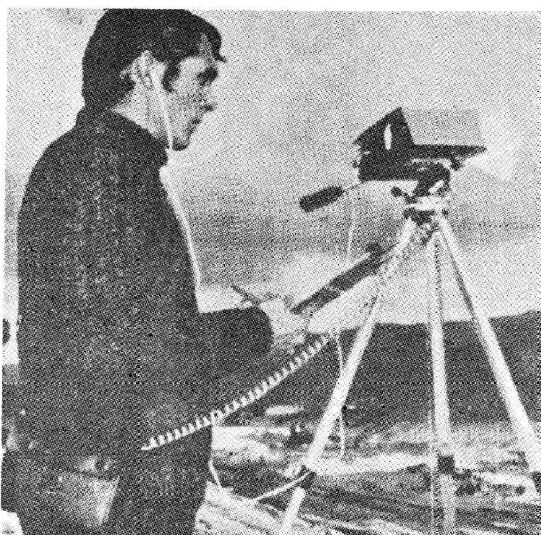
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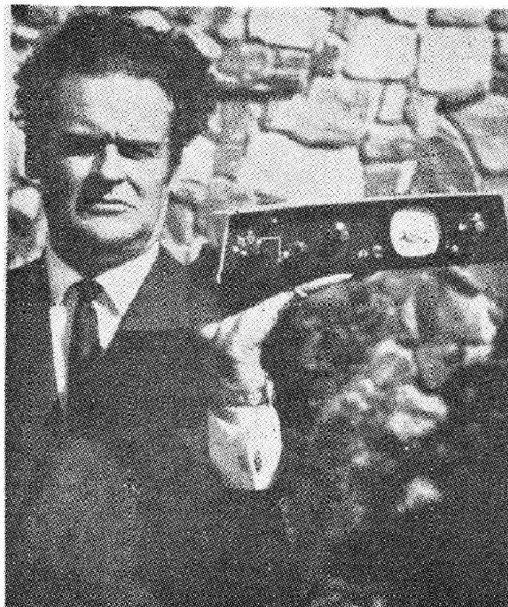
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