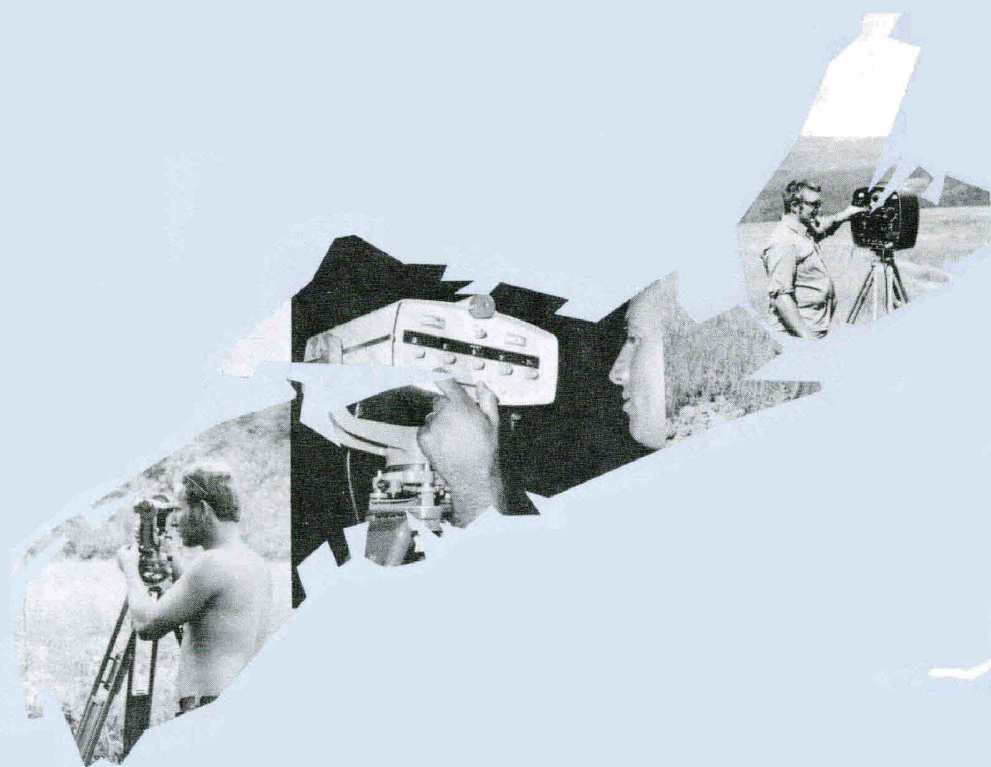


# The NOVA SCOTIAN SURVEYOR



**AUGUST 1971**

# The NOVA SCOTIAN SURVEYOR

*Published four times a year by*

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

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Secretary-Treasurer

Address all communications to P. O. Box 1541, Halifax, Nova Scotia

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HISTORY IN THE MAKING



The above picture was taken at a special Association Council Meeting. It was special for two reasons:-

- 1) The meeting was held in Sydney being the first time a Council Meeting was held outside Halifax.
- 2) All Councillors were there and participated. See page 5 for list of names and addresses.

## - 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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## - A MESSAGE FROM THE PRESIDENT -

Since becoming President of our Association last November, I have had the opportunity to travel fairly extensively and meet many of our own members, as well as members from other Provinces of the Dominion. In discussions with many of these people, I am struck with the similarity of much of the conversation, especially relating to the possibility of standardizing our educational instructions to surveyors and working toward reciprocity across Canada. I have heard this request in all of the eastern provinces and two presidents of the western provinces, whom I have met, were making similar overtures. How to do this? I do not know, but perhaps the provincial presidents, as a group, working through the C.I.S. can provide a vehicle to start the wheels in motion. This matter is to be included in the Agenda of the Provincial Presidents' Meeting being held in Toronto this October 24th.

I recently received a letter from Marcellin S. Chiasson, N.S.L.S., who is the Assessment Officer for the District of Port Hood. I have had the pleasure of meeting this gentleman during our June Council Meeting in Sydney and must say I was very impressed with him. He forwarded to me photo copies of five descriptions of property which were included in deeds submitted to the local Registrar of Deeds for recording. To coin a phrase from his letter "they are horrifying" and this type of thing should be stopped. Written by a local Justice of the Peace they fail in every respect to provide the proper ingredient necessary to relate the description on paper to the actual parcel of land, any similarity between these schedules and the metes and bounds of the actual parcels is, I am sure, purely coincidental. Some excerpts from these descriptions are enclosed for publication in the Nova Scotian Surveyor to show our members what not to do. See page 4.

During the recent Hurricane, "Beth", I was like many others - treated to a fair portion of its by-product, to be exact 4.75" of it in my basement office. The damage to files, plans and records was heavy but after a week of drying out, most of it was salvaged. My purpose in mentioning this is because many of our members also use their basements as offices and working areas, and many have a life-time accumulation of records stored in these areas.

I would like to make a few suggestions for the benefit of other surveyors who use similar areas. Linen tracings become worthless once getting the water treatment, tracing paper stretches and then shrinks after drying, with the old certification stamp pad ink going through as many as four adjacent tracings. The film tracings survived first class and, if dried immediately, the ink will not run or streak. I would suggest that instant stick-on titles be used for all certifications on plans, these are fast and economical, and I have been using them for the past five years. Sepias should be made of all linen tracings and stored in an outside location removed from the office, this provides some protection against fire as well as floods. This can be done for any tracing one may have, whether it ever reaches a Registry Office or not. This may seem expensive to a lot of our members, but stop for a minute and compare this cost against problems of complete loss or the cost of microfilming. Work files will dry out but paper clips and staples will rust in twenty-four hours after being subject to water and the red stain from this rust impregnates almost any type of paper. I sincerely hope that my unfortunate experience may be to the benefit of some of our members.

L. Robert Feetham,  
President.

\*\* EXCERPTS FROM DESCRIPTIONS \*\*

ALL of my Real Estate property belonging to me at the time of my death, whether it be buildings, or lands wherever it may be all times to my son, Hector Deveaux, without any interference of law whatsoever; Reserved: to my daughter Therese Celina, my daughter, a house lot if she ever needs one to build herself a home and a small garden. (May 1971)

\* \* \*

ALL of the following:- First: - House & Outhouses with (30) thirty feet of land all around the buildings together with all occupancy within and without to Mrs. Marguerite Muise (nee Camus) thence the remaining of all my land to be divided between by two Sons namely Amedee Muise and My Son Arthur Muise; Being and intended to be portion and lots of land as on Deed dated October 6th. A.D. 1947 to Simeon Joseph Muise by his own father John S. Muise and recorded at Port Hood in the Registry Office in Book No. 59, at page 293, on September 1st, 1953 at the hour of 9 A.M. (May 1970)

\* \* \*

ALL of a certain lot or parcel of land and Premises situate lying at the so-called Plateau a district of Cheticamp, County of Inverness, Province of Nova Scotia, and described as follows:- One House and lot and outhouses and buildings thereon, also the lot where the barn used to be, together with a right of way to and from each lots to the Main Highway. Being and intended to be the same land and premises as on Deed recorded in the Registry Office at Port Hood in the County of Inverness, Province of Nova Scotia, in Book No. 56, at page 81, on March 17th, 1951 at the hour of 9 A.M. (Dec. 1968)

\* \* \*

ALL of certain lot or parcel of land and premises (Buildings) situate lying at Cheticamp in the County of Inverness, Province of Nova Scotia, and more properly bounded and described as follows:-This piece of land is known to everyone in the neighborhood as Paddy a Marcellin Roach homestead bounded and described as follows:-On the North-West, North-East, South-East bounded by land of Joseph P. M. Roach; On the South-West bounded by land of the heirs of Phillippe Larade and being a piece of land by measurement (60) sixty feet from the South-West to the North-East and (125) one hundred and twenty-five feet from the bordering line of the property of the Main Highway and running to the South-East, from the North-West. Being and intended to be a portion of land as on Deed dated the 21st. day of June A.D. 1969, and recorded in Port Hood N.S. in Book No. 80 Page 648 on June 25th. 1969 at the hour of 9 A.M. (April 1971)

\* \* \*

County of Inverness, Province of Nova Scotia, bounded and described as follows:-Bounded on the North-West by an alleyroad adjoining Baptiste LeFort road and owned by the heirs of Mike LeFort; Bounded on the North-East by land owned and occupied by late Henry Desveau, and now by others, the heirs of Eusebe AuCoin; Bounded on the South-East by land owned by the heirs of Thomas Ivy and Louizon Desveau; Bounded on the South-West by land of Gonzague Ivy; This property was formerly owned by late John E. Cormier. Reserved:-One private right of way for Gonzague Ivy which is situated on the South West side of the above mentioned property, about (9) nine feet wide adjoining Michael's road (LeFort), with the right of the Grantors John M. Harris, his heirs to trespass on said private right of way whenever he wishes to do so. Also one acre of land at the head of the hay field which is a cow pasture at the present time for William Ivy; Also reserved one acre of land at the same place at the head of the hay field for Delore Ivy; with the preference of John M. Harris to buy such portions whenever the Ivys wishes to sell same. Also a right of way for the party of the second John M. Harris is heirs etc., to the above (2) two mentioned acres. Also one piece of woodland on the mountain of Plateau, on the South-East by the Crown Land; Bounded on the South-West by the Crown Land; Bounded on the North-West also by the Crown Land; Bounded on the North-East by land of Elore A. Poirier, comprising (28) twenty-Eight acres more or less of woodland and being half of the woodlot conveyed to Elore A. Poirier by Charlie E. Desveaux and Virgine his wife on December the fourteenth, A.D. 1946. (April 1970)

**\*\* ASSOCIATION COUNCIL \*\***

- PRESIDENT.....L. Robert Feetham.....108 Sunnybrae Avenue,  
Halifax, Nova Scotia.
- VICE PRESIDENT.....J. F. Doig.....P. O. Box 44,  
Lawrencetown, Nova Scotia.
- SECRETARY-TREASURER.....E. P. Rice.....39 Edward Laurie Drive,  
Rockingham, Nova Scotia.

COUNCILLORS

- HALIFAX CITY.....\*Ivan P. Macdonald.....39 Doull Avenue,  
Halifax, Nova Scotia.  
  - \*\*Forbes Thompson.....6407 Bayers Road,  
Halifax, Nova Scotia.
- HALIFAX COUNTY.....\*Arthur C. Gilmore.....7 Skeena Street,  
Dartmouth, Nova Scotia.  
  - \*\*John C. MacInnes.....292 Portland Street,  
Dartmouth, Nova Scotia.
- WESTERN SECTION OF PROVINCE.....\*J. A. C. Kaulback.....R. R. #1,  
Kentville, Nova Scotia.  
  - \*\*E. B. Hall.....P. O. Box 885,  
Digby, Nova Scotia.
- EASTERN SECTION OF PROVINCE.....\*G. E. Hingley.....87 Park Street,  
Truro, Nova Scotia.  
  - \*\*J. D. Chisholm.....43 Rupert Street,  
Amherst, Nova Scotia.
- CAPE BRETON SECTION.....\*John S. Pope.....257 Charlotte Street,  
Sydney, Nova Scotia.  
  - \*\*A. E. Briggs.....P. O. Box 633,  
Port Hawkesbury, Nova Scotia.
- MEMBERS AT LARGE.....\*W. E. Servant.....2769 George Dauphinee Ave.,  
Halifax, Nova Scotia.  
  - \*\*W. S. Crooker, Jr.....6 Julie's Walk,  
Halifax, Nova Scotia.
- PAST PRESIDENT.....Col. G. E. Streb.....Apt. 809 Embassy Towers,  
5959 Spring Garden Road,  
Halifax, Nova Scotia.

\* Term ends November 1971  
 \*\* Term ends November 1972

ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS  
REPORT OF COUNCIL MEETINGS

November 6, 1970 -

The following Members were appointed to standing committees for the coming year:

<u>Complaints Committee:</u>	E. P. Rice W. S. Crooker I. P. Macdonald
<u>Discipline Committee:</u>	J. F. Doig, E. P. Rice W. S. Crooker, John MacInnes G. E. Hingley, A. E. Briggs W. E. Servant, I. P. Macdonald
<u>Board of Examiners:</u>	A. F. Chisholm R. A. Dunbrack
<u>Private Practice Committee:</u>	W. S. Crooker A. E. Briggs E. B. Hall.

December 5, 1970 -

The Complaints Committee reported the case of a person, practising Land Surveying, who is not registered to practise. Also, the Association has caused to be published, a public notice to the effect, that a member of the Association is no longer entitled to practise due to his not being a member of good standing.

The Committee on Rates reported that a brochure consisting of suggested minimum rates, code of ethics, etc. is being drawn up.

Council has recommended the registration of surveyor-in-training records be kept and that copies of the proposed forms be recommended to the Board of Examiners.

A new design for membership certificates was approved by Council.

Mr. Ivan P. Macdonald was appointed Chairman of the Committee to look into the matter of forming a Society for Surveying Technicians.

March 13, 1971 -

The Complaints Committee reported that a matter of a member in arrears had been dealt with and a matter between a member and a client had been dealt with. A report was received concerning a person practising land surveying while not being registered as a Nova Scotia Land Surveyor. The question of unethical conduct by a surveyor was also dealt with. A person reported to be practising land surveying while not registered to do so was advised to discontinue such practise.

The Legislative Committee reported that they had met with the Deputy Minister of Lands and Forests regarding changes to By-laws which had been previously submitted to the Minister.

Due to the amount of typing required by the Editor of the Nova Scotian Surveyor, the Association's Secretary and the Secretary of the Board of Examiners, a typewriter should be acquired by the Association for this purpose.

The following new members were received as members of the Association:

Terence R. Doogue  
Garnet E. Wentzell  
Austin E. Atkinson  
Frederick C. Hutchinson  
L. Neil Fleming.

Mr. F. Lyndon Gray was appointed to represent the Association on the Voluntary Economic Planning Committee.

June 12, 1971 -

A Council Meeting was held in Sydney, it being the first time in the history of the Association that a full Council Meeting was held outside of the Halifax Area. Mr. Doig reported that a course had been given to district engineers and senior surveyors of the Department of Highways, consisting of lectures on the grid system and integrated surveys and monumentation.

The Legislative Committee reported that they had met with the Minister of Lands and Forests, his Deputy Minister and Executive Assistant, in regard to changes in the Association By-laws.

Thomas W. Smith and Ralph E. White were accepted as new members in the Association of Nova Scotia Land Surveyors.

Association President, L.R. Feetham, attended the Annual Meeting of the Association of Newfoundland Land Surveyors in May. Reports and papers were given on the Atlantic Provinces Surveying and Mapping Program, Offshore Drilling and the Hamilton Falls Development.

Councillor, J. C. Chisholm, attended the 1971 Meeting of the Association of Prince Edward Island Land Surveyors, where papers were given on subdivision design and development, offshore surveys under the P.E.I. Natural Gas and Oil Act, surveys and plans under the Land Titles Act and legal boundary surveys by the Federal Government.

The Editor.

STATISTICAL ACCOUNT OF NOVA SCOTIA - (Boundaries, Extent, Situation, General Appearance, Civil Divisions)

The Boundaries of the Province of Nova Scotia, previous to the conquest of Canada, were always a subject of dispute between Great Britain and France. They had never been settled by any treaty, and the Commissioners appointed to adjust them came to no conclusion upon a subject, which, by mutual consent, seemed to have been left to the decision of arms. - At the peace of 1763, the limits of the Colony were a matter of discretion rather than strict legal right, and were, therefore, fixed by the Crown, as follows: "to the Northward, our said Province shall be bounded by the Southern Boundary of our Province of Quebec, as far as the western extremity of the Bay Des Chaleurs. To the eastward by the said Bay, and the Gulf of St. Lawrence, to the Cape or Promontary called Cape Breton, in the Island of that name, including that Island, the Island of St. John's, and all other Islands within six leagues of the Coast, to the southward by the Atlantic Ocean, from the said Cape to Cape-Sable, including the Island of that name, and all other Islands within 40 leagues of the Coast, with all the rights, members and appurtenances, whatsoever, thereto belonging. And to the westward, although our said Province hath anciently extended, and doth of right extend, as far as the river Pentagoet or Penobscot, it shall be bounded by a line drawn from Cape-Sable across the entrance of the Bay of Fundy, to the mouth of the river St. Croix; by the said river to its source, and by a line drawn due north, from thence to the southern boundary of our Colony of Quebec." At subsequent periods, this territory was divided into four separate Provinces, viz. Nova-Scotia, New-Brunswick, Prince Edward's Island and Cape Breton. But in 1820, this latter Island was again annexed to the Government of Nova-Scotia, and now forms a County in the civil divisions of the Province.

- From "An Historical and Statistical Account of Nova Scotia, Vol. 2 by Haliburton.



AN ACT TO INCORPORATE THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS -

Be it enacted by the Governor-in-Council and Assembly as follows:-

1) This Act may be cited as the Nova Scotia Land Surveyor's Association Act.

- 2)
- R. J. Milgate, Halifax, N. S.
  - S. W. Crowell, Kentville, N. S.
  - A. M. Foster, Bridgetown, N. S.
  - J. K. McKay, Clyde River, N. S.
  - F. A. Harrison, Antigonish, N. S.
  - Clayton Prosser, Tusket, N. S.
  - E. B. Parker, Bear River, N. S.
  - S. E. March, Bridgewater, N. S.
  - C. W. Taylor, Cook's Cove, N. S.
  - Jos. S. McLean, Baddeck, N. S.
  - McLellan, Bell Cote, Margaree, N. S.
  - R. E. Dickie, Brookfield, N. S.
  - V. P. Harrison, Southampton, N. S.
  - Letson M. Smith, Scotch Village, N. S.

and such other persons as shall hereafter become members of the Association hereby incorporated, are hereby created a body corporate by the name of the Nova Scotia Land Surveyor's Association.

3) The objects and purposes of the Association are to facilitate the acquirement and interchange of professional knowledge among its members, and more particularly to promote the acquisition of that species of knowledge which has particular reference to the profession of land surveying, and further, to encourage investigation in connection with all branches and departments of knowledge connected with the profession.

4) The said Society shall have power to acquire and hold all lands and property necessary and required, in order to carry out the objects and purposes for which incorporation is sought provided that the value of the real estate, held at any one time for the actual use of the Society, shall not exceed \$5000.00 and the said Society shall also have power to sue and be sued, and implead by their corporate name; and to make and pass regulations and by-laws for the direction and management of the said Society, including all rules that may be deemed necessary for the maintenance of the honor and dignity of the profession, and such constitution, by-laws, rules and regulations, when approved of by the Governor-in-Council shall have the force of law.

5) The said Society shall be governed by a Council to be constituted in such manner as may be provided by the by-laws hereafter to be made, and the first five persons named in the second section shall constitute a provisional council, until such appointments are made.

6) Said provisional Council shall call a general meeting of the Association within two months after the incorporation of the Association for organization, making by-laws, the election of officers, and the transaction of any other business that may arise.

7) The Head Office of the Society shall be in the city of Halifax, or in any such other place as may from time to time be determined by a vote of two-thirds, of the members of the Society.

TO: *Secretaries of all Provincial Land Surveyor Organizations -*

Dear Sir:

As you are probably aware the Corporation of Land Surveyors of the Province of British Columbia recently had their Land Surveyor's Act amended. One of the changes in the Act changes the qualifications to become a member of the Corporation. Of particular interest to members of Land Surveying Associations across Canada is the requirements necessary for their members to become qualified. It would be appropriate if you would inform your members by circular letter the following excerpts from the Corporation of Land Surveyors of the Province of British Columbia By-laws:

a) A pupil of any duly authorized Land Surveyor other than a British Columbia Land Surveyor may, upon satisfying the Board that he has passed examinations equivalent to the Preliminary Examination and upon payment of a transfer fee of \$10.00, have his articles transferred to a British Columbia Land Surveyor. The pupil's previously served time shall count towards the total required, but the pupil shall serve a minimum of twelve months in the field in British Columbia.

b) Intermediate Examinations:

1) All candidates for membership in the Corporation shall be required to pass an Intermediate Examination consisting of the following subjects: - Elementary Geology, Elementary Minerology, Elementary Forestry, Elementary Hydraulics, Astronomy, Photogrammetry, Cadastral Survey Computations, General Survey Computations, Survey Instruments and Methods, Elementary Geodesy, Survey Adjustments, Map Projections, Field Test and such other subjects as the Board may, from time to time, find necessary.

2) The Intermediate Examination may be written at any regular examination sitting after entering into articles but on passing said examination, a minimum of one year's articleship must be served before writing the Final Examination.

3) The Board in its discretion may grant exemption from all or part of the Intermediate Examination to candidates in the following categories:

- i) surveyors with a licence to practice in other countries or other provinces of Canada,
- ii) graduates of universities, institutes of technology, service schools, or equivalent places of learning.

4) The fee for application to write or be exempt from the Intermediate Examination shall be \$75.00.

c) Final Examinations:

1) All Candidates for membership in the Corporation shall be required to pass a Final Examination consisting of the following subjects: Land Act, Forest Act, Official Surveys Act, Land Registry Act, Mineral Act, Placer Mining Act, Highways Act, Municipal Act, Petroleum and Natural Gas Act, Plans Cancellation Act, Special Surveys Act, Land Surveyors Act, Strata Titles Act, Description for Deeds, Principles of Evidence, Planning, Appraisal of Land Classifications and Utilization, Survey Business Management, Cadastral Surveying, General Surveying, a Field Survey project, an oral examination and other subjects as the Board may, from time to time, find necessary.

2) The fee for application to write the Final Examination shall be \$100.00.

d) All Examinations:

1) In the Preliminary, Intermediate and Final Examinations, a candidate will be required to obtain a 70% general average and in addition, must not fall below 50% in any one subject, otherwise he has failed the examination.

2) At the discretion of the Board a candidate may write Supplemental Examinations in a maximum of two subjects in the fall of the year in which he wrote the examination or at the next regular examination sitting.

3) Supplemental Examinations or the rewriting of any examinations shall be subject to the same rules and conditions as laid down for the original examination.

e) After Passing the Final Examinations:

- 1) The fee for his commission shall be \$100.00.
- 2) The current annual dues for a member in good standing are due and payable.

The Board of Management has also made the following rules to govern examinations:

- 1) Land Surveyors from other countries or provinces in Canada shall make application for exemption from the Intermediate Examination before December 31, 1971, for the Board's ruling, before making application to write the Final Examination. Such application should include a transcript of marks obtained by the applicant when he wrote his provincial association examinations and should be forwarded directly by his Association's Secretary. The necessary fees should accompany this application.

The applicant will then be advised immediately after the Board of Management's meetings of mid January, of their ruling.

This procedure will give the applicant approximately three (3) months for study before any examination sitting.

Your members should also be advised that the earliest sitting of our new Intermediate Examination will be April, 1972, and the earliest sitting of our New Final Examination will be April, 1973.

We trust that the above information will be helpful to your members. A new booklet on Regulations governing our Examinations is presently being printed. We will forward some copies to you when they are prepared.

Yours very truly,

A. A. W. Burhoe, B.C.L.S.,  
Secretary,  
605 Courtney Street,  
Victoria, B. C.  
June 4, 1971.

RESOLUTION NO. 1 OF THE 79TH ANNUAL MEETING OF THE ASSOCIATION OF ONTARIO  
LAND SURVEYORS - FEBRUARY 1971

WHEREAS O. Reg. 301/69 under The Surveys Act establishes the Ontario Co-ordinate System;

AND WHEREAS By-law No. 95 of the Association of Ontario Land Surveyors establishes new examination requirements for admission to the practice of Professional Land Surveying;

BE IT THEREFORE RESOLVED that, notwithstanding any other current legislation, this Association recognizes that professional land surveying includes, inter alia, activity at the professional level in the fields of geodesy and photogrammetry.

RESOLUTION NO. 2

WHEREAS Resolution No.1 of the 79th Annual Meeting of the Association of Ontario Land Surveyors expresses a principle;

BE IT THEREFORE RESOLVED that the Council of Management be requested to investigate, and make recommendations concerning, the legal and administrative procedures that are required to incorporate the said principle within the structure of the Association.

- SURVEYOR'S LAW -

I DELIMITATION

a) Definition and Classes of Boundaries:-

General Note.

b) Modes of Fixing Boundaries:-

i) By Agreement of the Parties:-

Grassett v. Carter, (1884), 3 N.S.R. 255 (C.A.)  
Zwicker v. Feindel, (1889), S.C.R. 516.

ii) Boundaries Fixed by Statute or Judicial Authority:-

Re Walker & Municipality of Burford, (1857), 15 U.C.Q.B. 82 (C.A.)  
Irwin v. Sager, (1862), 21 U.C.Q.B. 373 (C.A.)  
Thordarson v. Akin, (1910), 15 W.L.R. 115.  
Stafford v. Bell, (1881), 6 O.A.R. 273.

iii) Presumptions as to Boundaries:-

- By the Sea Shore:-

Rex v. Taylor, (1862), 10 N.B.R. 242.  
Lee v. Arthur, (1918), 46 N.B.R. 482.  
Turnbull v. Saunders, (1921), 41 N.B.R. 502.

- By Lakes and Rivers:-

Parker v. Elliot, (1852), 1 U.C.C.P. 470.

- By Non Navigable Waters:-

Massawippi Valley Railway Co. v. Reed, (1902), 33 S.C.R. 457.  
The Keewater Power Co. v. Town of Kenora, (1908), 16 O.L.R. 184.

II ERRORS AND CONTRADICTIONS IN DESCRIPTIONS

a) Governing Features:-

Young v. Belyea, (1909), 13 O.W.N. 423.  
Segee Munroc v. Pinder Lumber, etc. Co., (1927), 53 N.B.R. 236.  
Herrick v. Sixby, (1867), L.R. 1 P.C. 436.  
Wilson Lumber Co. v. Simpson, (1910), 22 O.L.R. 452.  
Blank v. Romkey, (1913), 11 D.L.R. 661.  
Grassett v. Carter, (1884), 10 S.C.R. 105.  
Hickman v. Kennedy, (1930), 38 O.W.N. 460.  
Hudson v. Austin, (1923), 24 O.W.N. 277.  
Artley v. Curry, (1881), 29 Gr. Ch. R. 243.

b) Lost Boundaries:-

Kingston v. Highland, (1919), 47 N.B.R. 324.  
Hamilton Motor Works Ltd. v. Browne, (1918), 15 O.W.N. 90.  
Rianco v. Banks, (1932), 5 M.P.R. 295 (N.S.)  
Bartlett v. N.S. Steel Co., (1907), 38 S.C.R. 336.  
O'Connor v. Dunn, (1878), O.A.R. 247.

III SURVEYS

- 1) Canada Land Surveying Act, 1952 R.S.C. Ch. 26
- 2) Dept. Mines and Technical Surveys Act, 1952 R.S.C. Ch. 73.
- 3) Provincial Land Surveyors Act, 1954 R.S.N.S. 230.

#### IV DUTIES AND LIABILITIES

##### a) To the Society:-

See Provincial Lands Surveyors Act, supra.

##### b) Duties to the Public:-

Le Lievre and another v. Gould, (1883), 62 L.J.Q.B. 352.  
 Chapman v. Walton, (1833), 131 E.R. 826.  
 Ramsay & Penno v. R., (1952), 2 D.L.R. 819.  
 Lanphier v. Phipos, (1838), 173 E.R. 581.  
 Avens v. Davidson, (1860), 10 U.C.C.P. 302.

##### c) Liabilities to the Public:-

Derry v. Peek, (1889), 14 A.C. 337.  
 Reg. v. Arnoldi, (1893), 23 O.R. 201.  
 Mill v. Hawker et al Wickett, (1875), L.R. 9 Ex. 309.

##### d) Duties to the Employer:-

Hemming v. Hale, (1859), 7 C.B. (N.S.) 487.  
 Hutton v. Barton School Trustees, (1926), 31 O.W.N. 358.  
 Lorenzen v. Labadie, (1954), O.W.N. 241.  
 Corporation of Staffard v. Bell, (1881), 6 O.A.R. 273.  
 Harris Hall & Kruse v. South Sarnia Properties Ltd., (1928), 63 O.L.R. 597.  
 Sharp v. Furber, (1939), 2 W.W.R. 242.

##### e) Liabilities to the Employer:-

Irving v. Morrison, 27 U.C.C.P. 242.  
 Chutarian v. Carter, (1940), 2 W.W.R. 312.  
 Lee v. Walker, (1872), L.R. 7 C.P. 121.  
 Columbus Co. v. Clowes, (1903), 1 K.B. 244.  
 Harmer v. Cornelius, (1858), 141 E.R. 94.

#### I DELIMITATION

##### a) Definition and Classes of Boundaries:-

A boundary may be defined as a line which fixes the limit of an estate and identifies it from a contiguous one. It may be marked by physical objects and is sometimes described as "natural" or "artificial" according as such objects have or have not been erected by man. Thus, natural boundaries may be formed by waters of a river or lake, or by the seashore, or by fault intersecting mines; an artificial boundary may consist of a wall, a ditch or fence. In boundary questions natural boundaries generally control courses and distances.

##### b) Modes of Fixing Boundaries:-

###### 1) Agreement of Parties:-

Grassett v. Carter (1884), 3 N.S.R. 255 (C.A.)  
per Ritchie, C.J. (S.C. of C.) at p. 110-111.

"That where there may be a doubt as to the exact true dividing line or two lots, and the parties meet together and there determine and agree on a line as being the dividing line of the two lots, and upon the strength of that agreement and determination, and fixing of a conventional boundary, one of the parties builds to that line, the other party is estopped from denying that that is the true dividing line between the two properties."

Zwicker v. Feindel (1889), S.C.R. 516 Per Gwynne, J. at p. 525.

Defendant has established his benefit "of the well established principal of equity that where a person makes a false representation for the purpose of fraudulently

influencing the conduct of another person who acts upon the representation, the person making the representation is estopped from denying the truth of the representation and may be compelled by the court to give effect to it..."

Thus, where a vendor of land wilfully mis-states the position of the boundary line and, thereby leads the purchaser to believe that he is acquiring a strip not included in the deed, the vendor is estopped from afterwards claiming such strip as his own property.

ii) Boundaries Fixed by Statute or Judicial Authority:-

Re Walker & Municipality of Burford, (1857), 15 U.C.Q.B. 82 (C.A.)

If the procedure and mode for surveying is set out in statute, then a survey made contrary to the regulations in the statute is illegal, per Robinson C.J.

Irwin v. Sager, (1862), 21 U.C.Q.B. 373 (C.A.) affmd. 22 U.C.Q.B. 22  
per Robinson, C.J. at p. 379.

"The legislature have in the plainest manner shown that in their apprehension the action of ejectment was a proper proceeding in which to determine a question of boundary."

Thordarson v. Akin, (1910), 15 W.L.R. 115.

In determining the proper location of a boundary line the Plaintiff must show the true limit of his property and a surveyor employed for that purpose must adopt proper methods to locate the lines.

Stafford v. Bell, (1881), 6 O.A.R. 273  
per Patterson, J.A. at p. 281 re expert testimony.

"If reference to questions addressed to surveyors as experts, and to opinions given by them as to what a surveyor ought to do in given circumstances. Such opinions cannot assist and may mislead. When given on a trial by jury they are most objectionable. It is the duty of the Judge to declare the law as to a survey made under any other subject. When such evidence is given to the jury, the impropriety of its reception is apparent from the consideration that the Judge may have to lay down the law as very different from that stated by the witness."

iii) Presumptions as to Boundaries:-

- By the Sea Shore:-

Rex v. Taylor, (1862), 10 N.B.R. 242  
per Parker, J. at p. 244.

"There was no evidence in this case to rebut the presumption of the Title of the Crown to the land lying between the ordinary high and low water marks."

Lee v. Arthur, (1918), 46 N.B.R. 482  
per McKeown, C.J. at P. 499.

"The words in the description "high water mark" should not be construed as exceptionally high, or exceptionally low, water mark, but, as the learned Judge says, ordinary high water mark.....In the absence of local custom high water mark does not mean high water mark at freshet time."

Turnbull v. Saunders, (1921), 41 N.B.R. 502  
per J. D. Hagen, C.J.

"County Court Judge correctly stated the law when he informed the Jury that if they could find the medium high tide line between the spring and the neap tides that line could be called the high water mark."

- By Lakes and Rivers:-

Parker v. Elliot, (1852), 1 U.C.C.P. 470  
per Maccualay, C.J. at p. 481.

" 'To the lake' or 'to the bank of the lake' means to high water mark so the grant went to high water mark only."

- Non Navigable Waters:-

Massawippi Valley Railway Co. v. Reed, (1902), 33 S.C.R. 457  
per The Chief Justice at p. 468-69.

"A deed which gives a non-navigable river as a boundary on one side of the land sold cannot be read as implying a reservation of the river, or as excluding it from the sale. The deed must be read as if the land sold was described in express words as bounded by the middle of the river."

The Keewater Power Co. v. Town of Kenora, (1908), 16 O.L.R. 184  
per Moss, C.J.O. at p. 190.

"The natural presumption is that a man whose land abuts on a river owns the bed of the river up to the middle of the stream, and if he owns the lands on both sides, the presumption is that the whole of the bed of the river belongs to him unless it is a tidal river."

## II ERRORS AND CONTRADICTIONS IN DESCRIPTIONS

### a) Governing Features:-

Young v. Belyea, (1909), 13 O.W.N. 423  
per Falconbridge, C.J. at p. 423.

"Where a lot or close has been granted by a certain name, then the lot as named is the governing feature, notwithstanding any erroneous descriptions which, if literally carried out would narrow or extend the quantity of land."

"Here the grant is in part of Lot 51 and particularly described by metres and bounds so, this distinguishes this case from the rule above." Thus metres and bounds control.

Segee Munroc v. Pinder Lumber, etc. Co., (1927), 53 N.B.R. 236  
per White, J.

"When the boundaries of land are specified in the deed, any other description containing the acreage will not change these boundaries."

Herrick v. Sixby, (1867), L.R. 1 P.C. 436  
per Richard T. Kindersley, at p. 451.

"If, in a deed conveying land, the description of the land intended to be conveyed is couched in such ambiguous terms that it is very doubtful what were intended to be the boundaries of the land, and the language of the description equally admits of two different constructions, the one of which would make the quantity of the land conveyed agree with the quantity mentioned in the deed, and the other would make the quantity altogether different, the former construction must prevail."

Wilson Lumber Co. v. Simpson, (1910), 22 O.L.R. 452  
per Meredith, C.J. at p. 460.

"...the words, 'more or less, added to the statement of the depth, control that statement, so that neither party would be entitled to relief on account of a deficiency or surplus unless in case of so great a difference as will naturally raise the presumption of fraud or gross mistake in the very essence of the contract'..."

Blank v. Romkey, (1913), 11 D.L.R. 661 C.A.  
per Drysdale, J. at p. 663.

"I think this is not a case of the plan not agreeing with the description accurately fits and describes what was obviously intended on the plan to be allotted as No. 7 (lot)." Rule: - A description in a deed will be accepted to an accompanying plan to give the plan effect.

Grassett v. Carter, (1884), 10 S.C.R. 105  
per Strong, J. at p. 114.

"When lands are described, ....by a reference, either expressly or by implication, to a plan, the plan is considered as incorporated with the deed, and the contents and boundaries of the land conveyed, as defined by the plan, are to be taken as part of the description, just as though an extended description to that effect was in words contained in the body of the deed itself."

Hickman v. Kennedy, (1930), 38 O.W.N. 460  
per Garrow, J. at p. 463.

"Innocent purchasers for value who buy lands to which a person is a party may rely on the boundaries fixed thereby, and has a good claim to such land as against those who consented to the plan, even though that person's lands are outside the plan and contain an error with respect to their boundary lines."

Hudson v. Austin, (1923), 24 O.W.N. 277  
per Riddell, J. at p. 278.

"The plan and field notes were conclusive",.... where there is doubt as to the accuracy of the position of the surveyor's post.

Artley v. Curry, (1881), 29 Grant's Chancery Reports 243  
per Spragge, C.J. at p. 251.

"The rule is well established, that it is the work on the ground that governs, and it is only where the site of a monument on the ground is incapable of ascertainment, that a surveyor is authorized to apportion quantities between known boundaries."

#### b) Lost Boundaries:-

Kingston v. Highland, (1919), 47 N.B.R. 324  
per Barry, J. at p. 328.

"If parties, the owner of either part of a lot, now after a lapse of seventy-eight years, call in a sworn surveyor to ascertain the true lines, the duty of the surveyor is to find if possible, the place of the original line, the stakes, marked trees and monuments which determine the boundary line between the proprietors in the first instance. However, erroneous many have been the original survey, or even if there were no survey at all, technically speaking, the monuments that were set, the trees that were marked and blazed must, nevertheless, govern, even though the effect be to give to one proprietor a much greater acreage than his deed would seem to entitle him, and give to the adjoining proprietor very much less. In the case of successive purchasers, or owners, they are entitled to no more or less an area than their predecessors in title; for parties buy or are supposed to buy in reference to the earlier lines of monuments, and are entitled to what is within these lines and no more."

"The general duty of a surveyor..is not to assume that a line is lost until he has thoroughly sifted the evidence and found himself unable to trace it..." the surveyor should inquire when it originated, how and why the lines were then located as they were, and whether claim of title has always accompanied the possession, and give all the facts due force as evidence.".....a supposed boundary line or a supposed division line if long acquiesced in, is better evidence of where the real line should be, than any survey made after the original monuments have disappeared."

Hamilton Motor Works Ltd. v. Browne, (1918), 15 O.W.N. 90  
per Middleton, J.A.

"It may be presumed that old buildings are lawfully located, but the true boundaries of lots on another street some distance away is not necessarily accurate when



based on the location of these old buildings."

Bianco v. Banks, (1932), 5 M.P.R. 295 (N.S.)  
per Mellish, J. at p. 301-2.

"A disputed lot may be located and its boundaries fixed by locating the boundaries of adjoining lots if this can be accomplished in reference to monuments."

Bartlett v. N.S. Steel Co., (1907), 38 S.C.R. 336

"Where any land has been conveyed in accordance with a description in a master plan of the subdivided lots, and no evidence has been adduced as to any error in that plan, a second plan of the subdivision showing the limits of the land will not be received in evidence.

Here the place, annexed to and forming part of the original crown grant of a very irregular piece of land is deemed to, "... have been prepared with great care, so as to show with correctness the relations of the parcels to each other."

O'Connor v. Dunn, (1878), C.A.R. 247  
per Moss, C.J. at p. 254.

"...It would be extremely dangerous in point of policy, and an unwise extension of the rule against hearsay, to admit after the death of a surveyor whatever entry he might have made in his field notes... But even these... the entries would only be admissible, not on account of their public character, but because they were made in the discharge of professional duty, and only to the extent to which duty required them to be made."

### III SURVEYS

- 1) Canada Land Surveying Act, 1952, R.S.C. Ch. 26.
- 2) Department of Mines and Technical Surveys Act, 1952, R.S.C. Ch. 73.
- 3) Provincial Land Surveyors Act, 1954, R.S.N.S. Ch. 230.

### IV DUTIES AND LIABILITIES

#### a) Duties to the Society:-

See - Provincial Land Surveyors Act, 1954, R.S.N.S. Ch. 230.

#### b) Duties to the Public:-

Le Lievre and another v. Gould, (1883), 62 L.J.Q.B. 352  
per Lord Ester at p. 355.

"A man may be negligent as he pleases with regard to all the world if he owes no duty to them". Thus we see that there has to be a breach of some duty recognized by law before there will be liability.

Chapman v. Walton, (1833), 131 E.R. 826  
per Tindal, C.J. at p. 829.

"For the defendant did not contract that he would bring to the performance of his duty, on this occasion, an extraordinary degree of skill, but only a reasonable and ordinary proportion of it; and it appears to us, that it is not only an unobjectionable mode, but the most satisfactory mode of determining this question...." The surveyor is like any other professional man, in that he has to exercise a reasonable degree of care and skill in his work. This is the care and skill which would be exercised in similar circumstances by the average person in the branch of the profession in which he is engaged.

Ramsay and Penno v. R., (1952), 2 D.L.R. 819  
per Hyndman, D.J. at p. 823.

"Engineers are expected to be possessed of reasonable competent skill in the exercise of their particular calling, but not infallible, nor is perfection expected, and

the most that can be required of them is the exercise of reasonable care and prudence in the light of scientific knowledge at the time, of which they should be aware."

Lanphier v. Phipos, (1838), 173 E.R. 581  
per Tindal, C.J. at p. 583.

"Every person who enters into a learned profession undertakes to bring to the exercise of it a reasonable degree of care and skill. He does not undertake, if he is an attorney, that at all events you shall gain your case, nor does a surgeon undertake that he will perform a cure; nor does he undertake to use the highest degree of skill. There may be persons who have higher education and greater advantage than he has, but he undertakes to bring a fair, reasonable and competent degree of skill, and you will say, whether in this case, the injury was occasioned by the want of such skill in the defendant."

Avens v. Davidson, (1860), 10 U.C.C.P.302.

Survey work done by an apprentice and subsequently adopted by the surveyor will be considered part of the surveyor's work and entitled to as much reliance.

c) Liabilities to the Public:-

Derry v. Peek, (1889), 14 A.C. 337  
per Lord Herschell who said that the authorities have held that fraud is proved when it is shown that a false representation has been made, (1) knowingly, or (2) without belief in its truth, or (3) recklessly, careless whether it is true or false. Thus to prevent a false statement being fraudulent there must always be an honest belief in its truth.

per Lord Bramwell at p. 350, "A man who makes a statement without care and regard for its truth or falsity commits a fraud." It would follow that a surveyor in the course of his practise must act honestly and should he wilfully deceive or mislead the public he becomes subject to such penalties as are provided for such a violation of public right.

Reg v. Arnoldi, (1893) 23 O.R. 201.

"An engineer in the public service of Canada, charged with the expenditure and audit of public monies may be indicted for misconduct as was the case here where the defendant used his own tugboat for public purposes, the boat being falsely registered in the name of another person."

Mill v. Hawker and others Wickett, (1875), L.R. 9 Ex. 309.

"In this case a surveyor under orders of his employers removed a lock from a gate placed across a part running through the plaintiff's land and was held personally liable for committing a trespass. It is not necessary to show any actual damages for an action in trespass, thus the surveyor was not exempt liability."

d) Duties to the Employer:-

Hemming v. Hale, (1859), 7 C.B. (N.S.), 487  
per Williams, J.

"Where a man employs an agent relying upon his particular aptitude for the work entrusted to him, it is not competent to that person to delegate trust to another."

Hutton v. Barton School Trustees, (1926), 31 O.W.N. 358  
Per Kelly, J. at p. 359.

(Architect sues for services rendered)"The plaintiff was entitled to the value of his services on a quantum meruit, but limited to the work and services he performed which were necessary for the purpose in respect of which the defendants at the time had power to obligate themselves."

Lorenzen v. Labadie, (1954), O.W.N. 241  
per McLennen, J. at p. 244.

"The plaintiff is entitled to a fair and reasonable compensation for his work."

In arriving at the amount I have considered the following factors:

- 1) The professional statute of the plaintiff
- 2) Special skill and ability arising from his experience
- 3) The responsibility involved in the work done
- 4) The result of the work.

Quantum meruit - is a consideration of all factors essential to fair play and justice."

Corporation of Stafford v. Bell, (1881), 6 O.A.R. 273  
per Burton, J.A. at p. 274.

"The law respecting land surveyors does, it is true, define the method of procedure to be observed in making surveys in many supposable cases, and affords greater facilities for proving negligence than in actions against others undertaking a professional duty; but undertakes as a matter of contract, like any other professional man to do the service required of him and as in all other cases of a cognate kind, there must be evidence of a want of reasonable skill and knowledge or of gross negligence before he can be made liable in this form of proceeding."

and at p. 275,

"but you can only expect of a surveyor that he shall be honest and diligent, and that he brings to the practice of his profession a reasonable amount of skill and knowledge."

per Patterson, J.A. at p. 279.

"Disobedience to the plain rule laid down in the statute is a breach of duty which may entail liability for whatever damages may naturally result from it, notwithstanding that the surveyor may have honestly arrived, by reasoning on the circumstances of the particular case at the conclusions that he could make a better rule from himself or one better adopted to those circumstances... The statute lays down rules which are to be obeyed.

Particular cases might occur which the statute does not provide for; and as to them other considerations might apply. But even then I should not be prepared to say too hastily that a surveyor should run no risk, although he ran such a line as in his judgment was best, if he did not inform the employer that it had no statutory sanction."

and at p. 281,

"I refer to questions addressed to surveyors as experts, and to opinions given by them as to what a surveyor ought to do in given circumstances... Such opinions cannot assist and may mislead."

In the Report of the Trial Decision in 31 U.C.C.P.  
per Wilson, C.J. at p. 106.

"The first duty of the surveyor who is going over old work is to discover what the original was, and not to undo what has been done by his predecessor if he can discover what it is that was done. And when he has discovered it, he must make his work conform to it."

Harris Hall & Kruse v. South Sarnia Properties Ltd., (1928), 630 L.R. 597.

This case deals with mistake made by the surveyor in the plan and staking out of a subdivision.

per Fisher, J. at p. 602.

"The law applicable is, that an architect or a surveyor is in the same position as any other professional man... he is responsible if he omits to do it with an ordinary and reasonable degree of care and skill."

"Where negligence and the omission to use due care and skill have been made out, the amount of damages that can be awarded is to be measured by the consequent loss to the employer, and it is immaterial that such damages may exceed the amount of the commission or fees agreed to be paid to the person employed for the performance of his duties."

per Masten, J.A. at p. 610.

"The surveyor failed in his duty which they had undertaken to perform on behalf of the plaintiffs, and have rendered themselves liable for failure to exercise reasonably the professional skill which they ought to have brought to bear, and which it was their duty to bring to bear upon the work undertaken by them, and that the plaintiffs are entitled to recover from them the damages which are attributable to their default."

Sharp v. Furber, (1939), 2 W.W.R. 242  
per Robertson, J. at p. 247.

Case dealt with architect drawing plans for an apartment building over and above amount his client wanted to invest, Held: - He couldn't recover for work on the plans.

"It may be that the defendant's requirements were such that the apartment house would have cost at least \$150,000.00 but on the defendant had been placed a limit of the amount she wished to put into it, it was up to the architect, who should have a very good idea of these things, to tell her that it couldn't be done at her price, otherwise he cannot recover for the plans for a greater building and price."

e) Liabilities to Employers:-

Irving v. Morrison, 27 U.C.C.P. 242  
per Galt, J. at p. 246-7.

"If a surveyor, who makes an estimate, sues those who employ him for the value of his services and it appears that he was so negligent, that he did not inform himself, by boring or otherwise, the nature of the soil of his foundation and it turned out to be bad; this goes to his right of action; and if he went on the information of others, which now turns out to be false, or insufficient he must take the consequences; for every person employed as a surveyor, must use due diligence."

Where on a question of quantum meruit for services, loss suffered through the negligence of that party can be deducted.

Chutarian v. Carter, (1940), 2 W.W.R. 312  
per Adamson, J. at p. 319.

"An injunction to restrain a person from using their knowledge and experience in practising their profession should not be granted."

Lee v. Walker, (1872), L.R. 7 C.P. 121  
per Brett, J. at p. 125.

"The defendant undertook for a reward to act for the plaintiff as skilled agent in obtaining a patent for them. He was, therefore, bound to bring a reasonable and ordinary care and knowledge to the performance of his duty as a skilled agent. He failed to bring that degree of care and is liable in negligence for the plaintiff's loss."

Columbus Company v. Clowes, (1903), 1 K.B. 244  
per Wright, J. at p. 247.

Here the surveyor drew incorrect plans. Held: "I think that it is plain that they are entitled to some damages... The defendant acted negligently, and in the cases such as those against solicitors where negligence is proved the plaintiff is entitled to some damages."

Harmer v. Cornelius, (1858), 5 C.B. (N.S.) 236, 141 E.R. 94  
per Wright, J. at p. 98.

"When a skilled labourer, artisan or artist is employed there is on his part an implied warranty that he is of skill reasonably competent to the task he undertakes."

"The failure to afford the requisite skill which has been expressly or impliedly promised, is a breach of legal duty, and therefore, misconduct. Misconduct is a justification of a discharge."

- Compiled at the request of the late Major J. A. H. Church,  
former Principal of the Nova Scotia Land Survey Institute.

Submissions made by: T. Scott  
F. Cordon  
L. Albertstadt  
C. Rae

SYNOPSIS OF ORGANIZATION AND ADMINISTRATION OF THE  
PROVINCIAL ASSOCIATIONS OF LAND SURVEYORS

The information contained herein gives a short but concise account of each of the Provincial Associations of Land Surveyors. This will be useful to the Canadian Institute when meeting in the International Field and to the Provincial Associations when meeting together.

The Provincial Associations are established and protected by Provincial Legislation. Their task at first was the orderly subdivision and development of the country for settlement. Now it is the perpetuation of the original subdivision framework to re-establish title limits. The most interesting part of this latter role is to decide how it will be accomplished in the future.

The dates of the Incorporation of the Associations may be misleading. Legal Surveys were carried out by properly qualified surveyors in the older settled areas as far back as the 1700's. Legislation controlling surveys progressed by evolution. Different factors from those existing today.

The Provincial Associations all recognize the need for a hard look into the future, for they are the organizations their Governments will be looking to for advice. It is hoped that the Canadian Institute of Surveying can be of assistance to them.

Respectfully submitted,

Land Surveying Committee 1970,  
Canadian Institute of Surveying.

Editor's Note:

Nova Scotia members on this Committee were: A. F. Chisholm, J. Doig, W. Servant and G. E. Streb.

Name of Association	Date of Incorporation	No. of Members	No. of Articled Students	Composition of Council	All Business Handled by Council	Council Meetings per Year	Standing Committees	Full Time Office and Employees	Discipline of Members
Association of Newfoundland Land Surveyors	1953	93	6	Pres. V-Pres. P-Pres. Secretary-Treasurer 8 Councilors	Yes	At call of Chairman	0	No	Council
Association of Nova Scotia Land Surveyors	1959	240	35	Pres. V-Pres. P-Pres. Secretary-Treasurer 12 Councilors	Yes	4	5	No	Discipline Committee
Association of Prince Edward Island Land Surveyors	1968	20	0	President Vice-President Secretary-Treasurer	Yes	10	0	No	Council initially
Association of New Brunswick Land Surveyors	1954	83	28	Pres. V-Pres. Secretary-Treasurer 6 Councilors	Yes	4	7	No	Council
Les Arpenteurs-Geometres de la Province de Quebec	1882	432	142	Pres. 2 V-Pres. Secretary-Treasurer 7 Directors	Executive, ratified by Council	18	24	Yes 3	Committee of Trustees
Association of Ontario Land Surveyors	1892	590	255	Pres. V-Pres. Minister, Surveyor Gen. Sec-Treas. 6 Councilors & 2 persons	Yes	12	17	Yes 3	Council
Association of Manitoba Land Surveyors	1881	60	24	Pres. V-Pres. P-Pres. Secretary-Treasurer 4 Councilors	Yes	16	11	No	Discipline Committee and Council
Saskatchewan Land Surveyors Association	1910	90	20	Pres. V-Pres. P-Pres. Secretary-Treasurer 4 Councilors	Yes	4-8	12	No	Discipline Committee and Council
Alberta Land Surveyors Association	1910	172	178	Pres. V-Pres. P-Pres. Provincial Secretary Sec.-Treas. 6 Councilors	Yes	6	2	Yes 2	Discipline Committee
Corporation of Land Surveyors of the Province of British Columbia	1905	231	53	Pres. V-Pres. P-Pres. Surveyor Gen. Sec.-Treas. 3 Councilors	Yes	4 (min.)	32	Yes 2	Board of Management

Province	Education and Examinations Controlled by	Composition of Board of Examiners	Non members of Association on Board	Number of Examinations Per Year	Time Limit to Complete Examinations	Courses by Association for Students	Service under Articles	Provincial Organization of Survey Technicians and Technologists
Newfoundland	Association Board of Examiners	2 persons and 2 members appointed by Council	Yes 2	1	No	No	3 years	No
Nova Scotia	Association Board of Examiners	6 appointees (see page 25)	Yes 1	1	No	No	2 years	No
Prince Edward Island	Association Board of Examiners	(see page 25)	1	1	Discretion of Board	No	3 years	Under consideration
New Brunswick	Association Board of Examiners	(see page 26)	Yes	2-3	5 Years	Occasional	2 years	No
Quebec	Corporation Board of Management	Commission of Examination	No	1	8 years	No	4 years (Max.)	Study underway. To be sponsored by Corporation
Ontario	Association Board of Examiners	8 Appointees (see page 27)	Yes 2	1-2	No	Annual Refresher	4 years (Max.)	Yes - Sponsored by Association
Manitoba	Association Board of Examiners	Registrar and 4 Members appointed by Council	No	1	No	Arranged if requested	4 years (Max.)	Study underway. Association will sponsor if considered feasible
Saskatchewan	Board of Examiners appointed by University of Saskatchewan		Yes	1	5 years	Yes	3 years (Max.)	No
Alberta	University of Alberta	University of Alberta	Yes	1	No	No	3 years	Yes - Sponsored by Association
British Columbia	Corporation Board of Management	Board of Management	No	1	No	No	3 years	No

Province	Policy of Association re Chief of Party - Commissioned Surveyor or Technologist - Technician	Employees Members of Labour Union	% of Members Employed by Various Levels of Government	Members Holding Membership in other Professions	Interested in Relationship with Other Associations	Could Relations be Discussed at C.I.S. Annual Meeting	Incorporation of Members Allowed
Newfoundland	Legal Surveys by Registered Surveyors	No	20%	35%	Yes	Yes	Yes
Nova Scotia	Legally should be NSLS, Technician must be under supervision	Some	37%	22%	Yes	Yes	Yes
Prince Edward Island	Technicians under supervision of Commissioned Surveyor	No	55%	70%	Yes	Yes	Yes
New Brunswick	No Policy	No	18%	25%	Yes	Alternative date preferred	Yes
Quebec	Commissioned Surveyor at the start of his career. Generally a Technician.	No	30%	50%	Yes	Quite in agree- ment	No
Ontario	Provision in New Act for "Personal Supervision" by Surveyor.	No	50%	31%	Yes	Yes	Yes
Manitoba	Use of Technician in- creasing. Under super- vision of M.L.S.	No	53%	10%	Existing now through Praire Joint Council	Yes - Continuity of representa- tion important	Surveyor No. Management Company Yes.
Saskatchewan	Commissioned Surveyor or Articled Student	No	20%	35%	Existing now through Praire Joint Council	Yes	Yes
Alberta	No Policy	No	19%	18%	Existing now through Praire Joint Council	Yes	Yes
British Columbia	No Policy	No	20%	33%	Yes	Yes	No



Province	Members Bonded	HORIZONTAL AND VERTICAL CONTROL SYSTEM			
		Already Estab-lished	Maintained by	Used by Private Surveyors	Connected to System Mandatory
Newfoundland	No	Partly	Province	Partial	Will be in future
Nova Scotia	No	Work in progress	Province	Not yet	Not yet
Prince Edward Island	No	Work in progress	Province	When complete	When complete
New Brunswick	No	Yes	Province	Partial	No
Quebec	No	Yes	Federal Provincial	When possible	When possible
Ontario	No	Partial	Not determined	No	No
Manitoba	Yes	Yes	Province	Yes	Yes
Saskatchewan	No	Yes	Province	Yes	Yes
Alberta	No	Yes	Province	Within control area	Within control area
British Columbia	No	Partial	Province	Fairly extensively	In designated areas

#### NOTAM I - Employees Members of Labour Union (Page 23)

Generally employees of surveyors are not members of Unions; however, non professional and supervisory personnel employed at various levels of government, and by corporations may be by circumstances members of Unions.

#### NOTAM II - Education and Examinations

The information contained in pages 24 to 29 of this report has been taken from a Questionnaire completed by each Association and from their Land Surveyors Act and Regulations. For this purpose the information has been greatly condensed.

Educational requirements quoted are minimum. Examination subjects are the maximum number recited in the Act, and terms of articles maximum. All of the Associations give credits for academic background and experience, and each Board has the discretionary power to grant exemptions from subjects providing the applicant produces satisfactory proof that he has taken a course and passed an examination in those subjects.

In the matter of reciprocity between Associations, there are no formal agreements but exemption may be granted in subjects where the content is comparable in scope and standard. Service under articles may be shortened or omitted, depending upon curriculums and experience.

Boards of Examiners are composed of carefully chosen people - who use power with discretion.

#### COMPOSITION OF BOARD OF EXAMINERS - EDUCATIONAL REQUIREMENTS AND EXAMINATIONS -

##### Newfoundland

The Board of Examiners is appointed by the Association and approved by the Lieutenant Governor-in-Council. The Board consists of two members and two persons who may, but shall not necessarily be, members of the Association.

Minimum entrance requirement for Articles is Grade XI (Newfoundland) or equivalent, including English, Mathematics and a Science. Each applicant is interviewed by

the Board.

Credits are allowed for subjects taken and passed at University level.

There are three sets of Examinations:

- Set A - Forestry, Geology, Mathematics, Physics, Surveying I, Surveying Drafting, technical writing.
- Set B - Legal Surveys which include all pertinent legislation, Photogrammetry, Principles of Astronomy, Surveying II and III, Elementary Town Planning.
- Set C - Comprehensive object (written) covering topics from all subjects of the Syllabus.

Supplemental Examinations are granted at the discretion of the Board.

No reciprocal arrangements have been made with other Provinces or Countries. Each application for entrance is judged on its merit.

Changes in education always under review.

### Nova Scotia

Board of Examiners consists of the Deputy Minister of Lands and Forests. One other member of the Department of Lands and Forests who is a member of the Association and is appointed by the Minister. The President of the Association, two other members appointed by Council, and one other member appointed by the Council of the Professional Engineers of Nova Scotia who is a member of that Association and a N. S. Land Surveyor.

Minimum entrance requirements for articles is Grade XI, or equivalent, with standing in English and Mathematics not less than 60%. Be examined in or exempted from subjects in the list hereunder.

Examinations are as follows:

- Preliminary - Arithmetic and Mensuration, Algebra, Plane Geometry, Basic Trigonometry and elements of Logarithms, Physics, Orthography and Grammar.
- Intermediate - Physics, Elementary Analytical Geometry, Elements of Calculus, Spherical Trigonometry, Principles of Astronomy, Geology, Mineralogy, Soils and Vegetation, Survey Methods and Theory of Instruments, Elements of Descriptive Geometry.
- Final Part I - Mathematics, Applied Astronomy, Survey Computations, Plan Drawing, Mapping, Photogrammetry and Map Projections.
- Final Part II - Law and Regulations pertaining to Land Registration and Land Surveying in Nova Scotia. Town planning principles and subdivision design. Description of land, preparation of technical reports. An oral examination on file practice.

Supplemental Examinations are granted at the discretion of the Board.

No reciprocal agreements have been made with other Provinces or Countries. Each application for entrance is judged on its merit.

Educational programme presently under review and changes contemplated.

### Prince Edward Island

In view of the short time the Association has been incorporated, firm policies have not been settled. The Association is being assisted at present by the University of New Brunswick and the New Brunswick Association.

The Board is responsible for approving applications for membership or for Articles.

An educational programme is being reviewed at the present time. Any examinations held now would be on the New Brunswick curriculum.

### New Brunswick

The Board of Examiners is appointed by Council on joint nominations by the President of University of New Brunswick. An examining committee consisting of the Secretary and three members of the Association is appointed, two by Council and one by Minister of Lands and Forests. This committee consults with the President of the University to select persons suitable for the Board.

Applicants for entry into Articles must have passed Junior Matriculation including the following subjects: - Physics, Arithmetic and Trigonometry.

Credits are allowed for subjects taken and passed at higher levels of education. There are two Sets of Examinations:

Intermediate Examination, when required, consist of -

Surveying Part I, a written and a practical examination, Trigonometry, Analytical Geometry, General knowledge paper - subject of topical public interest.

Final

Surveying Part II, a written paper and practical observations, Legal and Practical Surveying, Photogrammetry, Calculus, Town Planning.

Supplemental Examinations are granted at the discretion of the Board.

No formal reciprocal agreements made with other Provinces or Countries. Each application for entrance judged on its merit.

Changes in educational requirements are under review.

### Quebec

The Commission of Examination is named by the Board of Management and includes six members of the Corporation. The Commission may, if necessary, name other people to set and mark the examination papers. If any of these are not members of the Corporation, they are attested by the Secretary.

Applicants for entry into Articles must pass an entrance examination conforming to the programme of the Provincial Secondary level. Applicants having proof of baccalaureate level are exempted from this examination.

The candidate shall, however, have a sufficient knowledge of one of the official languages and must be able to correctly translate English into French, or French into English, according as he shall choose French or English for his examination.

Examinations are as follows:

- Intermediate -
- 1) Astronomie théorique et pratique
  - 2) Botanique (élément) et dendrologie
  - 3) Calcul différentiel et intégral
  - 4) Calcul matriciel
  - 5) Cartographie
  - 6) Chimie inorganique et physique
  - 7) Compensations géodésiques
  - 8) Droit de l'arpentage
  - 9) Evaluation foncière
  - 10) Géodésie
  - 11) Géologie et géomorphologie
  - 12) Géométrie analytique
  - 13) Géométrie descriptive
  - 14) Géométrie plane et de l'espace
  - 15) Lithologie et minéralogie
  - 16) Photogrammétrie
  - 17) Projections cartographiques

- 18) Topométrie
- 19) Trigonométrie rectiligne et analytique
- 20) Trigonométrie sphérique
- 21) Urbanisme

A candidate may be exempted from one or more of these subjects if he shows proof that he has attended a course in the subject at a recognized University and has passed an examination in that subject.

Final examination is an oral and written examination on the Practice of Surveying. There is no exemption allowed.

Supplemental Examinations are granted at the discretion of the Committee.

No reciprocal agreements made with other Provinces or Countries. Each application judged on its own merit.

Changes in educational programme will be made to conform with advances in professional practice.

### Ontario

The Board of Examiners consists of a member of the Council, appointed by Council, who shall be the Chairman of the Board, four members of the Association appointed by Council, two persons appointed by the Lieutenant Governor-in-Council (may not be members of the Association), and the Secretary.

The Board, with the approval of Council, may appoint one or more competent persons to assist the Board in any of the subjects of examination. The Board and their assistants, if any, must take the prescribed oath before a person authorized by law to take oaths.

Minimum entrance requirement for Articles is that the candidate hold a certificate of educational standing acceptable for admission to a course in civil engineering in a University in Ontario, or the equivalent thereof.

Examinations are divided into three parts as follows:

Part 1 - English I, Physics, Town Planning, Legal Surveying, Mathematics I, Mathematics II, Mathematics III, Mathematics IV, Mathematics V, Technical Report, Spherical Trigonometry & Astronomy, Descriptive Geometry, Photogrammetry I, Air Photo Interpretation, Plane Surveying, Advanced Plane Surveying and Location Surveys, Computer Programming, Control and Electronic Surveying, and any three of the following subjects: - Construction Materials and Municipal Services, Electricity and Magnetism, Drainage Engineering, Cartography, Economics, Forestry and Geology, Optics and Optical Tooling.

Part 2 - Geodetic Adjustments, Geodesy, Geodetic Astronomy, Town and Regional Planning, Photogrammetry II, Electronic Surveying.

Part 3 - Legislation, Land Boundaries, Law of Evidence, Descriptions, Surveys Act, Professional Practices, Real Property Law, History of Surveying.

The standard of examination will be at the baccalaureate level.

Supplemental Examinations are granted at the discretion of the Board.

A candidate may be exempted from one or more of these subjects if he shows proof that he has attended a course in the subject at a recognized University and has passed an examination in that subject.

No reciprocal agreements have been made with other Provinces or Countries. Each application for entrance is judged on its merit.

This programme has come into effect in 1970, but many of the students will be examined on the old curriculum. The new programme will be watched with great interest.

## Manitoba

The Board of Examiners consists of the Registrar and four members of the Association. Council may if necessary appoint competent persons to assist the Board in any of the subjects of the Examination. Council may also make arrangements with any University or educational institution in Canada for the examination of candidates in any subject or portion thereof forming part of the course of instruction required for examination of candidates for commission as Manitoba Land Surveyors.

Minimum entrance requirements for Articles is a preliminary examination, or the candidate must have a Grade 12 University entrance standing in Manitoba or equivalent. Length of Articles and the number of subjects to be written will be determined by the Board having regard to the candidate's educational background.

Examinations are divided into 4 Parts as follows:

- Part 1 - Botany and Geology, Algebra, Plane Geometry, Plane Trigonometry, Physics.
- Part 2 - Spherical Trigonometry, Analytical Geometry, Elementary Surveying, Practical Survey Project No. 1 (Topographic Survey).
- Part 3 - Advanced Surveying, Computations No- 1, Astronomy, Field Work and Observing, Practical Survey Project No. 2 (Subdivision Design and Report).
- Part 4 - Manitoba Acts, Descriptions, D.L.S. Manuals, Computation No. 2, Practical Surveying, Thesis.

Supplemental Examinations are granted at the discretion of the Board. The number of times a candidate may rewrite the same examinations has been established by By-law of the Association.

No reciprocal agreements have been made with other Provinces or Countries. Each application for entrance is judged on its merit.

A committee is presently negotiating with the University for assistance. Education is under constant review.

## Saskatchewan

The Board of Examiners is appointed by the Senate of the University of Saskatchewan, and its Secretary is the Registrar of the University of Saskatchewan Saskatoon Campus. The Board is responsible for the setting, conduct and marking of examinations.

Minimum entrance requirements for Articles is Grade 12 Saskatchewan standing, or its equivalent, with an average 60% and a mark of at least 60% in each of Algebra, Geometry, Trigonometry and Physics.

If an Articled pupil can satisfy the Board that he has obtained a satisfactory standing in any of the prescribed subjects, as a result of a course taken at an approved College, University, or other centre of post secondary education, he may be exempted from further examination in that subject.

Examinations are in 2 Parts as follows:

- Part 1 - Theory and Principles of Plane Surveying, Practical Computations, Engineering Surveys, Field Astronomy, Terrain Appreciation, Practical Surveying.
- Part 2 - Provincial Statutes and Regulations (2 papers dealing with the Land Surveyors Act and 1 paper dealing with other relevant Provincial Acts and Regulations), Descriptions and Principles of Evidence, Community Planning, Photogrammetry, Advanced Surveying, Practical Computations, Oral on Practice, and a paper on the History of Surveying.

Supplemental Examinations are granted at the discretion of the Board. Any candidate who fails in any subject more than once, will not be permitted to take the examination again and will, therefore, be prevented from becoming a Saskatchewan Land Surveyor.

No reciprocal agreements have been made with other Provinces or Countries. Each application for entrance is judged on its merits.

This is a new educational programme. Students articulated before the programme started will be examined on the old curriculum.

### Alberta

Entrance as an Articled student or as a member, is controlled by the Co-ordinating Council of the University of Alberta, which also prescribes the subjects of all examinations.

A student is qualified to enter articles if he has passed the preliminary examination prescribed by the Co-ordinating Council, unless the examinations are waived.

A member shall NOT enter into articles with more than one new pupil in the course of each year.

Examinations are as follows:

- Preliminary - English Language, Arithmetic and Mensuration, Plane and Solid Geometry, Plane Trigonometry and Logarithms, Algebra.
- Intermediate - Physics, Analytical Geometry and Introduction to Calculus, Principles of Astronomy, Survey Computations, Geology and Mineralogy, Prairie and Forest Flora of Western Canada, Methods of Surveying and Theory of Instruments, Spherical Trigonometry.
- Final - Analytical Geometry and Calculus, Applied Astronomy, Descriptions of Land and Technical Report, Plan Drawing and Mapping, Survey Computations, Laws Governing Surveys in Alberta, Instructions Governing Surveys in Alberta, Practical Surveying and Observing, Oral Examination.

Supplemental Examinations are granted at the discretion of the Co-ordinating Council.

No reciprocal agreements have been made with other Provinces or Countries. Each application is judged on its own merit.

There are changes contemplated in the educational programme.

### British Columbia

Entrance as an articulated student or as a member is controlled by the Board of Management of the Corporation.

A student is qualified to enter articles if he has passed a Preliminary Examination, assuming as a prerequisite that he has passed Grade 12 University Programme of the Province, or equivalent. The Preliminary Examination consists of Plane Trigonometry and Solid Geometry, Algebra and Analytical Geometry, Elementary Calculus, Physics.

The Final Examination is in 2 Divisions as follows:

- Division 1 - Land, Forest and Official Surveys Act; Description of Deeds; Land Registry Act; Description of Deeds; Land Registry Act; Geology; Hydraulics and Forest Flora of B. C.; Mineral and Placer Mining Acts; Highways, Municipal, Petroleum and Natural Gas Acts; Plans Cancellation and Special Surveys Acts.
- Division 2 - Astronomy; Survey I; Survey II; Laying out and Dividing I; Laying out and Dividing II; Field Test; Photogrammetry.

Supplemental Examinations are granted at the discretion of the Board.

## PERSONALITIES IN THE NEWS -

The Department of Lands and Forests have moved all their Halifax Staff to offices in the Dennis Building, Granville Street, Halifax. This will be a pleasant change for the Surveys and Mapping Branch which has spent the past twenty-five years in the Garret of the Provincial Building.

Mr. R. Thistlethwaite, Surveyor General, Legal Surveys of the Department of Energy, Mines and Resources has retired this year. The many friends he has made in Nova Scotia will be wishing him many happy days of golfing.

Ted Webber, who has been assisting our Secretary, is on a leave of absence from Nova Scotia Light and Power Company, to operate the family motel and business at Lake Charlotte this summer.

The Massachusetts Association of Land Surveyors and Civil Engineers are holding their 1971 Annual Meeting at Falmouth on Cape Cod, September 30th to October 2nd.

Douglas Melhman has left the Department of Lands and Forests to join Dabbs Surveys in Dartmouth, and Burton Cain has joined the same firm after being with the Nova Scotia Power Commission.

Arthur White has recently been appointed to the position of Chief Surveyor for the City of Halifax.

W. S. Crooker, Jr. has recently moved his office to 10 Rufus Street, Halifax, while Frank Longstaff has moved to 48 Dawson Street, Dartmouth, and Robert J. Donovan has moved to 5555 Young Street, Halifax.

Keith A'Coine, who received a degree in Surveying Engineering from the University of New Brunswick in May of this year, has joined the firm of Servant, Dunbrack and McKenzie Limited.

Robert Daniels, who graduated from the Nova Scotia Land Survey Institute in May, has returned to Servant, Dunbrack and McKenzie Limited, to serve as Student-in-Training and to add to his achievements he and the former Mary Martin were married in July - to them both go our best wishes for many happy years.

Ken Simpson, a recent graduate of the Nova Scotia Land Survey Institute has joined Shell Oil and is engaged on their offshore geophysical exploration surveys and drill-rig positioning.

## OBITUARY -

W. S. Crooker, Sr., age 66, of Dartmouth, Nova Scotia died at the Lunenburg Hospital on June 25, 1971, while vacationing at his summer farm in Lunenburg County. He is survived by his wife - Edna Florence; Son, William Sebra; three daughters - Emily MacLeod, Margaret Mosher and Joanna Frasher; two brothers - Leander and Delbert, and three sisters - Mary Annis, Adeliade Telfer and Charlotte Steele.

Mr. Crooker began his career in Land Surveying with the Nova Scotia Power Commission at the age of 19 where he worked first as an axeman, then as a rodman, and chainman, and later as a surveyor, after becoming a Provincial Land Surveyor in 1931.

Born at South Brookfield, Queens County, on November 9, 1904, Mr. Crooker was brought up and educated in this Community. At the age of 16 he started out in the world with the Bank of Nova Scotia as a bank clerk, where he worked until the beginning of his career with the Nova Scotia Power Commission. He remained with the Commission until his retirement in November 1969, having served 46 years in all. During his career with the Power Commission he spent many years in the field on topographic and transmission line surveys for hydro electric development projects throughout the province.

In his early years he travelled from one job to the other, sometimes tenting, at other times renting, and for several years lived in a house trailer. In spite of his constant travel he built and maintained a home at Musquodoboit Harbour on the Grant Road, near his wife's family homestead. He took his family with him on all his survey jobs and his family are left with many fond memories of places visited and the good times enjoyed, travelling about with the Surveyor Father.

In 1956, Mr. Crooker was promoted to the position of Superintendent of the Lands and Rights Department of the Nova Scotia Power Commission and served in this capacity until his retirement. He had a tremendous influence on younger people interested in the surveying profession, motivating many to become land surveyors themselves. His son, William, and nephew, David Crooker, are Nova Scotia Land Surveyors, an indication of the influence generated by his enthusiasm in the Profession. Mr. Crooker was extremely active in the formation of the Nova Scotia Land Surveyors Association having served on Council and contributed to the success of the Association in its early years.

**21<sup>ST</sup>**

**ANNUAL  
MEETING**

**NOVEMBER 4,5,6**

**HOLIDAY INN**

**DARTMOUTH**

**NOVA SCOTIA**



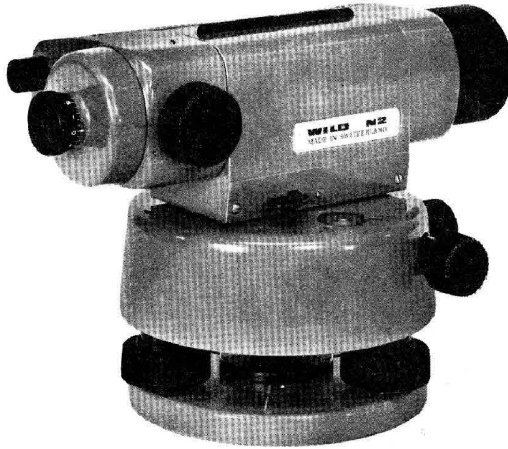


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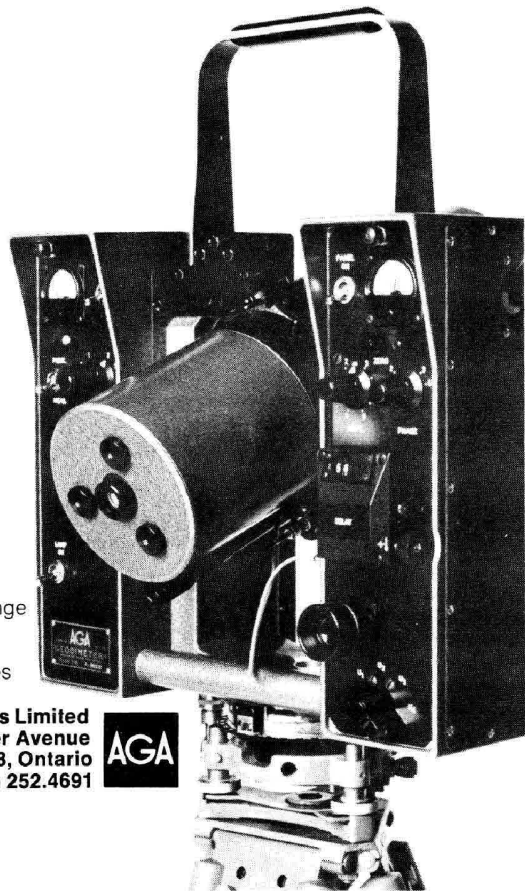
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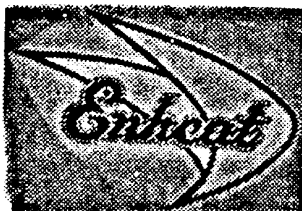
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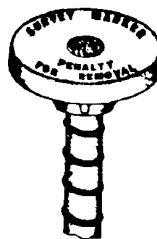
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THE COVER - *for this issue is a new idea and you can participate in future ones.*

*If you send pictures of survey personalities a copy of a planned subdivision plan or historical information to the Editor you too might make the next cover in place of the pictures on this cover.*

*The three pictures on the cover of this issue are:*

*from left to right*

*Reading angles with a theodolite.*

*Making distance measurement with short range E.D.M.*

*Making distance measurement with a long range E.D.M.*