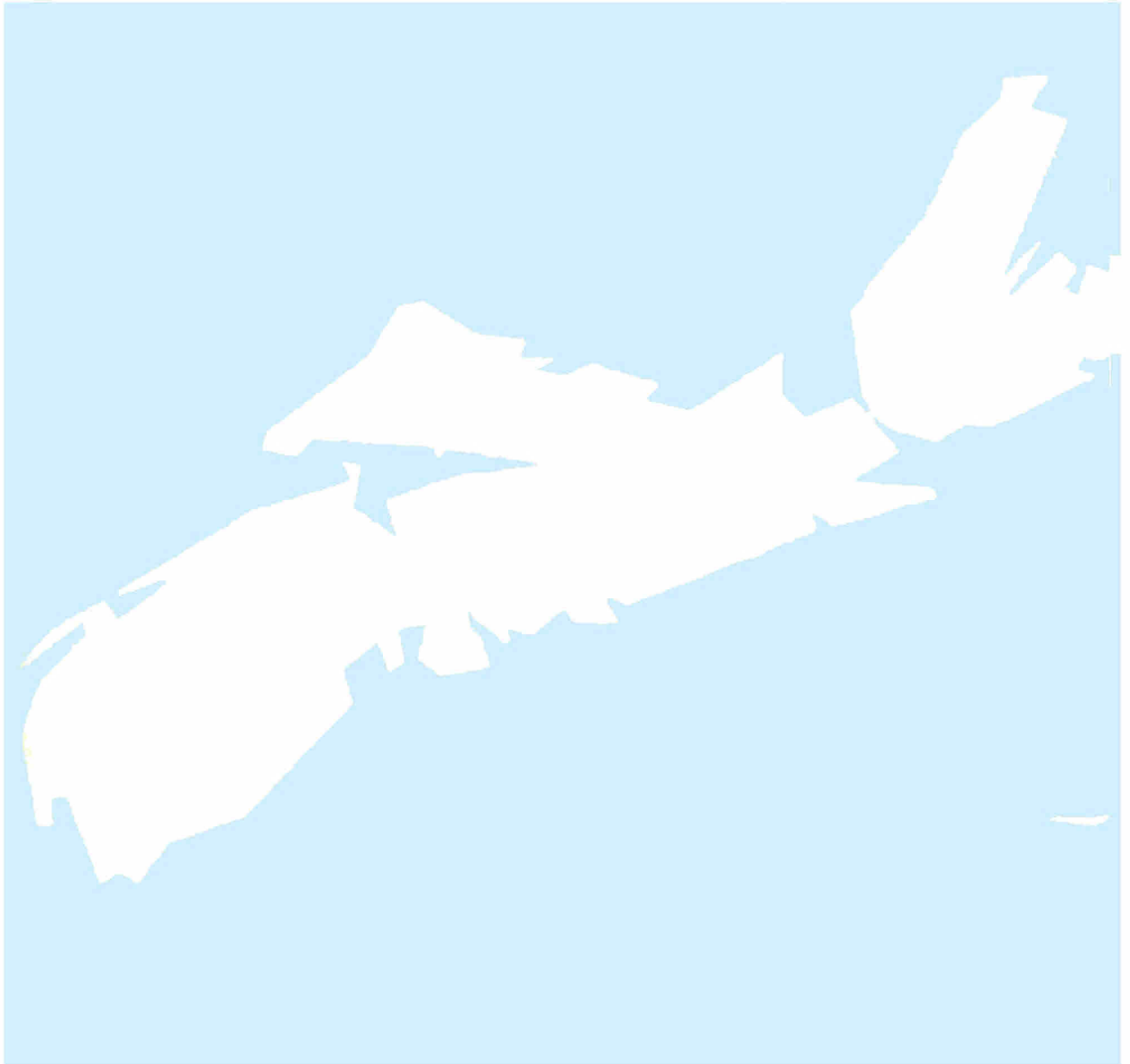


The NOVA SCOTIAN SURVEYOR



1979 ANNUAL MEETING
JANUARY
1980

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS
SLATE OF OFFICERS 1980-81
EXECUTIVE COMMITTEE

PRESIDENT.....Al E. Wallace	1350 Bedford Highway Bedford, N. S., B4A 1E1	0-835-9955 H-434-3711
VICE-PRESIDENT...Marcellin Chiasson	P. O. Box 69 Port Hawkesbury, N. S., B0E 2V0	0-625-0580 H-625-1811
PAST PRESIDENT...Walter C. Rayworth	73 Spring Street Amherst, N. S., B4H 1S6	0-667-2017
SECRETARY....***George E. Streb	5524 Heatherwood Crt., Apt. 502 Halifax, N. S., B3K 5N7	0-423-2058 H-455-1942

COUNCILLORS

ZONE 1..... *Erwin R. Turner	R. R. #2 Bridgewater, N. S., B4V 2W1	0-543-8202 H-543-8529
ZONE 2.....**John Kaulback	R. R. #1 Kentville, N. S., B4N 3V7	0-584-2226 H-678-8442
ZONE 3.....**Donald L. Parker	Box 2, R. R. #1 Brookfield, N. S., B0N 1C0	0-424-8561 H-895-6101
ZONE 4..... *William A. Thompson	P. O. Box 300 Westville, N. S., B0K 2A0	0-752-1331 H-396-5000
ZONE 5..... *John W. Ross	553 Coxheath Road Cape Breton, N. S., B1R 1S1	0-539-3824
**James W. P. Grant	Site 11, Box 72, R. R. #3 Sydney, N. S., B1P 6G5	0-562-1130 H-562-3856
ZONE 6..... *Cyril B. Carlin	3 Donview Drive Dartmouth, N. S., B2W 4C7	0-424-4021 H-435-4470
*Frank Longstaff	24 Rosedale Drive Dartmouth, N. S., B3A 1L8	0-466-2176 H-466-3226
**Michael J. Crant	Site 20, Comp. 54, R. R. #3 Armdale, N. S., B3L 4J3	0-466-2176 H-826-7374
**Allison B. Grant	13 Wallingham Street Dartmouth, N. S., B3A 2G8	H-469-7661

APPOINTEE OF MINISTER OF DEPARTMENT OF LANDS AND FORESTS

COUNCILLOR AT LARGE.....R. M. Smith	4 Smith Street Springhill, N. S., B0M 1X0	H-597-3138
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* Term ends November 1980
** Term ends November 1981
*** Not a Member of Council

The NOVA SCOTIAN SURVEYOR

Published four times a year by

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS INCORPORATED

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* * * * *

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** C O N T E N T S **

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

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** THE PRESIDENT'S PAGE **

As indicated at our 1979 Annual Meeting it is my intention to report to you, through the Nova Scotian Surveyor, my activities as your President and my views on important matters and also the major items considered by Council.

Priority items for the year include the reinstatement of our regulation dealing with the qualifications of a Nova Scotia Land Surveyor (NSLS) and the preparation of a new code of ethics for Nova Scotia Land Surveyors.

REINSTATEMENT OF OUR REGULATIONS

Prior to our Annual Meeting your Executive had requested a meeting with the Policy Board of our provincial government, the object being to urge them to remove our regulations from the back burner or shelf, and either reinstate them or let us know what amendments were required in order to satisfy all concerned parties. We have now received a reply from our Premier, who is the Chairman of the Policy Board and, Mr. Buchanan has advised that, before meeting with the Policy Board, we should meet with officials of the Nova Scotia Land Survey Institute (NSLSI) to see if mutually satisfactory arrangements can be concluded.

On November 14th I met with Jim Doig, Principal of the NSLSI, and together we arranged for a meeting of representatives of the NSLSI, representatives of the Atlantic Board of Examiners and representatives of our Association. The meeting was held on November 26th and, I believe, it was both fruitful and productive. Further liaison and meetings of these bodies will, we hope, cause a coming-together of minds on this very important topic and, we will then get on with our presentation to the Policy Board and the Cabinet.

CODE OF ETHICS

Since 1976 a committee of the Canadian Council of Land Surveyors has been in existence to study, investigate, report on and recommend a code of ethics. The committee's work was completed in 1979 when a proposed code was approved by CCLS as a national guide to provincial associations. Although the code is not binding on provincial members, it includes provisions taken from existing provincial codes of ethics as well as the FIG code of ethics and, for this reason, your Council has agreed to use it as a model and basis for discussion in the preparation of our own code.

You may wish to note Section 10 of our Act which reads:

10 (1) *The Council shall prepare and publish from time to time, a code of ethics containing standards of conduct designed for the protection of the public, which standards members of the Association must subscribe to and follow in the practice of professional land surveying.*

(2) *Copies of the code of ethics shall be sent to the members of the Association and shall be available free of charge to members of the public who apply therefor.*

And the importance of subscribing to the code is obvious from Section 2 of our regulations which reads:

2 *For the purpose of the Act and the regulations, "professional misconduct" means infamous, disgraceful or improper conduct unbecoming that of a professional Nova Scotia Land Surveyor, and without restricting the generality of the foregoing includes:*

(c) *a breach of the code of ethics prepared and published by the Council, or a breach of the Act, the regulations, or the by-laws.*

To date Council has only briefly viewed the proposed CCLS code and most members liked it, however, because of its importance, it was agreed that the proposed code will be discussed in detail at Zone meetings and, therefore, it will be mailed to each member with the notice of his next Zone meeting.

I urge all members to study the code and attend your Zone meeting bringing, in writing to your Councillor, your comments and suggestions so that they may be considered by Council in preparing the final code for publication.

ACTIVITIES OF COUNCIL

1980 Annual Meeting

Council has approved the time and place for our 1980 Annual Meeting which will be held in Halifax at the Chateau Halifax on the 14th and 15th of November 1980.

Planning Act Review Committee

Council has approved the brief prepared by our Planning Act Review Committee, for presentation to the provincial Planning Act Review Committee (PARC). The brief will be presented to the provincial committee on January 31st at a special meeting in Halifax. Council extends its thanks to Gary Glenn and his committee for a job well done.

Life Membership

It has been suggested to Council that a policy statement is required with regard to the granting of life membership. If you have opinions on this subject, again raise your concerns with your Councillor in order that they may be forwarded to Council.

Moonlighting

This topic was discussed to some length at our recent Council meeting. A few Councillors are of the opinion that moonlighters are taking unfair advantage of self-employed members in full-time private practice and, that the public's best interest was not being served. Certainly, all Nova Scotia land surveyors are licensed to serve the public and, there are no restrictions on when the work is to be performed; however, as stated under Section 4 of our Act, our main concern as an Association is to ensure that the public interest is served and protected. I have asked the Councillors to have this matter discussed at Zone meetings, possibly in conjunction with the code of ethics and, if there are situations which the majority feel need improving, if not covered by our code of ethics, perhaps a by-law or other steps can be taken to regulate the practice of professional land surveying in this respect.

Moonlighting and moonlighters have been discussed for decades and, there definitely are two sides and opposing opinions on this subject; therefore, regardless of which side of the fence you are on, get out to your Zone meetings and discuss the subject.

It is interesting to note that one of the topics to be discussed at the Annual Meeting of the Association of Ontario Land Surveyors is "moonlighting". Their meeting will be held during February and so I may have something to report on this subject in the next edition.

THE PRESIDENT'S TRAVELS

On Friday, November 23rd, I attended on your behalf, the annual meeting of the Association of P.E.I. Land Surveyors -- some of the interesting notes from that meeting are:

a) A minimum fee schedule was approved by the membership which will be submitted to the provincial cabinet for approval;

b) The annual fees were increased fifty per cent from \$100.00 to \$150.00;

c) On the question of one-lot subdivisions, which do not now require a survey in P.E.I., I was informed that this law has not greatly affected the volume of survey work required because the banks and mortgage companies are requiring a survey and, therefore, sooner or later a survey is done. The public, however, is being misguided because a survey made after a deed has been written without a survey is bound to cost more. Secondly, although one can buy a piece of land in P.E.I. without a survey, one might not be able to get a permit to build on it and consequently might be left with a useless parcel of land.

On December 1st I attended a meeting of our Division Directors in Truro and, I would like to assure you that our Vice President and the Division Directors have the committees organized for 1980 and are doing a fine job.

Happy New Year to all.

A. E. Wallace, President

* * *

DEPARTMENT OF SURVEYING ENGINEERING UNIVERSITY OF NEW BRUNSWICK

**Bachelor of Science in Engineering
Master of Science in Engineering
Master of Engineering
Doctor of Philosophy**

Further information from

**Chairman
Department of Surveying Engineering
University of New Brunswick**

Fredericton, N.B.

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

29TH ANNUAL MEETING

CHATEAU HALIFAX, HALIFAX, N. S.

NOVEMBER 1, 2, 3, 1979

OFFICIAL OPENING

President Rayworth introduced the Hon. George Henley, Minister of the Department of Lands and Forests, who extended greetings and best wishes for a successful meeting on behalf of the Department of Lands and Forests and the Government of Nova Scotia.

He said that the Department has always been associated with the progress and perfection of land surveying and in fact for many years was responsible for the administration of the Land Surveyors Act. Under the present legislation the Minister of Lands and Forests is represented on the Council of the Association and on the Board of Examiners. As the largest land owner in the province, the Department is also the largest employer of land surveyors, and therefore, the Department is keenly interested in the activities of the Association.

One of the concerns, said the Minister, is the high cost of surveying. This is a special concern in rural areas where in many cases the cost of survey exceeds the value of the land. The Department is able to provide assistance in this regard to woodlot owners under the Private Land Program of the Forestry Subsidiary Agreement between the province and the government of Canada. Government assists in the cost of surveying and of maintaining boundary lines, and reimburses the land owner for 60% of the cost of surveying up to a maximum of \$750 per mile. This program has proven to be quite satisfactory and very popular.

The Council of Maritime Premiers, he said, has decided to continue with the L.R.I.S. program to complete the coordinate survey and mapping program that was started by the Department in 1968. This will no doubt result in a better standard of survey and in time will eliminate uncertainties that now exist in property boundaries and descriptions.

* * *

President Rayworth introduced His Worship, Mayor Edmund Morris who welcomed visitors and guests to the City of Halifax.

The Mayor said that the city has completed a full official municipal development plan, together with an associated zoning by-law for the entire city. The plan has been approved by the Minister of Municipal Affairs and has the force of law. It is the basic document for the city's future development.

Indications are that the city will be embarking upon a very challenging construction program of laying natural gas trenches in every one of our streets to provide gas to every property.

INTRODUCTION OF GUESTS

Dan Bridge	- Representing British Columbia Land Surveyors Association
Norman R. Mattson	- President, Alberta Land Surveyors Association
Thomas E. Lyons	- President, Ontario Land Surveyors Association
Lea Windsor	- President, Association of Prince Edward Island Land Surveyors
Donald Elmore	- President, New Brunswick Land Surveyors Association
Eric Jerrett	- President, Association of Newfoundland Land Surveyors
Jim Dearden	- President, Canadian Council of Land Surveyors
Jack Webb	- President, Canadian Institute of Surveying
Bill Blackie	- Surveyor General and Director of Legal Surveys
Eric Topple	- Director of Surveys for the Province of New Brunswick

Len Kincaid	- President, Association of Certified Survey Technicians and Technologists of Nova Scotia
Willis Roberts	- Executive Director of L.R.I.S.
Wallace Wyman	- President, Massachusetts Association of Land Surveyors and Civil Engineers
Ed Anderson	- Treasurer and Editor of the Massachusetts Surveyor
Lew Schofield	- Honorary Member of our Association from Massachusetts
Tim Koepke	- Representing, Canada Land Surveyors, Yukon

INTRODUCTION OF EXHIBITORS

AGAtronics Limited
 Atlantic Air Survey Ltd.
 Carl Zeiss Canada Ltd.
 Hewlett Packard Canada Ltd.
 Kern Instruments Canada Ltd.
 Keuffel & Esser Co.
 Norman Wade Company Limited
 Tellurometer Canada Limited
 Westward Industries Limited

STANDING OF MEMBERS - George E. Streb, Secretary

As of September 30, 1979 there were 398 members on the roll in the following categories:

Regular-----	305
Non Practicing-----	17
Student-----	47
Life-----	17
Honorary-----	7
Associate-----	4
Retired-----	1
TOTAL	<u>398</u>

A one-minute silence was observed for the three Nova Scotia Land Surveyors who had passed away during the year: - John Douglas Campbell, Hoyes A. Cameron and Henry L. Langley.

MINUTES OF LAST ANNUAL MEETING

Approval of the minutes of the 28th Annual Meeting, as distributed in the January issue of the Nova Scotian Surveyor, was moved by John MacInnis and seconded by Art Chisholm. Motion carried.

COUNCIL AND EXECUTIVE REPORTS - W. C. Rayworth

Council met five times during the year. The meetings were well attended and every Zone was represented at all meetings.

The Executive held six scheduled meetings and, in addition, as a group met with members of the provincial cabinet on different occasions. Some of the more important matters dealt with were as follows:

1) The need to support the L.R.I.S. program following the federal government cutback. Letters were sent to Mr. Pierre Trudeau, Mr. Joe Clark, Mr. Elmer MacKay and Mr. Allan MacEachen of the federal government, and to the Premier, the Attorney General and the Minister of Lands and Forests in the provincial government.

2) The reinstatement of the regulations which were rescinded by the government last winter. The Executive met with the interested cabinet ministers and as

a result the regulations, minus the education package, were reinstated almost immediately. We have since had meetings with the various cabinet ministers involved and feel that we made some definite progress towards the reinstatement of the education regulations. These cabinet ministers have passed on their findings to Premier Buchanan's Policy Board, however, no decision or action has been taken by that Board. At present we are waiting for a reply to a request made by our attorney on our behalf to have a meeting with the Premier and the Policy Board in order to expedite a decision.

3) Investigation of a charge made against one of our members by the Association of Professional Engineers of Nova Scotia of performing engineering work contrary to their Act. The Executive investigated this matter, felt the charge unjustified and established a steering committee, chaired by the Vice President, for the defence of that Nova Scotia Land Surveyor. APENS dropped the charge before going to court and our Liaison Committee has since held a meeting with their president and lawyer and members of their Law Enforcement Committee.

During the year I had the honour of representing you at the Annual Meetings of Newfoundland, Prince Edward Island, New Brunswick, Quebec, Ontario and Alberta as well as C.C.L.S. and C.I.S.

Attended banquets as an invited guest at the Nova Scotia Barristers' Semi-Annual Meeting, the Nova Scotia Forests Products Association Annual Meeting and the APENS Annual Meeting. Also attended the Land Information Bureau of N.B., one Atlantic Board of Examiners' Meeting and the closing exercises at the Nova Scotia Land Survey Institute.

Mr. George Bates represented us at the Massachusetts Association of Land Surveyors and Civil Engineers Convention last month (October).

A very well attended workshop was held on January 13, 1979 in Halifax.

FINANCIAL REPORT - George E. Streb, Treasurer

BREAKDOWN OF BUDGETS FOR COMMITTEES OPERATING UNDER THE VICE PRESIDENT

Survey Standards-----	\$ 800
Membership-----	1,700
Biographies-----	\$ 100
Offshore Surveys-----	800
Public Relations-----	600
Professional Practice-----	200
Legislation-----	1,000
Legislation-----	\$ 500
By-laws-----	100
Regulations-----	100
E.L.R. Ctee-----	300
Special Assignments-----	300
ACSTINS-----	\$ 100
Salary Review-----	100
Metric-----	100
Communications-----	9,100
N. S. Surveyor (Income \$1,600)-----	\$ 5,000
Liaison-----	100
Continuing Education (Income \$4,000)	4,000
Zone Co-ordinator-----	100
	<u>\$13,000</u>
Less income from N. S. Surveyor and Continuing Education-----	<u>5,600</u>
Net V. P. Committee expenses-----	<u>\$ 7,400</u>

STATEMENT OF REVENUE AND EXPENSES
FISCAL YEAR ENDED 30 SEPT. 79 & BUDGET 79/80

REVENUE	ACTUAL 77/78	ACTUAL 78/79	NET BUDGET 79/80
Membership Fees-----	\$48,335	\$35,958.81	\$49,000
The Nova Scotian Surveyor-----	1,816	1,600.03	1,600
Board of Examiners-----	5,319	5,240.50	5,300
Interest Income-----	2,336	3,095.65	4,000
Miscellaneous-----	161	345.07	300
Discipline Committee-----	-	150.00	200
Convention-----	687	-	-
Certificates of Authorization-----	260	105.00	100
Continuing Education-----	6,533	3,899.70	4,000
Sale of 'Case Reports'	133	1,519.05	300
	<u>\$65,581</u>	<u>\$51,913.81</u>	<u>\$64,800</u>
EXPENSES			
Executive Expenses-----	\$ 3,605	\$ 4,138.60	\$ 4,500
Discipline Committee-----	1,278	203.16	1,500
Board of Examiners-----	4,060	3,745.60	4,000
Complaints-----	44	16.19	300
Council Meetings-----	1,020	1,186.04	1,500
Zone Meetings-----	115	361.03	500
Annual Meetings-----	1,223	368.51	2,000
Office Assistant-----	6,901	8,631.45	9,500
C.P.P. & U.I.C.-----	519	303.58	300
Workmen's Compensation-----	-	81.29	100
Secretary's Salary-----	10,782	16,000.00	17,600
Postage-----	-	1,129.32	1,500
Office Equipment & Maint.-----	7,343	2,024.50	1,000
Office Supplies-----	2,496	2,518.00	3,000
Office Rent & Taxes-----	3,539	3,821.71	4,000
Printing of Roll-----	585	575.06	600
Steno Services-----	479	643.50	1,500
Audit-----	16	225.00	400
Telephone-----	-	958.48	1,000
Grants-----	2,701	2,459.64	2,600
Miscellaneous-----	353	696.03	1,000
Election Expenses-----	-	354.64	400
Public Relations-----	-	107.20	-
Professional Practice-----	-	145.05	-
Legal Fees-----	-	486.91	3,000
The Nova Scotian Surveyor-----	3,368	4,340.77	5,000
Liaison-----	180	59.37	100
Continuing Education-----	5,336	3,598.06	4,000
Statutes, Reg. & By-laws-----	1,748	1,788.60	-
Survey Standards Committee-----	-	-	800
Membership Committees-----	-	-	1,700
Legislation Committees-----	-	-	1,000
Special Assignments Committees-----	-	-	300
Zone Coordinator's Committee-----	-	-	100
Atlantic Board-----	-	325.50	300
Other (principally Case Reports)	2,907	-	-
	<u>\$60,848</u>	<u>\$61,292.79</u>	<u>\$75,100</u>
Net: Increase in reserve-----	4,733	-	-
Net: Reduction in reserve-----	-	9,378.98	10,300
	<u>\$65,581</u>	<u>\$51,913.81</u>	<u>\$64,800</u>

STATEMENT OF FINANCIAL POSITION
AS AT 30 SEPTEMBER 1979

<u>ASSETS</u>	<u>1978</u>	<u>1979</u>
Cash in Bank (Current Account)-----	\$ 2,543	\$ 1,004.16
Cash in Bank (Bonus Savings Account)-----	10,293	392.61
Petty Cash-----	2	25.00
Working Fund Advance (1979 Convention)-----	500	500.00
Accrued Interest Receivable-----	468	1,275.62
Debentures (Nova Scotia Savings & Loan)-----	3,056	3,056.21
Term Deposits (Nova Scotia Savings & Loan)-----	21,729	18,255.30
	<u>\$38,591</u>	<u>\$24,508.90</u>
 <u>LIABILITIES AND NET WORTH</u>		
Accounts Payable-----	\$ 4,916	\$ 641.06
Prepaid Fees-----	-	120.00
Contingency Reserve-----	16,629	16,629.66
Working Reserve-----	17,046	7,118.18
	<u>\$38,591</u>	<u>\$24,508.90</u>

October 17, 1979

T0: The President and Members of
The Association of Nova Scotia Land Surveyors

I have reviewed and examined your Secretary Treasurer's Statement of the Financial Position as at September 30, 1979, and the related Statement of Revenue and Expense for the year then ended. My examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as I considered necessary in the circumstances.

In my opinion, the accompanying Statement of the Financial Position and the Statement of Revenue and Expense, present fairly the financial position of the Association at September 30, 1979, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with the preceding year.











T. H. Cater, Accountant



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-  Automatic slope distance measurements, up to 1 km within 5 seconds and to maximum range within 10 seconds.
-  Automatic vertical height measurement.
-  Automatic tracking of horizontal or slope distance and vertical height at speeds up to 4 m/sec.
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AGA

BOARD OF EXAMINERS' REPORT - A. F. Chisholm, Chairman

Our Secretary, George Streb, has put together a collection of facts describing the activities of the Board of Examiners over the past year. I shall give you that report shortly, but before that, I want to make some general comments, taking advantage of the opportunities offered me. Perhaps some people should not be permitted behind a microphone.

Anyway, I can look back on a long succession of meetings of the Board over the total life of the Board. I recall a parade of different faces, some of which are no longer with us. I recall a meeting of the late Jim Church, Don Eldridge (now Deputy Minister) and myself when the initial draft of the original regulations was made, and a lot of those paragraphs are still on the books.

One can easily stand aside, look back and say 'I remember' and 'I wish it were still that way'. I indulge myself in such reverie by-times, but I'd rather take the attitude we are living today -- yesterday's mistakes are behind us, tomorrow never comes.

About your Board, let's set the scene, describe the actors. APENS' appointee Tom Swanson; Barrister Society's Bruce Gillis; Roy Dunbrack, Keith AuCoin, John MacInnis; one and only President Rayworth, myself, make up the members, and George Streb is Secretary.

In past years I've used various adjectives to describe the contributions of the Board members. It becomes very difficult each year to think up new words, so I'll just say that this year we have acted and reacted together transacting much business in what appears to have been an efficient, useful fashion. But I must say a special word about George Streb. When he was President, I went to some pains to needle him, but I did believe he was a credit to the Association. Now that he is Secretary, I take this opportunity to express my personal gratitude for his presence, his thoroughness, his thoughtfulness and for his very real and genuine concern for the candidates, and for the Board members, for his humour and patience. May he live and serve forever!

In the past I've expressed my views on different topics and sometimes been sorry I spoke out for I was challenged to do something to remedy the situation.

This time I'll say first I have no solution. My concern is about communication and the problem of ensuring understanding of the spoken or written word. It is a problem not at all peculiar to this Association, its members, their businesses, clients, suppliers, their homes, offices.

Just think how many times you have made some statement and later realized the other person 'heard' what he thought you said or what he wanted you to say and didn't hear or understand what you did say. Then there is the person who has something worthwhile to say and does say or write it but perhaps never realizes most people he has tried to reach and influence have been so turned off or distracted by a poor presentation they literally or figuratively turned the page. I know I recently turned the page from an article written by a leading doctor here in Halifax. I felt a bit ashamed of myself because the subject matter I left was good, something I sort of thought I should know about, but his presentation was just terrible.

Another person told me how he turned off his TV the other night after listening to some of the parliamentary proceedings, but only because the speaker was so deadly dull.

I'm not suggesting we are all a potential David Suzuki or a Billy Graham, both of whom are highly skilled at reaching into a topic, going right to the point, illustrating that point, making it interesting and encouraging us to remember what was presented -- they possess skills I wish I had, wish I could impart to you. So how to improve our presentations, our everyday discussions and conversations? As I said before, I have no ready answers -- there are no easy tricks, but do be sure you aren't

in a trap such as happened to the person who asked three others to a meeting saying it would be 10 to 4 on next Thursday, meaning a six-hour session. You can guess what happened, one came at 3:50 p.m.!

Say what you mean to say, containing only one meaning; ensure your comment, statement or writing is in response to the question asked or is pertinent to the subject. Don't be like the chap who when asked if he had a match gave out with a history of the Eddy Match Company.

When I began I said Secretary Streb had put together the facts concerning our 1979 activities. You know, when he gave me the facts, that is all he gave me. Usually one prepares a skeleton and hangs some meat on it. He just prepared the skeleton; here are his facts:

BOARD OF EXAMINERS - STATISTICS

FOR THE PERIOD 1 NOV. '78 TO 31 OCT. '79

The Board held seven meetings during the year.

Students qualified as N.S.L.S.	- 7
Articles commenced	- 39
Articles completed	- 13
Technical papers submitted	- 17

Examinations:

	<u>Candidates</u>	<u>Exams Written</u>	<u>Exams Passed</u>	<u>% Passed</u>
Intermediate	49	156	138	88%
Finals Part I	61	143	123	86%
Finals Part II	23	36	29	80%
Totals	133	335	290	86%

GUEST SPEAKER - Mr. W. V. Blackie, Surveyor General of Canada

Mr. Jim Chisholm introduced Mr. Blackie who gave an interesting report concerning the qualifications needed for commissioning as a Canada Land Surveyor. He explained that the standards have been raised and have been broadened to enable C.L.S.'s to deal competently with offshore surveys; also he said that now all Maritime Provinces are likely to have control over their offshore resources as for Newfoundland. Provincial Land Surveyors soon may be permitted to do offshore surveys and therefore we should consider what action we soon must take to ensure that our surveyors will be competent to do such work. For the full text of Mr. Blackie's talk see Annex 'A' on page 42.

SCRUTINEERS' REPORT - F. C. Hutchinson

No elections were required in Zones 1 and 4 as Councillors in these Zones are just beginning the second year of their two-year term.

The following persons were elected to Council for the term beginning November 1979:

President - Alfred (Al) E. Wallace
 Vice President - Marcellin Chiasson
 Councillor Zone 2 - John Kaulback
 Zone 3 - Donald Parker
 Zone 5 - James Grant
 Zone 6 - Michael Crant
 Zone 6 - Allison Grant

Number of returns in:

Zone 0 - 6 out of 30 for a 20% return
 Zone 1 - 12 out of 38 for a 32% return
 Zone 2 - 16 out of 39 for a 41% return
 Zone 3 - 18 out of 34 for a 53% return
 Zone 4 - 16 out of 32 for a 50% return
 Zone 5 - 19 out of 37 for a 51% return
 Zone 6 - 56 out of 117 for a 48% return.

Total number of returns:

143 out of 327 for a 44% return.

Respectfully submitted,

Fred Hutchinson
 Walter Jackson
 John MacInnis

NSLSI REPORT - W. E. Chambers

Mr. W. E. Chambers gave the annual report on the Nova Scotia Land Survey Institute. He said that enrolments and graduations for the year were as follows:

<u>COURSES</u>	<u>ENROLLED SEPT. 78</u>	<u>GRADUATED MAY 79</u>
Land Survey Certificate	31	29
Photogrammetry Certificate	6	2
Land Survey Diploma	28	27
Photogrammetry Diploma	1	1
Survey Assistant	12	12
Property Mapping	14	10

The full report is Annex 'B' as found on page 45.

COMPLAINTS COMMITTEE REPORT - Stuart W. E. Cameron

The other members of the Complaints Committee are Gary Glenn, John MacInnis, and David Crooker. At this time I would like to thank them for their cooperation and contributions to this committee over the past year.

During the year the Complaints Committee held six meetings and dealt with nineteen complaints; fifteen of the complaints have been resolved and the remaining four are presently under investigation.

The complaints received fall into three categories:

- 1) 13 complaints regarding incorrect positioning of boundaries,
- 2) 5 complaints regarding overcharging for services,
- 3) 1 complaint regarding a plan of survey not meeting the requirements of the regulations of the Association.

DISCIPLINE COMMITTEE - Arthur A. White

The Discipline Committee is comprised of six members: - Errol Hebb, John Covert, Wayne Hardy, Keith AuCoin (Secretary), Doug MacDonald (Vice Chairman), and myself, serving as Chairman.

Two meetings were held during the past year, one on February 1 and the other on March 1.

Action by our Committee was required in the matter of two cases, both cases having been received as on-going matters from the files of the previous Discipline Committee. In each case the matter was brought to a satisfactory conclusion.

At the time of writing this report, the Committee has not received any further request for a hearing.

LRIS COORDINATE CONTROL DATA - Mr. Charles Chamberlain, LRIS

Mr. Charlie Chamberlain spoke on the re-definition of the Maritime Provinces secondary control network, changes that have occurred in the system and where surveyors can obtain information to use it. See summary as Annex 'C' on page 46.

ZONE REPORTS

Zone 1 - Erwin Turner

Two meetings were held this past year, one in Liverpool in April and a combined meeting of Zone 1 and Zone 2 in Lawrencetown in September. These meetings had a 40% turnout of the members.

The progress and concerns of Council were reported at these meetings.

Some topics discussed at the first meeting were the "bushing out" of lines by unqualified individuals who were being paid to do so by the government under the G.D.A. program; the new regulations; the Planning Act Review Committee and the progress being made with liability insurance.

The combined Zone meeting of September selected two names for Zone 2 Councillors, Jack Kaulback and Arthur Bent. Further discussion arose on the Planning Act Review Committee and a schedule of their meeting dates was presented. Phil Milo discussed the Education Regulations and their present status.

Other topics discussed at the combined meeting was the Survey Standards Committee and their proposed method of plan checking. The plot plans prepared for mortgage certification are finding their way to registry offices and are being filed and sometimes being used as boundary surveys. A notation of "not a boundary survey", or the like may solve some of this problem.

Zone 2 - Phil Milo

Two meetings were held in Zone 2 - one in March and one in September. At the March meeting, Development Officers from Annapolis and Kings Counties, Mr. Terry Crowe and Mr. Alan Merrit were invited guests. It proved to be a very useful meeting as members present were not only brought up to date as to planning regulations in the towns and counties, but both Mr. Crowe and Mr. Merrit brought out points of concern to both planners and surveyors. Discussion of this matter and the new Survey Regulations took up the remainder of the evening.

The September meeting was a joint meeting of Zones 1 and 2. Joint Zone meetings seem to be successful, and in Zones 1 and 2 we are trying to have at least one joint meeting per year.

The Survey Standards Committee was a topic of discussion. There seems to be considerable concern as to the actual methods to be used in checking survey plans. I understand that in at least one registry district a member of a firm practising in the area has already checked some plans.

Nominations of candidates for Councillor for Zone 2 were made and subsequently submitted.

As usual, a fair amount of the evening was taken up by more discussion of such matters as highway monumentation, blazing, Planning Act, Atlantic Board Syllabus and plot plans.

I wish to thank the members of Zone 2 for giving me the opportunity to serve on Council for the last two years and to wish the new Council all success in their endeavours.

Zone 3 - David L. Crooker

Three meetings were held by Zone 3 during the year. The first meeting was held in Oxford on March 20, 1979, with 9 members, 2 students and the Development Officer for Cumberland County present.

Subdivision plans and by-laws and other items of mutual interest were discussed.

The second Zone meeting was held in Truro on May 15, 1979, with 9 members, 1 student and the Development Officer for Colchester present. There was a good discussion on subdivision planning and plans as well as the 20% change-of-use tax; also discussed at some length were the new regulations.

The third meeting was held in Oxford on October 2, 1979, with 6 members and 1 student present. The Survey Standards Committee was discussed at length; also discussed were some good-practice resolutions and the Association of Metropolitan Land Surveying Consultants.

One disappointing fact at these meetings was the poor turn-out by members from East Hants. If these members have any suggestions for Zone meetings please convey them to your new Councillor.

Your Councillor also attended numerous Council and Committee meetings.

Zone 4 - William A. Thompson

As Councillor for Zone 4, I have attended four Council meetings in Halifax and one workshop for the Association held in Halifax in January, and I chaired three Zone meetings in the New Glasgow area.

At the Zone meetings we had an average attendance of 11 out of 33 members or 33%. Zone 4 represents 9% of our membership.

At our March meeting, the main topic was the new regulations. Mr. Van MacLeod, Development Officer for Pictou County, attended our August meeting to discuss the Planning Act, and also we reviewed the redefined data distributed by L.R.I.S. Several points arising from this meeting concerning the Planning Act were sent to Gary Glenn.

In October, a special meeting was called to discuss the Survey Standards Committee By-law at which the By-law was accepted 100%.

As the Zone 4 Councillor represents the Zone for a two year period, it is planned that we have the second year meetings, if feasible, in the Antigonish area.

During 78/79, the only expense to the Association for Zone 4 was the cost of notice mailouts; these were handled by the Secretary of the Association.

Zone 5 - Rod MacInnis

Three meetings were held during the year: January 11 at St. Peter's with 13 in attendance; May 3 at Port Hawkesbury with 12 in attendance; September 6 at Sydney with 13 in attendance. Forty-one per cent average attendance.

A lawyer from a Port Hawkesbury firm was present at our May 3 meeting. He covered many common points of interest between land surveyors and lawyers.

A planning officer from the Cape Breton Metro Planning Commission was present at our September 6 meeting to inform our members what the Commission are trying to achieve with their new regulations (made under the Planning Act). Many ambiguous sections of the regulations were discussed and clarified.

It seemed that the membership in Zone 5 respond best to the question-and-answer type meeting with a guest speaker present.

I would like to thank John Ross, my Co-councillor, as well as the members in Zone 5 for their support during the year 1979 and to extend good luck to the new Council.

Zone 6 - Bob Daniels

There were three meetings held in Zone 6 since the 1978 Annual Convention. They were held on February 20, March 28 and October 10, with approximately 25 members in attendance at each meeting.

The February 20 meeting was aimed at informing the members of Zone 6 on Association activities. The topics were: - 1) Zone Co-ordinator, 2) Continuing Education, 3) Survey Standards Committee and the Association of Metropolitan Land Surveying Consultants.

The March 27 meeting was devoted entirely to the new Survey Regulations. There were several members of the original Regulations Committee and the Technical Editing Committee in attendance and many points of interpretation and questions were discussed.

At the last meeting held on October 10, Bill Campbell of the County of Halifax Planning Department was in attendance and discussed many questions with our members. (I hope to have the text of the discussion published in the Nova Scotian Surveyor.)

Other items on the agenda included presentations by: - 1) The Planning Act Committee, 2) Metric Committee, 3) Survey Standards Committee, and there was a report on the status of our regulations.

Highlights of recent Council meetings were also presented at the meetings.

Plans are now underway for a Zone 6 meeting to be held on November 21, 1979, to discuss the existing Planning Act and to make suggestions to our Planning Act Committee, chaired by Gary Glenn. This is to enable a brief to be presented on behalf of our Association for the new Planning Act. Invitations to attend this meeting will be sent to all our members throughout the Province.

LEGISLATION - F. W. Roberts, Division Director

BY-LAWS COMMITTEE REPORT - Jim Gillis

This Committee is made up of Jim Doig and myself.

The Committee has had only two topics to deal with this year, the existing Section 13 dealing with retired members and the newly proposed Section 18 dealing with the Survey Standards Committee.

With regard to Section 13, as only two comments were received on the subject of changes we felt that unless Council gives us some specific direction otherwise, this Section should be left as it is. I can't see any need for changing the Section every year because someone has a different opinion on it.

On the advice of our solicitor Section 18 will be presented to the membership for their approval at this meeting. Mr. Donahoe felt that the Survey Standards Committee should have its existence and functions set down in By-law form. This particular By-law clearly will be one of our most important in years to come and therefore members should give both the By-law and the Committee their full support.

EXISTING LEGISLATION REVIEW COMMITTEE REPORT - Jim Gillis

This Committee was formed late last year as an ad hoc Committee to review the existing statutes of the Province of Nova Scotia from the point of view of land surveyors and to make comments and suggestions as to how the statutes can be improved. It is the intention that each Act which is being studied should have a subcommittee to look into it and that at the end of the year the Committee should have a report prepared dealing with their findings and suggestions. New subcommittees will be formed and old ones disbanded as time goes on.

Another aim of this Committee is to compile for the use of the members a document which will consist of those portions of the various Acts which are pertinent to surveying. I am still in the process of acquiring these Acts and expect that I should have most of them by the end of this year.

The five existing subcommittees that we have in force right now are: Planning Act - Gary Glenn & Frank Longstaff; Registry Act - Marcellin Chiasson; Public Highways Act - Robert Redden; Mineral Resources Act - Kirk Nutter & Garnet Clarke; Mechanics' Lien Act - Forbes Thompson.

REGULATIONS INTERPRETATION COMMITTEE REPORT - John C. MacInnis

(The other members of this Committee are D. K. MacDonald and A. White.)

The Interpretation Committee has responded to 40 inquiries re the new regulations, the Sections of concern being: 10, 11(a), 15(1) & (3), 23, 41(a), 42, 43, 47, 48, 54, 59, 61, 62, 64(c), 66(1), 67(d) and 74. A list of the questions and replies appears as Annex 'D' on page 49.

If anyone should have a copy of Regulations Interpretation Committee Report #1, please note that the numbers refer to the first approved copy of the regulations; thirteen must be subtracted from these section numbers to coincide with the regulations approved later on March 28, 1979.

From the nature and numbers of questions pertaining to the regulations, it would appear that the Regulations Committee should draft changes and amendments to the regulations and should prepare a "Guide to Good Practice" to help members with some of the situations that are difficult to cover precisely with regulations.

INTERIM REPORT - DEFERRED MONUMENTATION - Douglas K. MacDonald

"The survey plan is presently the vehicle used to document the nature of boundary marks and their relationship to each other. While this is suited for administrative purposes and as an illustration of the shape of a land unit, it is of little use to the owner unless there are marks on the land itself that relate it to the document. While some societies have been satisfied with general demarcations such as fences, hedge rows, walls, etc., others have insisted on the more definite survey marker. All realize that without permanency these marks are useless."

"As the price of land and the cost of installation of services has increased significantly over the last 25 years, the demand for affordable housing has resulted

in diminishing sizes for building lots. The builder has responded with mass production and the use of time and cost-saving machinery. In order to utilize topographically less-suited lands, area grading is being used more extensively than before."

"All these developments have the effect that very few survey markers planted in the first instance are left undisturbed or even in place once the development process is completed, and the new home owners appear on the scene."

"Past experience has shown that under the present requirements approximately an additional 50% of the basic cost of a subdivision is now expended on duplication of effort, i.e. replacing lost survey markers. Nevertheless, only a very small percentage of new property owners enjoy the pleasure of finding their property corners. Moreover the technical quality of the survey fabric that remains is of a very low order, very often not in accordance with the technical ability of the profession."

"In order to re-establish the survey fabric, a surveyor is presently obliged to heavily rely on building ties and secondary marks that were obtained and established by other survey firms during the latter stages of house construction..... Even after being made to fit by using the rule of "best available evidence" the entire subdivision fabric, although once accurate, is contorted and bears no accurate relationship to the measurements on the subdivision plan."

"Unfortunately, the needs of the development community demand that legal land division, and registration of the subdivision occur early in the process of physical development. These needs are governed not only by financial considerations, but also by the requirements of various approving authorities and by commonly accepted development practices. Since the survey component of the development process, although important, constitutes only a very small portion of its cost, it is only natural that it should be modified to conform to the other considerations. It is imperative to the vitality of our profession that we take action in this regard soon."

"A new procedure that departs substantially from established practices must be optional rather than compulsory, at least until such time when it has proven its value in actual use for a number of years. It must be realized that while a deferred monumentation procedure is urgently needed in densely developed areas, it probably will never be required in areas of less intense development."

"It is neither practical nor desirable to install direct monumentation prior to registration in the early stage of development, but this should be done at the time when development is completed and new property owners move in."

"While a new procedure must provide the public with a service that is equal to or better than it now receives, the cost must not be more than it is now. There should also be a financial incentive for developers and surveyors to take advantage of this option."

The above remarks are selected excerpts quoted from the report on deferred monumentation prepared by the Deferred Monumentation Committee of the Association of Ontario Land Surveyors under the Chairmanship of Mr. Guenter Bellach, O.L.S. The Association of Ontario Land Surveyors' Executive Secretary has kindly supplied me with a complete copy of this report which is available at the Association Office. My indebtedness to their Association for providing same is hereby acknowledged. I would also mention at this time that Mr. Guenter Bellach kindly gave of his time to discuss the entire matter with me at some length during the past C.I.S. Convention in Toronto.

It is to be hoped that such extensive use of quotations from another's work will be properly seen as concurrence with his thoughts and not as lethargy on the part of your Committee Chairman. In fact, I have opened my report with these remarks to point out that other jurisdictions across Canada share our concern as to the best method of insuring adequate, accurate and permanent monumentation of our legal surveys. It is with this goal in mind that your Deferred Monumentation Committee has studied the current procedures and contemplated methods whereby they might be approved.

You will recall that at our last annual meeting during a discussion on the monumentation regulations two motions were put forward to give interim relief from the onerous aspect of these regulations.

It was moved and seconded that Section 34(1) read as follows: "Every exterior angle or corner of the perimeter boundaries of the area being subdivided shall be defined in the survey by either a survey marker or a rock post". This motion was defeated by a vote of 6 for, 16 contrary and 4 abstentions.

It was then moved and seconded that "these regulations be approved as amended at various meetings, subject to the provisions re - monumentation, to enable deferred monumentation to be drafted and approved by the membership or whatever Council deems advisable". This motion was defeated by a vote of 11 for, 13 contrary and 2 abstentions.

It is quite possible that these motions were defeated because they were seen by many to be an attempt to circumvent the requirement for complete monumentation of subdivisions. We now know that it was the intention of the movers that complete monumentation of the entire subdivision would occur following completion of construction activities. Presumably, however, since the motions did not go on to detail the mechanics by which this subsequent monumentation would be effected, the membership was hesitant to entertain them as presented.

Following the annual meeting the Council of the Association requested me to act as Chairman of a Deferred Monumentation Committee to more fully explore this whole area. Since I anticipated that at least in the early stages the Committee's work would principally involve data gathering and discussions with various interested parties and/or agencies, I have operated as a Committee of one to date.

During the ensuing months your Committee Chairman has:

- 1) Obtained and studied the above mentioned report of the Association of Ontario Land Surveyors.
- 2) Obtained and studied a brief report on the deferred monumentation regulations presently in effect in Alberta. (It is interesting to note that these regulations have been in place since March of 1976.)
- 3) Discussed the O.L.S. experience in drafting deferred monumentation regulations with Mr. Guenter Bellach, O.L.S.
- 4) Discussed the subject in broad, general terms with the Chief Surveyors for the cities of Halifax and Dartmouth, as well as principals of various metro surveying firms.
- 5) Last but not least, absorbed some caustic feedback from "Developers", as to their thoughts on our current monumentation regulations.

For two reasons, I have purposely avoided contacting any municipal planning and approving authorities to date. The first reason being that I felt we should "get our own act together" with respect to the Association's collective stance as to whether we should pursue deferred monumentation or not. The second reason being that until we could present some fairly detailed and concrete proposals to the municipal authorities, I doubted that they would be in a position to provide any meaningful input.

Based on study and analysis of the aforementioned reports and discussions, your Committee Chairman has concluded as follows:

1. There is a distinct, if limited, demand and need for deferred monumentation regulations.
2. Such regulations would be invoked principally in urban areas on high density, large scale developments.

3. The immediate cost saving to the developer in putting his development on stream would vary considerably, from project to project, but in virtually all cases should be significant enough to be attractive to him. These savings would flow principally from the following sources:
 - a) Reduced time and cost to provide the developer with a subdivision plan, suitable for seeking the necessary municipal and provincial approvals. This would be particularly true during the winter months when field work and monumentation are both time consuming and more costly due to inclement weather and adverse ground conditions.
 - b) Reduced time and cost to effect changes in subdivision plans requested by municipal and provincial authorities as a condition to their granting approval e.g. larger lot sizes; street widenings; cut-offs at street intersections; altered or additional walkways and/or sewer and drainage easements, etc.
 - c) As a result of (a) and (b), reduced carrying charges on raw land, faster response to market conditions, and the potential for negotiating preferred mortgages in these times of rapidly rising interest rates.
4. Monumentation occurring after road construction, the installation of services and utilities, and after area grading would result in leaving the ultimate lot owners with a homogeneous system of lot monumentation of the highest possible accuracy and in register with the mathematical model portrayed on the original subdivision plan.
5. Detailed, binding and bonded subdivision agreements would be required to be entered into between the developer and the appropriate authority to ensure compliance with all aspects of the deferred monumentation regulations. This is not to suggest that the majority of developers would be remiss in their obligations, but the agreements would simply provide protection to the surveyor, the approving authorities and society against any misadventure.

If we are to proceed with drafting detailed deferred monumentation regulations it would appear that they should be written to lead to the following general procedures.

1. The surveyor would carry out the conventional monumented perimeter-boundary-survey of the area to be subdivided.
2. He would blanket the area to be subdivided with a control network monumented with substantial concrete monuments. These control monuments would be sited, after discussions with the developer, in areas most likely to be safe from construction activities, and would be well flagged and well referenced. There would be sufficient control monuments placed so that the distance between any unmonumented legal corner and the nearest control monument would not exceed approximately 150 metres.
3. The subdivision plan would then be prepared showing the perimeter boundary monumentation, the control monuments and a co-ordinate table listing the co-ordinate values for the above points as well as all unmonumented corners in the subdivision. The plan would bear a notation to the effect that "this plan has been prepared under Deferred Monumentation Regulations, Section.....". This would serve notice to other interested parties that monumentation will take place at a subsequent date in accordance with a subdivision agreement lodged with the appropriate authority.
4. The subdivision plan could then be signed and submitted for necessary approvals. Any alterations in the layout and design could be made, without the need of further field surveys or monumentation.
5. Having received final approvals, the developer would then proceed to carry out street construction, installation of services, area grading, etc. During the

course of his construction activities, the developer would naturally require many points to be defined on the ground. These could simply be marked with colour-coded wooden grade stakes set to an accuracy sufficient to meet his construction requirements

6. It would be a part of the subdivision agreement that any control monuments destroyed as a result of construction activities would be immediately re-established so as to maintain the requisite density of control monumentation.
7. Upon completion of the construction activities the developer's surveyor would return to the site and monument all lot corners and other points requiring monumentation.
8. A film copy of the original subdivision plan would then be enhanced with all missing monumentation symbols and information and would be annotated "all monumentation required under Section 55, Part 3 of the Regulations made pursuant to Section 8 of the Nova Scotia Land Surveyors Act has been completed as at (date).".
9. At all times during the entire process the original subdivision plan would be deemed to be the official legal plan of the subdivision, and all legal descriptions and title transfers would be based on this plan. The film copy showing monumentation would simply be a supporting technical document. Naturally, each plan would bear a suitable notation cross-referencing it with the other, to ensure that anyone dealing with either plan would be aware of the existence of its companion.

This, gentlemen, is as far as your Committee has proceeded to date. We await further instruction from Council and membership as to whether we should proceed with drafting detailed regulations and procedures for formal submission to and approval by the membership.

REPORT OF STATUTES COMMITTEE - F. W. Roberts

The Statutes Committee has two primary functions as I understand its terms of reference, and they are:-

- 1) To coordinate the development of legislation internally within the Association and promote that legislation through to Government for approval, and
- 2) To review and scrutinize any new legislation coming before the house, which may in some way affect surveyors and the surveying industry.

If one had to put a label on those two functions I suppose the first would be called "active" and the second "reactive".

It seems appropriate at this point in the Committee life that its efforts be concentrated largely toward its second function as there appears to be no immediate need to promote new legislation, but amendments to our Act and Regulations may well be required in the near future. Notwithstanding this, on a continuing basis we would still have an open file on such matters as Land Titles Legislation for example. This has been with us for several years now but the only concrete action in terms of legislation has been the passage of the Land Titles Act, which to date has not been proclaimed. There is no indication to us at the present time that we can expect an early proclamation of this Act. We all know that last year about this time the whole Land Titles program was in some jeopardy due to withdrawal of Federal funding. Currently the program is continuing on a reduced scale supported by Provincial funding only and presumably is in relatively good health again. So this item will remain open until such time as further developments bring it again into sharp focus.

As part of our watch-dog role if you like, we have perused all new bills presented to the Legislature, but have found nothing which would substantially affect surveying, either for good or bad. There is one Bill which I could mention, that is Bill 30 titled "An Act to Amend Chapter 248, R.S.N.S. 1967, the Public Highways Act".

This is a Bill which would convert all reference to weights, widths and distances from imperial units to metric units.

The legislative component of the Committee structure has been subdivided so that many new subcommittees have been created to deal specifically with the review of particular Acts. You will hear about these from other people elsewhere in this program. I would like to mention briefly the Planning Act Review Committee (PARC) set up by the Government to review all aspects of the existing Planning Act (1969).

The Association's Committee on PARC is headed up by Gary Glenn whom you will be hearing more from on this matter I'm sure, however, I would like to make perhaps a personal observation which, if nothing else, amplifies the fact that lack of support and cooperation of the membership is very disheartening to any Committee, trying to do an effective job for the Association. To get to the point, the Planning Act is I am sure you all know, the Legislative authority upon which the various subdivision regulations in effect throughout the province are based. I had come to understand, perhaps mistakenly as it turns out, from discussions with many of you that the requirements of the regulations vary greatly from one municipality to the next, and in fact create great inconvenience, maybe even hardship, to surveyors trying to provide an efficient and economic service to their clients. When, however, Gary solicited your comments on the Act, earlier this year, he received only three replies. From that, one can only assume an enormous apathy prevails amongst surveyors or that in fact there are no real problems with the Act or regulations in the first place. There may be a need to review and perhaps revise certain parts of our own Act, the Land Surveyors Act.

We have been operating with the Act for about 2 1/2 years now and it is becoming apparent that certain sections may not be as clear cut as they appeared to be initially. I am thinking particularly of the sections which deal with Corporations and their Certificates of Authorization, 19, 20 and 21. It may well be that we will have to test these sections in the Courts. Shortly after the Act was proclaimed, there had been some concern, of course, about the provisions of the section 22 respecting the liability of shareholders being joint and several. Presumably, the difficulties anticipated at that time have either been overcome or never materialized; however, if there are problems with this we would be prepared to review the particular section based on any submission you may make. I think a point to be remembered here is that we are often prone to react too quickly to changes to the status quo before giving these changes a fair trial.

As you know, the Survey Standards Regulations came into effect on March 27 of this year. As is normal with most new things, there is a period of familiarization when there is need for some official interpretive ruling. So earlier this year, Council authorized a special committee called the Regulation Interpretation Committee to handle queries dealing with problems arising from the new Survey Standards Regulations and to render an official interpretation. I believe the Committee has made several rulings (some of which I might not personally agree with) and those would form the basis for any potential revision which might subsequently be required in the Survey Standards Regulations. The interpretations given will be thoroughly reviewed and any legislative amendments developed therefrom brought back to the membership before they are advanced to the governing council.

As I mentioned earlier your Statutes Committee's "active" role has lessened from that of its earlier days and has assumed a more "reactive" stance as some of its functions are more or less "farmed-out" to the various subcommittees. The monitoring function, however, is one which is perhaps more essential today than ever before, as our society at large seems to be increasingly besieged by over-regulation. Since our lives and livelihood will continue to be influenced by an increasing amount of government intervention and regulation this Committee hopes that the Association will see fit to maintain this monitoring or surveillance.

MEMBERSHIP - John Covert, Division Director

STANDARDS COMMITTEE REPORT - Burney A. Smith

The Standards Committee was set up last January, as a vehicle to assist the Council in the implementation of the new regulations.

It was felt that we should have a committee of our own members which would attempt to do two things:

Firstly, make sure that all members, government agencies and planning officers are aware of the new regulations.

Secondly, examine plans on public record to determine if the regulations were being followed.

A Committee of eight members, representing the several areas of the province was set up at the January Workshop.

The Committee provided copies of the regulations to non-members, such as Planning Boards.

During the summer and fall the Committee compiled feedback from members, lawyers, development officers and the regional meetings.

The following points are evident from the Committee's work to date:

- 1) Most members appear to have accepted and are using the new regulations.
- 2) The Interpretation Committee was referred to on several occasions.
- 3) As the Committee had predicted, a small percentage of members are not following the regulations at all.
- 4) It is evident that some of the members have not read their regulations, but the more active surveyors/survey firms seem to be up-to-date.
- 5) The following items are the most common defects that were noticed:
 - a) inadequate title block
 - b) no certificate
 - c) wrong certificate
 - d) magnetic bearing only, and no ties as required
 - e) no indication of monuments set or found
 - f) no legend
 - g) no indication (by book and page reference) whether or not adjoiner's deed was examined
 - h) plans not to metric size
 - i) insufficient survey data.

The Committee has compiled a check list and a proposed letter to be sent to any surveyor who is deficient in his plans. These were circulated to all regional meetings.

Several points should be noted from the feedback we are receiving:

- 1) The planning boards and development officers are 100% behind us and are only limited by some existing regulations in their districts, and by budgetary and manpower constraints.
- 2) Many clients already require work to this level.
- 3) We have not been able to find any proof that survey costs would rise dramatically as feared.

- 4) The matter of developing boundaries and staking unpaved roads is a concern for the rural surveyors and should probably be reviewed.

The Committee recommends that the membership re-read the regulations, and if there is any doubt of interpretation, call the appropriate Committee Chairman.

The Committee urges each surveyor, before signing the final plan, to take a white print and go to the computer, and without any other information check to see if the survey closes and if all the necessary information is there. This is the way the client, the lawyer or another surveyor sees the plan. If any inadequacy exists, then it will be found and corrected. Only then should the plan be signed.

It is strongly recommended that each member become more involved, read the Nova Scotian Surveyor, attend the Zone and Annual Meetings and volunteer for Committee work.

Most of the non-conforming surveyors are those who do not attend the meetings, and in general do not appreciate the need for better field work and proper plans.

10:00 A.M. - SATURDAY, NOVEMBER 3, 1979

CANADIAN COUNCIL OF LAND SURVEYORS' REPORT - Ivan P. Macdonald

The Canadian Council of Land Surveyors (CCLS) has been very active during the past year and has reported its endeavours to you through its Newsletter.

Some of you are perhaps not aware that CCLS has endorsed the LRIS program, and the President accordingly wrote to the governments administering LRIS to emphasize the advantages of the Land Titles System and to point out that this system has proved its worth and is fully supported by surveyors in other provinces that have had the Land Titles System for many years.

CCLS has developed a code of ethics which has been adopted as a guideline for provincial organizations. This code was printed in the Nova Scotian Surveyor in the April edition.

CCLS strives for academic reciprocity for all Canadian provincial surveyors. Its Council recommends that the surveyor, after meeting standards "common" to all provinces, should be required to write "special" examinations on the provincial statutes and on survey law, and then to serve as a surveyor-in-training.

The Education and Reciprocity Committee, chaired by New Brunswick's Dr. John MacLaughlin, prepared two motions for the CCLS's October meeting in Charlottetown:

FIRST MOTION - To set up a national policy for reciprocity with the following elements:

a) a common technical academic requirement, b) a common surveyor-in-training program and c) a common in-training program in other jurisdictions. This motion was passed.

SECOND MOTION - The first draft for the national technical model would have the following parts in it:

a) the first three levels of the examination schedules for the CLS as outlined in the new regulations which came in effect on September 13, 1979, b) a two-year surveyor-in-training period and, c) a six months maximum in-training period for transfer from one jurisdiction to another. This motion was also passed.

A surveying engineering program has commenced at the University of Calgary, September 1979. This is another sign that indicates the desire of many to acquire a higher educational standard in surveying.

In P.E.I. the government recently announced that land owners are not required to have a one-lot survey. To prevent such an occurrence in New Brunswick the land surveyors there have presented a brief to their government explaining the importance of the one-lot survey and the high costs that eventually are bound to result if surveys are not made whenever land is divided. The P.E.I. action is not likely, I think to occur here, but there could be a movement for it and, therefore, all of us should clearly understand why, in the long term interests of the public, such legislation should not be enacted in Nova Scotia.

The l'Ordre des arpenteurs-geometres du Quebec has been requested through the provincial body on professions to routinely carry out professional inspection of the complete works of their surveyors. Before they inspect anyone, due notice and the details of the ensuing inspection are given. The results of these inspections have proven that the public will benefit even more from increased survey services.

We are about to set up formally our Survey Standards Committee which also will be inspecting the work of surveyors that is already on public record. These inspections will be carried out at Registry of Deeds offices and County offices and should not be considered as witch-hunting. When they find deficiencies in a plan they will discuss the matter with the originator of the plan with a view to having it corrected and thus ensure that future plans will be in proper order.

Tendering for government jobs has been discouraged by the Ontario Land Surveyors Association who have presented different briefs to their government on this subject.

As you know, compulsory liability insurance is under active discussion across Canada and CCLS has devoted a good deal of discussion-time to it. The Ontario land surveyors will be asked to vote on a by-law at their annual meeting in February 1980 to recommend compulsory liability insurance. Quebec already has compulsory insurance. It came about in Quebec through the professional body there which controls professions and saw fit to require all Quebec land surveyors to insure themselves. The public is thus protected when the surveyor might carry out some duty in a wrongful manner.

Manitoba reported that some of the old township fabric which dates back to 1870 - and some of that has never been re-surveyed since that time - is becoming lost. The surveyors in that province sought the support of CCLS to encourage their government to establish a restoration program. They had a study done and they found out that there has been about \$100,000,000 worth of re-surveying in this old fabric which is shared on a higher percentage by the private sector and a lower percentage by the government.

Saskatchewan has begun to republish suggested fee structures without any strings attached. It seems to work as an aid to the surveyors in all parts of that province.

Every Alberta land surveyor is listed in the telephone books of 15 districts under the Association's logo and this is the only listing in the yellow pages. The annual cost for this service is about \$2,000 for an Association which has about 30 members less than our own Association.

British Columbia has changed over from the Registry Act system to a new Land Titles System which came in effect November 1, 1979. Their Registry Act was much more comprehensive than the one that we are familiar with. B. C. land surveyors are also watching closely new Acts that the governments are bringing in and one in particular is the Planning Act. They want to ensure that the Planning Act is really a Planning Act and not a Planners' Act. They also have negotiated standard rates for all government work.

In the Yukon, Canada Land Surveyors (formerly DLS) have prepared a brief to the federal government to amend the requirement that all surveys be tied to control monuments. Their coordinate monuments are not as densely placed as ours and there are problems in some of the adjustments. The cost to tie into the coordinate control monuments is much higher than we experience here.

CCLS has concluded a semi-annual meeting of Directors just two days prior to this annual meeting, therefore, I have spoken of only recent items of information without the benefit of the official minutes. You will have a complete updating in the next CCLS Newsletter.

I want to thank our Association Council for appointing me as Director for Nova Scotia. I always will be an ambassador of our Association and will uphold the standards to the best of my ability.

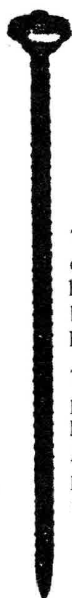
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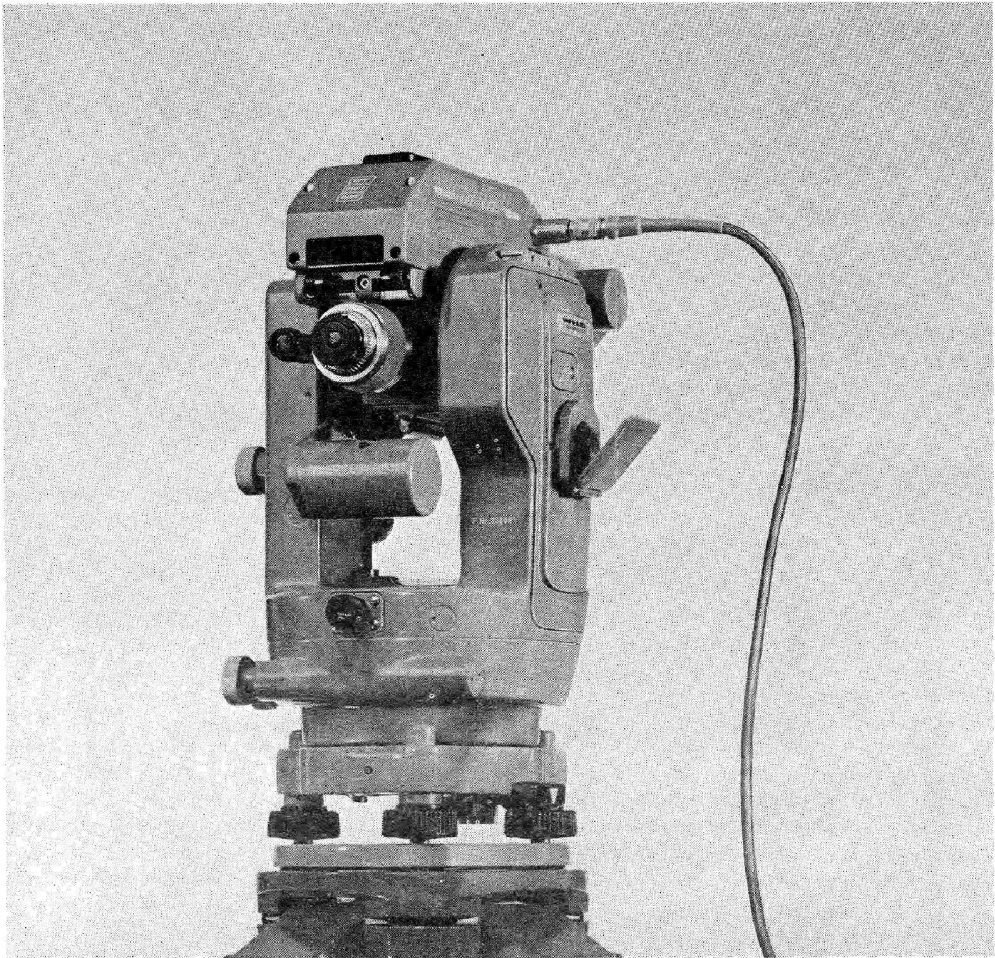
INFORMATION

DRAFTING, DESIGN, REPRODUCTION, SURVEYING, TECHNICAL
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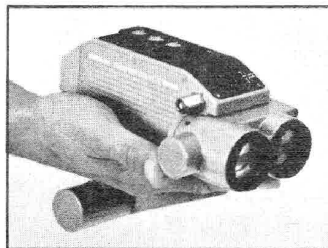
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PUBLIC RELATIONS COMMITTEE - Ron Dunn

I am very pleased to announce that after much hard work, especially by Wayne Hardy and the Committee, the Association has a new pamphlet. Ten thousand of these information pamphlets will be printed and distributed to members and the private sector to help illustrate the role and functions of the Nova Scotia Land Surveyor.

Many entries have been received for the logo contest and we ask each member to examine the logo display in the outer area and complete the form to enable us to share your views.

As I have been elected to the position of National President of the Canadian Micrographic Society, a society of seven hundred members with eight chapters across Canada, and with my other functions and job demanding more and more of my time, I regretfully submit my resignation as Chairman of the Public Relations Committee. I humbly suggest and recommend the nomination of Wayne Hardy to the position of Public Relations Chairman.

PROFESSIONAL PRACTICE COMMITTEE - J. Forbes Thompson

A study of the Mechanics' Lien Act, Chapter 178 of the revised statutes, 1967, was made to determine whether surveyors are included in the present Mechanics' Lien Act and whether surveyors will be included in the proposed Builders' Lien Act.

The Nova Scotia Law Reform Advisory Commission has revised the Mechanics' Lien Act to be called the Builders' Lien Act and has presented the revised Act to the Attorney General for Nova Scotia for consideration as a replacement for the present Mechanics' Lien Act.

The various explanations and recommendations for the above are contained in a draft having some 185 pages. It is most difficult for this Committee (Professional Practice) to comment at length on the various parts of the Act that apply to surveyors; therefore, comments will be set out in an itemized fashion.

1. Are surveyors included in the present Mechanics' Lien Act? Although the word surveyor is not in the Act, one can interpret the Act to include surveyors. A lien on land improved by the holder's work, service or materials.

2. Are surveyors included in the proposed Builders' Lien Act? Again the word surveyor is not in the proposed Act and it is also more difficult to interpret whether surveyors are included.

This Committee recommends that an interpretation of the proposed Builders' Lien Act be obtained and we feel that surveyors should be included in this Act.

OFFSHORE SURVEYING COMMITTEE REPORT - Dave Roberts

There was a meeting of the interprovincial committee on offshore surveying held during the New Brunswick Land Surveyors convention last winter. We were represented by your President, Walter Rayworth, at that meeting during which Newfoundland and Quebec withdrew from this group because of their different status with the Federal Government compared to the remaining three provinces.

There was a later meeting in Moncton attended by myself, Ed Smith from New Brunswick and Lea Windsor from P.E.I.

At this meeting the general priorities and objectives of the three Associations were discussed in depth and consolidated. It was decided that one of us would arrange to meet with Mr. Blackie, the Surveyor General, to promote our interests in the survey of lands adjacent to the respective provinces and also the position of the provincial land surveyor in qualifying as a Canada Land Surveyor.

Ed Smith met with representatives of the Surveyor General's office when he was in Ottawa on other business but was unable to meet with Mr. Blackie as he was out of town at that time.

At a later date I met with Mr. Blackie and discussed the above mentioned objectives. Mr. Blackie's talk this morning has outlined the present position on both topics extremely well and I feel any more I might say on the subject would be redundant or useless speculation.

Depending on the outcome of the Federal-Provincial agreement one will either have to obtain his CLS to perform legal offshore surveys or the provincial land surveyor will have a completely new realm open to him. However, this cannot be looked on as a gift but as a challenge which, if it is going to be met, will require extensive educational improvements in that portion of the membership who wish to offer their services in this field.

SPECIAL ASSIGNMENTS - Ed Rice, Division Director

ASSOCIATION OF CERTIFIED SURVEY TECHNICIANS AND TECHNOLOGISTS OF NOVA SCOTIA - Glen Brathwaite

The Certification Board of the A.C.S.T.T.N.S. met on five occasions during the year 1978/79. Meetings of the Board were called after some four or six applications were received by the Secretary. This was done to reduce the amount of travel time for some members of the Board.

A total of 18 applications were reviewed by the Board during this period. Following is a breakdown of the recommendations to the Council of the A.C.S.T.T.N.S.:

Non certified members	- 2 applications recommended for acceptance as members.
Technician I	- 5 applications recommended for acceptance as members.
Technician II	- 9 applications recommended for acceptance as members.
Technologists	- 2 applications recommended for acceptance as members.
Total	= 18

There were two additional applications received, one for Technician I and one for Technologist. These were both reviewed. It was decided that the applicants should be asked to present additional information.

Recommendations in this regard were presented to the Council of the A.C.S.T.T.N.S.

The past year was the first attempt by the Board to classify applications. The members of the Board found this to be challenging and at times frustrating.

In general, it was felt that the Board had a successful year. This success lies primarily in the Board's effort to overcome many obstacles that emerged only after applications were presented for processing.

MUNICIPAL METRIC LIAISON ADVISORY COMMITTEE REPORT - John C. MacInnis

As previously reported Mrs. Eileen Stubbs was appointed Provincial/Municipal Metric Co-ordinator through a contract between Thomas Communications and the Province.

The last meeting of this Municipal Metric Advisory Committee was held early

in 1979. The single most important issue which always came to light at these meetings was 'the Province will have to take the lead' and this attitude is supported by quotations found in a report of Mrs. Stubbs which included remarks from municipal officials such as - "we need a plan by the Province with effective dates for municipal conversion";

- "we need provincial leadership before municipalities can launch any plans";
- "I cannot recommend very much activity to my council that would be based on the presence of provincial government plans".

By default this Committee is now dissolved as a direct result of the contract between Thomas Communications and the Province not having been renewed in March of this year.

Any questions of, or information pertaining to metric conversion should be directed to Mrs. Eileen Stubbs, "Metric Information Officer" (Federal), c/o Thomas Communications, Suite 1118, 1505 Barrington Street, Halifax, N. S.

SALARY REVIEW COMMITTEE REPORT - Dennis A. Jones

Suggested salary scale - 1979:

Level "A"

A Nova Scotia land surveyor who makes independent decisions and conclusions on basic survey field work which are referred to a higher authority. A graduate of N.S.L.S.I. or equivalent with from 0 to 5 years' experience as a N.S.L.S. - Salary range - \$13,000 to \$15,000. Seven per cent (7%) of all returns received fell into this level.

Level "B"

Prerequisite - A Nova Scotia land surveyor with from 2 to 6 years of experience.

Responsibilities - Recommendations and decisions are usually accepted as accurate and incorporated in final production of plan. Work is limited to the direction of one or two survey crews with objectives set by higher authority. - Salary range - \$15,000 to \$17,000. Eleven per cent (11%) of all returns received fell into this level.

Level "C"

Prerequisite - A Nova Scotia land surveyor with from 6 to 8 years' experience.

Responsibilities - Recommendations and decisions required for final solution to plan. Responsible for day to day operation of offices and subordinate staff. Occasionally required to sign plans. - Salary range - \$17,000 to \$19,000. Fourteen per cent (14%) of all returns received fell into this level.

Level "D"

Prerequisite - A Nova Scotia land surveyor with 7 to 9 years' experience.

Responsibilities - Make responsible decisions which are rarely subjected to review on all matters, including establishment of policies and expenditures of large sums of money.

Instructed on policy and broad objectives of company. Day to day work is generally accepted. Regularly required to sign plans which are the direct result of their work. - Salary range - \$19,000 to \$22,000. Thirty-five per cent (35%) of all returns received fell into this level.

Level "E"

Prerequisite - A Nova Scotia land surveyor with 9 to 15 years' experience.

Responsibilities - Make responsible decisions which are rarely subjected to review on all matters, including establishment of policy and expenditures of large sums of money.

Make final decisions on complex surveying problems and regularly required to review and evaluate work of junior surveyors and/or subordinate staff. Signs the plans produced under personal supervision. - Salary range - \$22,000 to \$25,000. Thirteen per cent (13%) of all returns received fell into this level.

Level "F"

Prerequisite - A Nova Scotia land surveyor with over twelve years' experience and a Bachelor's Degree or equivalent.

Responsibilities - Principal of a firm or department primarily engaged in surveying which employs in excess of 15 people. Responsible for long range planning and administration of programs.

Holds a managerial position, making decisions on all aspects of surveying and business transactions of firm or government department. - Salary range - \$25,000 to \$30,000. Thirteen per cent (13%) of all returns received fell into this level.

Level "G"

Self-employed persons or top managerial government employee with a minimum Bachelor's Degree (other than surveying). - Salary range - over \$30,000. Seven per cent (7%) of all returns received fell into this level.

COMMUNICATIONS - Jim Chisholm, Division Director

THE NOVA SCOTIAN SURVEYOR REPORT - Ivan P. Macdonald

The Nova Scotian Surveyor - what is it to you? Some members say that it is the voice of the Association, others say it is a media by which ideas are conveyed and some others say - look do you have to reprint articles all the time - maybe we should give the thing up.

The Annual-Meeting edition carried the Annual-Meeting proceedings, reports, business-meeting minutes.

We had some letters to the editor which were included in the Annual Meeting report section. One of the letters was prompted by the Annual Meeting itself and that pertained to the retired-member status.

The April edition had a message on "moonlighters", notes on the law of boundaries of Nova Scotia, articles on the expanded profession of land surveyors and other short articles.

The Summer edition included articles in reference to this Annual Meeting. This also included Norval Higgins' report which he submitted as the qualifying requirements for his Nova Scotia Land Surveyor's Commission.

The October edition carried a dialogue on 'High Water Marks'. There was also a section on case reports which contained some samples of the court room dialogue. Another very interesting item was a report by Major Church on 'Training of Land Surveyors'.

I want to thank all our contributors for articles and suggested articles. The 'Surveyor' is nothing without you people getting back to us.

Our magazine is world-wide and each year we receive requests from new subscribers. The latest request for a subscription is from the University of Calgary.

LIAISON COMMITTEE REPORT - Murray J. Banks

The Liaison Committee met with the Engineers' Liaison Committee during the past year on the fourth Tuesday of every month, not including the summer months. The meetings were held during lunch in the APENS board room.

One of the projects undertaken this year was the arranging of a seminar in cooperation with the Continuing Education Committee. The engineers had requested that we provide some general information on the use of the Nova Scotia Coordinate System as it applies to engineering. The Continuing Education Committee did an admirable job which will be dealt with in more depth in that committee's report. The engineers have indicated that they would like a similar type seminar again this coming year.

An item of major contention between the two associations appeared on the horizon this past year. In a nutshell, the engineers contend that a land surveyor is practising engineering, to some degree, if he carries out a subdivision survey without input from a professional engineer. If a land surveyor decides on the location of a street system without the services of a consulting engineer, he is practising engineering according to the engineers. Even though the plan is scrutinized by the various approving authorities, the land surveyor is still practising engineering they contend.

The Act Enforcement Committee of APENS, along with their solicitors were in attendance at the September meeting during which the matter received considerable debate. Needless to say, we argued the opposing view point. We are presently at a stalemate on the matter; however, they issued a warning to us that they will be taking legal action against various members if the practice continues.

There were no meetings held during the past year with our counterpart Committee of the Nova Scotia Barristers' Society. This may have been due to a lack of initiative on the part of your Chairman. It almost seems that there must be an issue or a project before there is reason to meet. Any suggestions brought forward from the membership at large would be most welcome.

CONTINUING EDUCATION COMMITTEE REPORT - Jim Chisholm

At the twenty-eighth Annual Meeting held in November 1978, the Committee circulated a notice for the second series of Coordinate Survey Seminars. The five seminars were subsequently held and the details are as follows:

November 30 & December 1, 1978	Zone 5 - Sydney	Attendance - 8 surveyors - 2 apprentices
December 7 & 8, 1978	Zone 1 & 2 - Lawrencetown	Attendance - 6 surveyors 2 apprentices
January 11 & 12, 1979	Zone 3 & 4 - Truro	Attendance - 17 surveyors - 3 apprentices
January 18 & 19, 1979	Zone 6 - Halifax City	Attendance - 4 surveyors - 2 apprentices - 3 technicians
January 25 & 26, 1979	Zone 6 - Dartmouth & remainder	Attendance - 14 surveyors - 3 apprentices - 4 technicians
Total participation		49 surveyors 12 apprentices 6 technicians

Part of the material required for a third series of seminars has been prepared, however, the cost to our Association for the remainder of the preparation is estimated at approximately \$2,500. Council has decided not to allocate the funds at this time.

Early in November 1978 the Executive forwarded a questionnaire to the membership on the subject of the Continuing Education Committee. Although the response to this questionnaire was not high, the direction regarding Continuing Education was clear, in that

- a) the main topic of interest is the legal aspect of surveying, and
- b) the optimum number of seminars to be held each year is two.

The Committee, with the assistance from some members, has planned a legal seminar for December or January. More details will be finalized at a Committee meeting to be held November 3, 1979. The general aim of this seminar is to provide an opportunity for members to improve their understanding of some aspects of the law relating to property boundaries. The seminar will be held in the metro area and registration will be restricted to a maximum of 30 persons. Land surveyors will have priority for registration and the committee hopes to set the fee at not more than \$50.00.

The cost/recovery philosophy is being followed by the Committee again this year and revenue and expenditures to date balance within \$300.00.

In the questionnaire referred to earlier in this report, a number of members expressed an interest in working on the Continuing Education Committee. These members will certainly be contacted when all committee membership is reviewed by the new Executive.

* * *

Al Wallace stated that the other Division Director was Cyril Carlin, Zone Co-ordinator, who feels that the reports given by the Zone Councillors make up his report. The Zone meetings were increased by 100% from 8 to 16 this past year.

* * *

Mr. Jim Doig introduced Mr. Vernon Singhroy, Instructor at the Nova Scotia Land Survey Institute, who gave a very interesting technical presentation on remote sensing.

RESOLUTIONS

RESOLUTION NO. 3

- | | |
|-------------|---|
| John Ross | - MOVED pursuant to By-law 12(2) that Lawrence S. Long be granted Life Membership in the Association of Nova Scotia Land Surveyors. |
| James Grant | - Seconded. |
| Vote | - Motion carried. |

RESOLUTION NO. 2

- | | |
|--------------|---|
| Murray Banks | - MOVED pursuant to Section 9(1) of the Nova Scotia Land Surveyors Act that By-law No. 13 of the Association be amended as follows: |
| | 13(1) to remain as it is |
| | 13(2) insert a period after the word "Association" and delete all thereafter to the end of the sentence. |

13(3) delete 5% and insert 20% in its place.

(Note: The effect of these changes is to permit "retired" members to vote and to practise, and is to increase their annual fee from 5 to 20% of the regular fee.)

Fred Hutchinson - Seconded.

Vote - Motion defeated.

RESOLUTION NO. 1

Jim Gillis - MOVED pursuant to Section 9(1)(c) of the Nova Scotia Land Surveyors Act that the By-laws of the Association be amended by the addition of By-law No. 18 which By-law reads as follows:

By-law No. 18

18. SURVEY STANDARDS COMMITTEE

- 18.1 There shall be a Committee of the Association to be called the Survey Standards Committee of the Association of Nova Scotia Land Surveyors, hereinafter referred to in this By-law as the "Committee".
- 18.2 The Committee Chairman shall be selected by the Vice-President.
- 18.3 The Committee Chairman, in addition to being Chairman, shall also be a Director in the organization structure of the Association.
- 18.4 The Committee Members shall be selected by the Committee Chairman so as to provide representation from all areas of the Province.
- 18.5 The Committee shall report to Council through the Vice-President on a regular basis.
- 18.6 The Committee shall annually prepare an estimate of its anticipated expenses and submit the estimate to Council for approval. The Committee shall not incur expenses beyond its approved budget without the prior approval of Council.
- 18.7 The functions of the Committee are:
 1. To inform and advise Members of the Association and government agencies on survey standards as set forth in regulations under the Nova Scotia Land Surveyors Act.
 11. From time to time to carry out examinations of plans on public record to determine if they are prepared in accordance with the regulations under the Nova Scotia Land Surveyors Act, and
 - a) To report deficiencies to the surveyor who signed the plan, and encourage him to improve in the area of concern, and
 - b) To report a finding of continued deficiencies in plans and/or field work to the Secretary of the Association for consideration by Council.

Burney Smith - Seconded.

Roy Dunbrack - Moved an amendment that in 18.1 last line after the word "this" an insertion "section of the" be added to read this section of the By-law as the "Committee".

Ed Rice - Seconded.

- Roy Dunbrack - Withdrew amendment.
- Jack Kaulback - Moved an amendment to 18.7(11)(a) to read "To report to each surveyor whose plan is checked."
- Everett Hall - Seconded.
- Vote - Amendment to motion defeated.
- John Kaulback - Moved an amendment to 18.7(11)(b) to delete "and/or field work".
- Everett Hall - Seconded.
- Vote - Amendment to motion defeated.
- Vote - Motion carried.

**** OUTGOING PRESIDENT'S FINAL WORDS ****

It has been a privilege and an honor to represent you during the past year. I want to thank Council, the other members of the Executive and in particular our Secretary-Treasurer George Streb for their excellent work during the past year.

I was disappointed this year and I am still disappointed in the effect that our regulations have had on our membership. The plans have gone into the registry office, and in a great many cases they are no better than what they were five years ago.

I now hand over the President's chair with great relief and no regrets to a man whom I have great confidence in and admiration for.

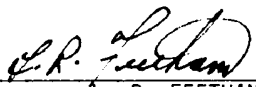
Burt Robertson and Art Chisholm escorted Al Wallace to the platform to be sworn in as President for the coming year

INSTALLATION OF NEW PRESIDENT


OATH OF OFFICE

I, ALFRED (AL) ERNEST WALLACE, DO HEREBY SOLEMNLY SWEAR THAT DURING MY TERM OF OFFICE AS PRESIDENT OF THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS I SHALL DISCHARGE THE DUTIES OF THIS OFFICE WITH THE UTMOST DEDICATION, HONESTY AND INTEGRITY, THAT I SHALL BE GUIDED IN MY DECISIONS BY THE WISDOM OF COUNCIL AND THE DIRECTIONS PROVIDED IN THE NOVA SCOTIA LAND SURVEYORS ACT AND ASSOCIATED BY-LAWS AND REGULATIONS, SO HELP ME GOD.

SWORN BEFORE ME AT HALIFAX
IN THE COUNTY OF HALIFAX
PROVINCE OF NOVA SCOTIA THIS
3RD DAY OF NOVEMBER 1979 A.D.



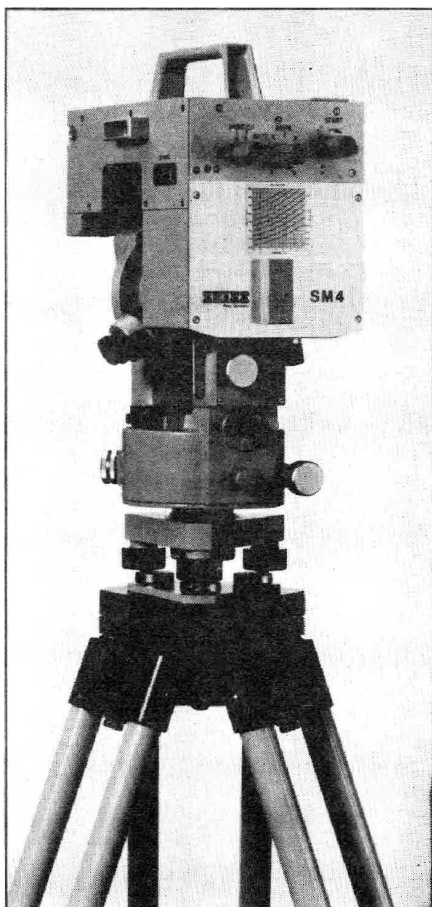
L. R. FEETHAM
A COMMISSIONER OF THE SUPREME COURT
OF NOVA SCOTIA



ALFRED (AL) ERNEST WALLACE

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For example: just one sighting for distance and angle.



SM-4, the electronic tacheometer theodolite by Zeiss, an electro-optical rangefinder with integral optical-scale theodolite for measuring horizontal angle, zenith angle and slope distance. Its range: 0-2000 m.

SM-4—smaller, lighter and handier than earlier models.

SM-4—rangefinder, optical-scale theodolite and power supply all rolled into one compact unit.

Transceiver optical system and theodolite telescope with a common optical axis: just sight—switch on power—trigger measurement—and take reading. Only one sighting is required for measuring distance and angle.

Fully automatic rangefinding cycle takes barely five seconds: including zero correction and change-over of measurement frequencies, with full allowance for atmospheric conditions.

Six type LR 14 (E 93) cells supply enough power for 500 to 1000 observations. Alternatively, dry cells or rechargeable NiCd batteries can be used.

High measurement accuracy in two ranges:

		No. of reflectors
Range I	Range II	
700 m	1000 m	1
1000 m	1500 m	3
1500 m	2000 m	7

Angle measurement (with telescope direct and reversed): $\pm 3''$ or $\pm 10''$

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** ACCEPTANCE SPEECH **

- Al Wallace -

It is indeed an honour and a privilege to become your President for the coming year.

One enters this position with many mixed feelings -- mostly fear; however, I do realize the responsibilities you have bestowed upon me, and God willing, I will do my best to justify your trust in me.

It seems traditional that at this time the incoming President is expected to outline his personal aims and concerns relating to the affairs of this Association, and if I could have your attention for a few minutes I will do just that.

First, I would like to say that I believe we have a strong Association -- we have been blessed with excellent leadership during recent years -- Walter, Murray, Keith, and many before them have sacrificed many hours from their families and work to provide the leadership which has caused us to move forward and kept us from many pitfalls which we may otherwise have encountered.

We have a very competent Secretary, George, who carries out his daily duties admirably and with dignity. I shudder to think "How would we get along without him?"

Our greatest strength, however, in my opinion is found in the individual members of this Association. Look at our attendance at the Annual Meeting and compare that with other Associations. Look at our committee structure chart and note the number of surveyors working for the advancement of the surveying profession.

With all this strength you may think I have no concerns -- unfortunately that is not the case. In this age of consumerism, the public is demanding more accountability from all professions. They are increasingly concerned about the power of the profession -- and rightly so.

Generally speaking, the public will no longer take for granted the integrity and ethical conduct of the professions. They are taking a second look at us and everything we do. Look at some of the events that support this, which have occurred during the past year -- in our own Association. Our Secretary has informed me that it is almost a weekly occurrence to have someone call the Association office and use him as a sounding board! Complaining over some aspect of the survey which they have just had performed. George is alarmed at the number of surveyors who are leaving their client unhappy.

The Complaints Committee during the past year has dealt with 19 complaints. Fortunately, all were resolved without action by the Discipline Committee -- however, this still represents quite a number of unhappy people.

A few months ago one of our members was taken to the court-house steps -- charged with practising engineering, while in the opinion of the Executive of this Association, he was surveying in accordance with the law.

Exactly one year ago, during his acceptance speech, Walter sighed with relief when he said, "We have a new Act. The membership has approved the By-laws, and our regulations are with the cabinet on the very eve of approval".

Well, as you know, that portion of those regulations dealing with qualification for land surveyors is still in the government's hands. The government is in effect doubting the opinion of this Association with regard to the standards required to serve the public in surveying.

Gentlemen, these are some of my concerns. Put it all together and you can see that we must remain strong or we will lose bit by bit what our predecessors have given us after a great deal of toil.

During the past year, I believe, with the addition of the Survey Standards Committee and the Zone Co-ordinator to our committee structure, that we have added to our strength, and I will assist our new Vice-President and the Division Directors with this important work.

During 1980 as I visit some of our sister associations, I will be looking for solutions to our problems, and I hope to report my findings through the "Nova Scotian Surveyor" for your consideration, and I trust, discussion at Zone meetings.

Council immediately will be taking steps to generate a new Code of Ethics, which I hope will be finalized during 1980.

The Executive will continue to meet with the government to urge them to reinstate our regulations dealing with qualifications, because I am convinced that without that, in the long term we will go by the wayside.

During this period when so many important matters are being considered, it is of the utmost importance that all members of our Association be fully informed of the activities of Council. The most effective place to debate these activities is at the Zone meeting. Council needs your assistance. The Zone meetings must play a significant part in communicating the plans of Council and the reaction of our members to these plans.

In order for us to remain strong, there is a continuing challenge to all Nova Scotia land surveyors to stay informed of and involved in the actions of your Association, and I know as always, that we will rise to that challenge.

INTRODUCTION OF COUNCILLORS BY THE PRESIDENT

1st year members of Council:

I would like to introduce the new members to Council as follows:

Marcellin S. Chiasson	- Vice President
John A. Kaulback	- Zone 2
Donald Parker	- Zone 3
James Grant	- Zone 5
Michael J. Crant	- Zone 6
Allison B. Grant	- Zone 6

2nd year members of Council:

The following Council members will serve their second year:

Erwin R. Turner	- Zone 1
William A. Thompson	- Zone 4
John W. Ross	- Zone 5
Frank Longstaff	- Zone 6
Cyril B. Carlin	- Zone 6
R. M. Smith	- Ministerial Appointee

NEW BUSINESS

Comment:

Jim Gillis, who could not be present when Resolution #1 was made, spoke against the By-law on Life Members. Life Membership, he said, is an award for people that have made an outstanding contribution to our Association. In the future he hoped that these Life Memberships would be reserved for people who have made very outstanding contributions to the Association and that they would not be given out indiscriminately.

MOTION #1

Tom Swanson - MOVED that the following message be forwarded to the Honourable John Buchanan, Premier of Nova Scotia: "We wish to commend the decision of the Maritime Premiers to continue the Programs of the Land Registration and Information Service. Further, we wish to urge your government to maximize the benefits to Nova Scotians from these programs through having all government departments fully utilize L.R.I.S. information and facilities, through advising industry of the information which is available for its use, and most important, through immediate implementation of the proposed new "Land Titles System"."

Gary Glenn - Seconded.

Vote - Motion carried.

MOTION #2

Roy Dunbrack - MOVED that Council give authority to the Deferred Monumentation Committee to proceed on the drafting of regulations to implement the procedure of deferred monumentation and to report back to Council.

John MacInnis - Seconded.

Vote - Motion carried.

MOTION #3

Murray Banks - MOVED that the budget be approved for the coming year.

Walter Rayworth - Seconded.

Vote - Motion carried.

MOTION #4

Roy Dunbrack - MOVED that the budget information be distributed to the membership with the notice of the call for the Annual Meeting.

Tom Swanson - Seconded.

Vote - Motion carried.

SUGGESTION

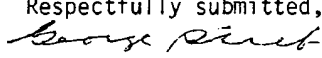
Doug MacDonald suggested that in future we should have a two-day business meeting in November, starting at approximately 8:00 a.m. and running until 5:00 p.m. with the option for an evening meeting, with absolutely no social functions whatsoever and, then on a long weekend in the summer have a three-day social affair at which we would have some interesting technical papers.

WORDS OF THANKS

Words of thanks were expressed by the invited guests at the closing of the new-business session.

ADJOURNMENT

Meeting adjourned at 3:30 p.m. Attendance at meeting 178.

Respectfully submitted,

 George E. Streb, Secretary

ANNEX 'A'

** THE CANADA LAND SURVEY ACT **

*by W. V. Blackie
Surveyor General and Director of Legal Surveys*

An ad in the paper recently said that the Board of Examiners for Canada Land Surveyors were going to consider applications for "Grandfathering" from people who had five years' experience in surveying at the professional level in Canada.

This ad was brought about because about ten years ago when a group of oil company surveyors came to Ottawa and complained that they could not make their surveys in the "offshore" jibe. The two of them had compared positions for a common buoy that they had both fixed off Sable Island and their positions differed by a 1/2 mile. They claimed that there was something wrong with the geodetic survey of Canada. They also asked a very pointed question about the competence of the Dominion Land Surveyors to handle these surveys in the offshore, which the law requires that they do handle. This started a whole series of meetings, task forces, workshops and changes.

What came out of this was a study by the National Advisory Committee on Control Surveys and Mapping that eventually led to a change in the Canada Land Surveys Act designed to do some specific things as follows:

To broaden the qualifications of surveyors to ensure that the people who have been given this commission, now Canada Land Surveyor, are in fact competent to handle the theory of offshore surveys, to handle the control work that is necessary to do coordinate control surveys in cities, and to handle the mapping that is necessary on occasions to define property. They recommended that the Act be changed to create a broader surveyor, not the narrower property surveyor. In 1977 some amendments were put to the parliament and were passed.

A summary of changes that were introduced were:

They agreed that the quality of surveying of Crown Canada lands should be upgraded by providing for a broader qualification of surveyors. They provided for a new title for surveyors, namely the Canada Land Surveyor, and to include within that new title those professionals engaged in satisfying surveying requirements under changing conditions whether these are on land, underwater or from the air. They provided for an increase in the membership of the Board of Examiners from 3 to 5 with 4 of the members being drawn from the specialty fields of surveying.

There were a number of other administrative changes that were introduced into the Act, one of which created some concern amongst your own members, and that was to create a statutory authority for the survey of offshore lands by the Canada Land Surveyor. The definition of Canada land was changed by the addition of the words 'any lands under water belonging to Her Majesty in the right of Canada or over which Her Majesty in the right of Canada had the power to dispose of rights'. This addition created the statutory authority for the Canada Land Surveyor to operate under the regulations which he had been working under.

The Act was passed in September 1977 and immediately an Advisory Committee was set up to map out strategy how these new requirements were going to be implemented. As a result a set of agreed principles and draft regulations was turned over to the expanded Board of Examiners in December 1978. These regulations have now been put forward and were approved by the Governor-in-Council on September 13, 1979.

The main changes in these new regulations are:

The articling process was eliminated, and with the abolition of this articling process there was no longer a need for a preliminary examination for entry into articles. The Board felt that for experience, which was being substituted for articling,

to be meaningful, it had to be at a certain academic level. They have now required that no person will be accepted as a candidate until he has education to the technologist level. In effect all candidates for C.L.S. exams in future will be required to be graduates of Institutes of Technology or some more advanced study. In place of the articles there is a prescribed period of training and experience to be supported by affidavits. This experience may be obtained in any one or more of the major fields of surveying which are identified as cadastral, geodetic, photogrammetric and hydrographic. The training and experience must be at a level such that the professional competence of the candidate in those fields is ensured. We are not requiring that a person have experience in any particular specialty or even that he have experience in more than one.

The new examination curriculum is set at about the bachelor's level of survey science or surveying engineering, and graduates from the four universities that are now giving degree courses in surveying will probably receive exemptions from most of the 23 subjects of examination. Persons who are not university graduates, but who have had the minimum education required, that is of technologist level, may qualify through a program of home study or part-time attendance at university. Exemptions can be granted from any subject other than from the two subjects survey law and the acts and regulations governing surveys of Canada lands. Both of these subjects require a 75% pass level.

Provincial Land Surveyors may be granted a commission as a C.L.S. if they have at least two years of professional survey experience in Canada and write the two examinations in survey law and, if required by the Board, complete a further period of training and experience and pass further examinations. The Board of Examiners is now studying every provincial set of examinations in Canada and will determine for each set of examinations what exemptions will be granted to surveyors of their province. This information will be available in about one month's time.

Until September 1981 persons having five years' professional experience in Canada in any survey specialty may apply to the Board for a special examination for a commission. The special examination will comprise the two mandatory examinations in survey law.

Some of the information from the application for a special examination is:

The Canada Land Surveys Act and examination regulations have been broadened to include the commissioning of persons practising in various disciplines in the major fields of surveying including hydrography, photogrammetry and geodesy. While a commission is not mandatory to practise in these fields, the commission will be an excellent certification of a surveyor's qualifications. The awarding of commissions in the past has been limited to cadastral or land surveys. The new commission for C.L.S., while covering additional survey disciplines, will allow persons the right to operate only in their area or areas of competence as determined by their experience. In other words, the new commission is not going to be an automatic license to operate in any of these specialities.

The revised Canada Land Surveys Act was brought about in order to cope with the rapidly growing exploration for minerals in the marine environment of Canada and because of the rapid and technological changes occurring both within and outside the survey industry. There are many persons who have had extensive and responsible experience in the field of hydrography, photogrammetry and geodesy who may not possess the formal qualifications of professional training and experience which are required for the C.L.S. commission.

Under Section 12 of the new regulations, commissions can be issued to persons who are actually engaged in this type of survey work at what may be termed the professional level or at a level of experience and competence comparable to the existing C.L.S. commission. Persons holding provincial survey commissions are also included. All those persons who have been engaged in this responsible work may apply for a special examination for commission under Section 12 of the new examination and regulations.

One of the objectives of the amendments was to extend the application of the Act to Canada lands offshore and there was some confusion as a result of this, and interpretations of the Act, that a provincial land surveyor for example would not be entitled to survey under the Canada Lands Surveys Act in the offshore unless he were also a Canada Land Surveyor. The reason for this was really the objections that had been raised by the oil industry some ten years ago about the competence of the Dominion Land Surveyors at the time. The then Surveyor General was asked how the Board of Examiners ensured that the D.L.S.'s were competent in the offshore, and it was very difficult to answer that question. In fact, the Board within one year of being asked the question, changed the syllabus for the Dominion Land Surveyor and added two subjects, geodesy and the determination of geographic position offshore. The revised C.L.S. syllabus as it now exists has a considerable part devoted to geodesy, higher surveying and hydrography. The Board felt that to open up the surveys in the offshore after having gone through these changes would really have aggravated the undertaking that they had given to the oil industry back in the early 70's.

What has happened since then, of course, is a quite dramatic change in the political situation with respect to the offshore. The principles that were agreed to between Prime Minister Clark and Premier Peckford with respect to the offshore mineral resources off Newfoundland are as follows:

The Province of Newfoundland should own the mineral resources of the continental margin off its coast insofar as Canada is entitled to exercise sovereign rights over its resources in accordance with international law.

Such ownership should be to the extent possible of the same nature as if these resources were located within the boundaries of the Province.

The legislative jurisdiction of the Province should, to the extent possible, be the same as for those resources within the boundaries of the Province.

The same words of agreement have been offered by the Prime Minister to the Premiers of all other provinces. This does not, of course, mean that these changes have taken place. It is an agreement of intent.

In Newfoundland a negotiating committee of federal cabinet ministers has been appointed and a provincial negotiating team still has to be nominated. These people will then sit down and determine the precise words of the constitutional change that will affect the transfer of resources. The words that are contained in the agreement of principle quite really establish that the responsibility for administering these resources is going to fall totally upon the provinces.

It creates a situation where the Association of Nova Scotia Land Surveyors should now concern itself about the competence of its membership to handle these surveys. The arguments that were presented to the Surveyor General ten years ago with respect to the competence of D.L.S.'s will now undoubtedly be made to provincial associations with respect to their examination processes and procedures for equipping their members to handle these surveys.

I think it is ironical that after struggling for ten years to make sure that C.L.S.'s were competent, the whole political process has reversed and it can now become a matter of question as to what the provincial associations will have to do to equip their members to handle these same responsibilities.

ANNEX 'B'

NOVA SCOTIA LAND SURVEY INSTITUTE

ANNUAL REPORT TO A.N.S.L.S.

- by W. E. Chambers -

The academic year began on 5 Sept. 1978. The distribution within the Survey Department by program and results achieved are:

	<u>Enrolled</u>	<u>Withdrew</u>	<u>Failed</u>	<u>Graduated</u>
Survey Certificate				
Survey	31	1	1	29
Photogrammetry	6	2	2	2
Survey Diploma				
Survey	28	1		27
Photogrammetry	1			1
Survey Assistant	12			12
Property Mapping	14	4		10

The programs, for the most part, went quite well despite the fact that we were unable to offer much by way of forestry instruction, encountered considerable problems in getting returns of surveys in on time, and found the spring weather poor for astronomical observations.

Jobs were not as plentiful this year as last.

New equipment acquired during the past year: three automatic levels, two Commodore PET mini-computers, one having 32K capacity plus a print-out attachment.

Programs are modified slightly each year in order to improve overall efficiency and reflect the changing needs of industry. We have on order additional target/traverse equipment and hand radios which will increase our students' experience in their field projects.

The September 1979 enrolment in the first year of the surveying program was the lowest since we increased the number of seats in this program in 1974. For the first time, this program has begun without a waiting list of students who could not be accommodated.

During the period October 1978 to September 1979, the Institute provided accommodation for and administrative support to a Canada Works program--the Nova Scotia Remote Sensing Centre. A number of projects were undertaken including crop monitoring and assessment of Dutch Elm disease. The Survey Department was able to assist in some of the Centre's work--particularly in obtaining oblique aerial photography with a hand-held camera.

Instructors from the Planning Technician Program will have a larger commitment to the Survey Program, beginning with the academic year 1979-80. Hence our graduates will have a better understanding of the complexities of planning.

Each winter for the last six years the Survey Department has presented a short course for highway survey technicians. This fall we are conducting a short course in six different locations for this same group. The course is a one day "show and tell" affair dealing with metric conversion, designed to assist the technicians with the new system and help them feel more comfortable with it.

ANNEX 'C'

** LAND REGISTRATION AND INFORMATION SERVICE **

*by Charles Chamberlain, P. Eng.
Summerside, P.E.I.*

This afternoon I would like to use this time to talk about a variety of subjects that affect you as Nova Scotia Land Surveyors and users of L.R.I.S. coordinate control data.

As you are probably aware, the Control Surveys section of the L.R.I.S. completed the redefinition - readjustment of the maritime secondary control network in May of this year. Anyone who has used the new coordinate values has noticed significant changes. There are four reasons for these changes, namely; redefinition, metrification, mapping plane change and the readjustment.

(i) Redefinition

In the past the non-geocentric Clarke 1866 ellipsoid was used as the reference surface for geodetic computations. The geocentric Average Terrestrial System (ATS 77) is now being used which accounts for a shift of about 225 metres on the coordinate values (approximately 220 metres in the northing and 45 metres in the easting).

(ii) Metrification

The coordinate values are now published in metres and fractions of metres. The coordinates are in metres only and there is no feet equivalent.

(iii) Mapping Plane Change

The false easting of the two 3⁰ Modified Transverse Mercator (M.T.M.) zones has been changed. The old value of the false easting in both zones 4 and 5 was 1,000,000.00 feet. The new false eastings are 4,500,000.000 and 5,500,000.000 metres for zones 4 and 5 respectively. It is now possible to distinguish the M.T.M. zone by looking at the first digit of the easting coordinate.

(iv) Readjustment

The adjustment of the secondary network was performed as an entire network with the primary stations weighted rather than fixed. This allowed the secondary network observations to move the primary points slightly and eliminated any biases due to holding either primary or secondary points fixed. This method of adjustment will account for small variations in the coordinate values.

The second item which I would like to discuss is what materials are available from the Control Surveys section.

(i) Short List

The Short List contains the mapping plane coordinates (northing and easting), elevation and meridian convergence at all points on a provincial basis. The Short List is available in hard copy or microfiche form.

(ii) Explanation of Short List

The Explanation of Short List is a five page document which describes the information contained in the Short List.

(iii) Individual Station Data

The Individual Station Data is one "page" per monument and contains all information pertaining to the point. It includes point location (map sheet, county),

three sets of coordinates (provincial mapping plane, geographic, U.T.M.), error estimates of the coordinate values, gravity field components, data on interconnected stations and a comments section. The Individual Station Data is available only on microfiche on a provincial basis.

(iv) Explanation of Individual Station Data

The Explanation of Individual Station Data is a forty-one page document which describes in detail (including mathematical formulation) all items contained in the Individual Station Data.

(v) Distance Reduction Tables

A set of tables to reduce observed distances to the provincial mapping plane has been produced. The reduction is a two step process taking into account firstly the elevation of the points and secondly the mapping plane. The tables also include a map of geoid-ellipsoid separations required for the elevation reduction and a numerical example. The tables are available on a provincial basis.

(vi) Sketches, Index Maps

The sketches and index maps are available (as in the past) on the 1:50,000 map sheet basis. We are presently investigating the possibility of distributing both the sketches and index maps on microfiche.

The third point I would like to mention is the History File. As part of the redefinition project the history of each coordinate monument was compiled into a machine readable format. The history of the station appears on the individual station data fiche under the heading of "Comments". We believe the file is up-to-date at the time it was compiled, however, to maintain the file we need the cooperation of the users. Survey marker report cards are available from the Summerside office to report any change in the status of a monument. Any report cards we receive are greatly appreciated and help us in providing you with a better service.

The fourth item I would like to touch upon is the microfiche. There was a reluctance at first, especially by myself to the microfiche, however, once we had an opportunity to use it, the advantages were obvious. All values are in one compact space, are convenient to use and very inexpensive. As an example, one hard copy of the individual station data in Nova Scotia would cost in the vicinity of \$3,000, whereas a set of fiche for the entire province cost \$25. There is a wide variety of microfiche viewers available on the market, ranging from about \$50 for the simplest hand-held model, to \$5,000 for a desk-top model that produces excellent copies on bond paper. Approximately \$200 will buy a desk-top viewer.

One problem that has arisen as the result of the redefinition is the plotting of coordinated points on existing maps and computations where "old" coordinates are available. There are several solutions to the problem, the appropriate choice must be made dependent upon the scale of the map and if coordinate computations are required. For plotting purposes at a relatively small scale (1:50,000), a mechanical grid may be made. For medium scale (1:20,000) the Vening - Meinez formulas (which neglect the adjustment) may be used and at larger scales (1:10,000 and larger) a Helmert transformation is acceptable. If old coordinates are required for computation purposes a more rigorous transformation must be done. We are presently working on a solution in Summerside which uses the polynomial surface fitting technique (modification of a program obtained from the Geodetic Survey of Canada) which should be ready for use by the new year.

The final subject I would like to mention is the reduction of observations from the terrain to the mapping plane. It should be noted that all reductions are a two-step process, firstly the terrain observation is projected from the terrain onto the ellipsoid and secondly the ellipsoid value is mapped from the ellipsoid to the mapping plane. As a general rule it may be stated that to neglect reductions for distances can cause significant distortions but to neglect reductions for directions

(directions, angles, azimuths) will not cause significant distortions, however, great care should be exercised in deciding which reductions to neglect. It is my personal feeling that if a machine of sufficient capacity is being used for computations, the reduction formulae should always be programmed into the software. Anyone who does not have a computer for the reduction of distances can use the tables we provide.

In conclusion I would like to say that we are always available to help anyone with problems they may have with any data we publish. Finally, I would like to thank your President, Walter Rayworth, for the opportunity to speak to you today.

* * *

Nova Scotia Land Survey Institute

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Nova Scotia Land Survey Institute**

Lawrencetown, Nova Scotia.

ANNEX 'D'

REGULATIONS INTERPRETATION COMMITTEE REPORTDETAILS OF QUESTIONS AND REPLIES INCLUDINGREPORT #1 DATED APRIL 5, 1979

- by John C. MacInnis, Chairman -

Regulation

- #10 (1) Upon the official implementation of the Metric (SI) System by the province each reference in this part to a dimension or size in the Imperial System of measure shall be replaced by the Metric (SI) System reference in parentheses that immediately follows the Imperial System of measure reference.
- (2) Until the implementation of the Metric (SI) System by the Province all Metric (SI) System reference in parentheses in this part shall be of no force or effect.

QUESTION: *Do the regulations permit the preparation of plans in the Metric (SI) System?*

REPLY: The word "effect" in Section 10 (2) would lead one to say no, but it was not intended in drafting the regulations to 'outlaw' the Metric System, but to have the metric standards in the regulations so that it would not be necessary to go back to the government for approval of changes to the regulations when the Metric System becomes the standard system of measurement.

* * * * *

#11 In this Part:

- (a) "check-measured" means that the value of a quantity has been determined by at least two independent observations using different methods so that the possibility of significant error in the accepted value is eliminated.

QUESTION: *What is "check-measured"?*

REPLY: Checking the measurement of a distance by an alternate method or means.

* * * * *

- #11 (i) "plan" means a graphic representation of boundaries of real property prepared for the purpose of legally defining some or all of the boundaries shown thereon;

QUESTION: *Monumented lot from deed; client wishes plan (sketch) to show monumentation. No transfer of title intended using plan. Surveyor wishes to stamp and sign plan (sketch) with note "not for registration".*

REPLY: 1. If plan (sketch) is not signed then plan does not fall under the regulations.

or

2. If plan (sketch) is signed and note added to the effect "plan not to be used for transfer of title or registration" then plan (sketch) does not fall under the regulations.

* * * * *

- #15 (1) All tapes used to measure distances shall be steel tapes graduated in units and decimals of units, and shall be tested at least once a year and also after any repairs, by comparing with a certified tape.
- (2) Records of such comparisons shall be made and preserved by the surveyor to support the validity of his measurements.
- (3) A surveyor shall have access to a certified tape, which shall not be used in the field, but kept as a standard.

QUESTION: *Where may one test a tape?*

REPLY: Wherever one has access to a certified tape.

QUESTION: *Must a surveyor own his own certified tape?*

REPLY: No! But must have access to a certified tape.

QUESTION: *How does one obtain a certified tape?*

- REPLY: 1. Available at one or through at least one of the survey equipment suppliers.
2. Purchase a tape, preferably the same type and length as the one you use, and send same to the address below for certification. (We understand the present cost of certification is \$78.00.)

National Research Council of Canada
Division of Physics
Ottawa, Ontario.

* * * * *

#23 Bearings shall be derived from astronomic observations referred to the appropriate central meridian of the Nova Scotia Co-ordinate Survey System or from two suitably spaced control monuments of the Nova Scotia Co-ordinate Survey System, with the following exceptions:

- (a) a magnetic bearing may be used as an aid in the re-establishment of an old boundary when other means are not available;
- (b) a magnetic bearing may be used in the case of surveys conducted under clause (e) of subregulation (1) of regulation 21 (land utilized as forest); or
- (c) a magnetic meridian may be used, at the discretion of the surveyor, as the best possible meridian obtainable at the time of survey in an area where undue hardship and expense would be caused in the determination of an astronomic or grid meridian, provided that at least two angular ties are made to permanent visible points.

QUESTION: *Adding parcel to lot surveyed in 1976, is it necessary to use astronomic bearings or is magnetic permissible?*

REPLY: Magnetic not permissible in this situation.

QUESTION: *Does one scale the longitude off the 1:50,000 topographic map to calculate the convergence to be applied to the astronomic bearing to obtain the grid bearing?*

REPLY: Yes.

* * * * *

#41 Where a survey is made for the purpose of defining, locating or describing any line, boundary or corner of a parcel of land;

- (a) all angles or corners on the boundaries of the parcel of land shall be defined in the survey by either a Survey Marker or Rock Post.

QUESTION: *4,000 feet of woods boundary defined by an irregular fence about 50 years old. Must every 'kink' in the fence be monumented?*

REPLY: If the fence is considered to be the only and governing evidence of the boundary, then generalize the median line of the fence to the extent that no part of the fence departs from the median line by more than 2 feet to reduce the number of 'kinks' to a minimum. Then you must monument those 'kinks'.

#41 Where a survey is made for the purpose of defining, locating or describing any line, boundary or corner of a parcel of land;

- (a) all angles or corners on the boundaries of the parcel of land shall be defined in the survey by either a Survey Marker or Rock Post;
- (b) where it is practical all angles on a traverse line established to determine a natural boundary shall be defined in the survey by a monument.

#42 Where a survey is made for the purpose of subdividing land;

- (a) every exterior angle or corner, all angles at street intersections, the beginning and end of all curved boundaries of constant radius, every angle in a street boundary, all angles of lots or blocks and all angles and corners in the subdivision, shall be defined in the survey by either a Survey Marker or Rock Post;
- (b) all angles on a traverse line established to determine a natural boundary shall be defined in the survey by a monument.

#43 Notwithstanding the provisions of Regulations 41 and 42, a previously established public highway, right-of-way or easement crossing the lot or lots being surveyed, need only be monumented at the intersection with the first and last boundary crossed.

QUESTION: *Is it required to monument 1) an easement, 2) a right-of-way, 3) a lease?*

REPLY: Since present regulations do not address all aspects of dealing with easement, rights-of-way, leases, etc., the following guidelines are to apply pending revisions to the regulations notwithstanding Sections 43 and 67 (b);

- (a) for surveys made for the prime purpose of defining limits of major transmission lines, pipe lines and highways, complete quantitative data shall be shown and one limit of the easement or right-of-way shall be monumented at every deflection and in accordance with the provisions of Section 44.

Notwithstanding (a) above, limited interests in land of a specified duration of less than 10 years need not be monumented.

- (b) where easements and rights-of-way are created or encountered in the course of surveys and are incidental to the survey being done, all quantitative data shall be shown but the easement or right-of-way need not be monumented.

QUESTION: *Re 42. Must the road-boundary and lot-boundary intersections be monumented where a plan is being prepared for land purchase?*

REPLY: Yes.

* * * * *

#47 The identification cap to be fitted on a Survey Marker or Rock Post is to be cast or stamped with the lettering "SURVEY MARKER - PENALTY FOR REMOVAL" (or such other lettering as may be approved by Council) together with the surveyor's number or other symbol which will identify the surveyor or firm responsible for the placement of the monument.

QUESTION: *May survey markers from existing stock be used?*

REPLY: Yes, if they meet the spirit of the regulations and have some identification as to who may have placed the marker.

or

approval of Council.

QUESTION: *What lettering, other than "Survey Marker - Penalty for Removal", may properly be approved by Council?*

REPLY: The intent of this section was to attempt to 1) identify the iron bar or post as a "survey marker"; 2) to give the warning "penalty for removal"; 3) identify the person or survey firm responsible for the placement of the mark.

* * * * *

#48 The Secretary shall maintain a register concerning the identification of monuments in which shall be entered the name of the surveyor, his registration number, and any symbol used on his survey monuments. The use of letters or a symbol must be approved by Council.

QUESTION: *This section refers to "the use of letters". Does this refer to letters other than the lettering in the bracketed clause in Section (47) - the name of a firm for instance?*

REPLY: This section refers to the registration of symbols (logos), names or letters that may be used in place of or in addition to the registration number referred to in Section (47) and in addition to "survey marker - penalty for removal".

* * * * *

#54 A plan shall be drawn and executed in black drafting ink or tracing linen or plastic tracing film.

QUESTION: *Must all original plans be drawn on linen or film?*

REPLY: Yes. There are no exceptions under these regulations.

* * * * *

- #59 A plan shall be drawn to a scale or scales sufficient for clarity of all particulars on the plan. Scale ratios shall conform with standards of the Canadian Government Specification Board (CGSB) respecting scales (ratios) for Charts, Maps, and Plans in the Metric (SI) System.

QUESTION: *Please clarify.*

REPLY: This regulation should be considered as two separate subsections, viz:

- (1) A plan shall be drawn to scale or scales sufficient for clarity of all particulars on the plan;
- (2) Scale ratios shall conform with standards of the Canadian Government Specification Board (CGSB) respecting scales (ratios) for Charts, Maps, and Plans in the Metric (SI) System.

Here again scale ratios pertain to the Metric (SI) System.

QUESTION: *Is it not required that all plans be drawn to conform with this Section?*

REPLY: No. Refer to Section 10.

* * * * *

- #61 There shall be a border on each plan located at least 1/2 inch (1 centimetre) from each edge, and no numbers or letters shall appear outside the border.

QUESTION: *Is this Section consistent with Section 75(2)?*

REPLY: Yes.

* * * * *

- #62 (1) Plan sheet sizes shall be in metric paper sizes.
- (2) Metric paper sizes for trimmed plan sheets shall conform to the International Standards Organization (I.S.O). "A" series of standard paper sizes.
- (3) In exceptional situations, where justifiable, sheet sizes in excess of those required by this regulation may be permitted provided that the increase is a standard multiple of the system.

QUESTION: *Re Section 75(3) - what is the standard multiple of the system?*

REPLY: See I.S.O. "A" series re plan sizes. The basic unit would be 210 mm x 297 mm trimmed paper size.

* * * * *

- #64 The legend of the plan shall:

- (c) indicate whether distances and bearings shown on the plan are measured in adjusted values, and if they are adjusted values, the legend shall indicate the nature of the adjustment and whether distances have been corrected for scale factor;

QUESTION: *Must plan show if scale factor is applied or not?*

REPLY: Yes.

* * * * *

#66 (1) A location map of a scale not smaller than 1:50,000 shall be drafted on each plan and shall bear the same orientation as the diagram.

QUESTION: *Key plan scale of 1:50,000 is too large to identify the location of large tracts of lands. What should be used?*

REPLY: A smaller scale should be used to comply with the use and the intent of the key plan.

* * * * *

#67 A plan shall show:

- (d) the graphical and mathematical location of all buildings within 10 feet (3 metres) of the boundaries of the property;

QUESTION: *What is meant by 'all buildings'?*

REPLY: 'All buildings' means all structures including garages, sheds, etc.

* * * * *

#74 (1) A plan shall be certified by the surveyor personally in charge of the survey, signifying the plan and survey as having been made in accordance with the Act and Regulations.

(2) The form of certification shall be as follows:

SURVEYOR'S CERTIFICATE

I, (Print Name of Surveyor), Nova Scotia Land Surveyor, hereby certify that the survey represented by this plan was conducted under my supervision, and that the survey and plan were made in accordance with the Nova Scotia Land Surveyors Act and the regulations made thereunder.

Dated this.....day of....., 19....
.....N.S.L.S.

(3) A certificate shall be accompanied by the Surveyor's Stamp which shall be obtained from the Association in the form approved by Council.

QUESTION: *Need the original plan (linen or film) be stamped?*

REPLY: Yes, although in using the "ink type" stamp it may prove difficult to get a good and permanent reproducible impression. One solution to this is to have the stamp(s) prepared by a printer on transparent film with an adhesive face so the stamp(s) may be applied to the back of the original plan.

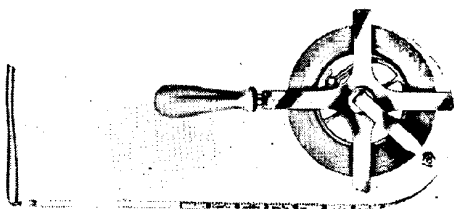
SUGGESTIONS RE OTHER SECTIONS:

1. A complete understanding of Section 23 should eliminate questions re the references to Metric (SI) units in the regulation.
- 2 Section 44(3) should be approached with the mutual understanding of all parties concerned, as this has not been the standard practice in this Province even though these rights are covered by Federal Statute. It may take time for the general public to become aware of and accept this practice.

* * * * *

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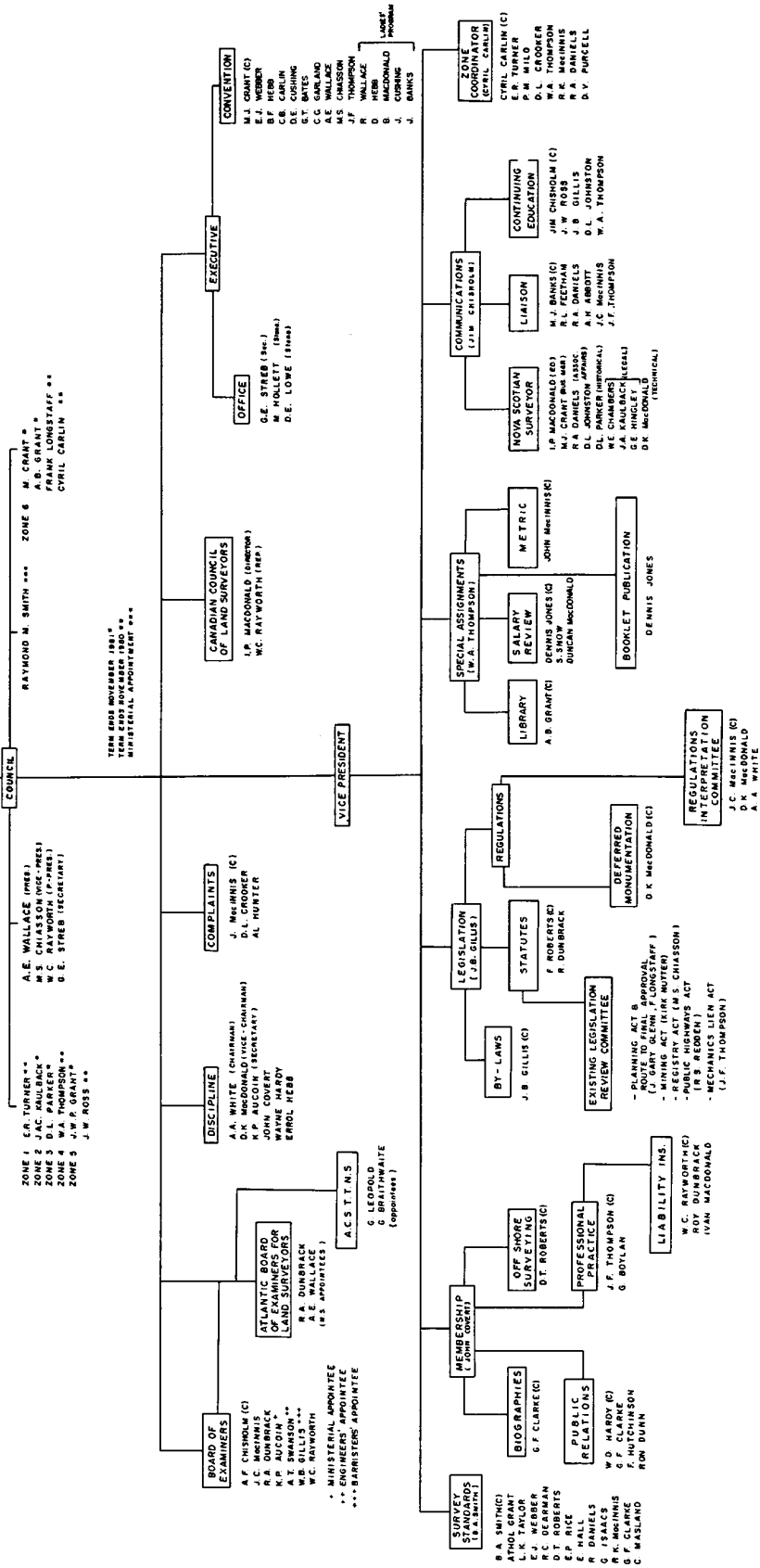
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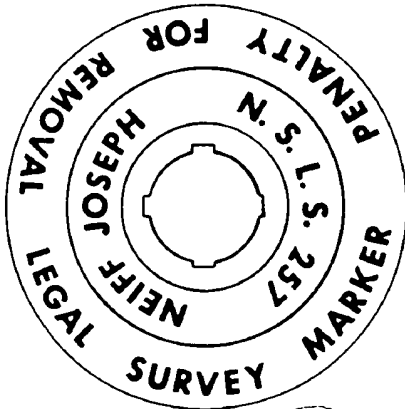
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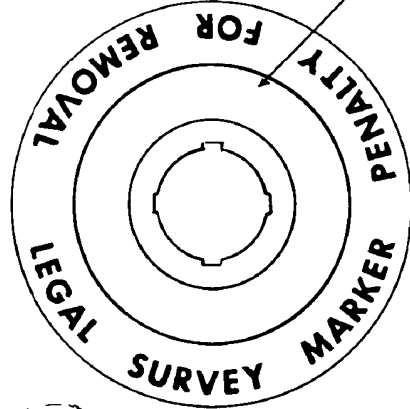


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