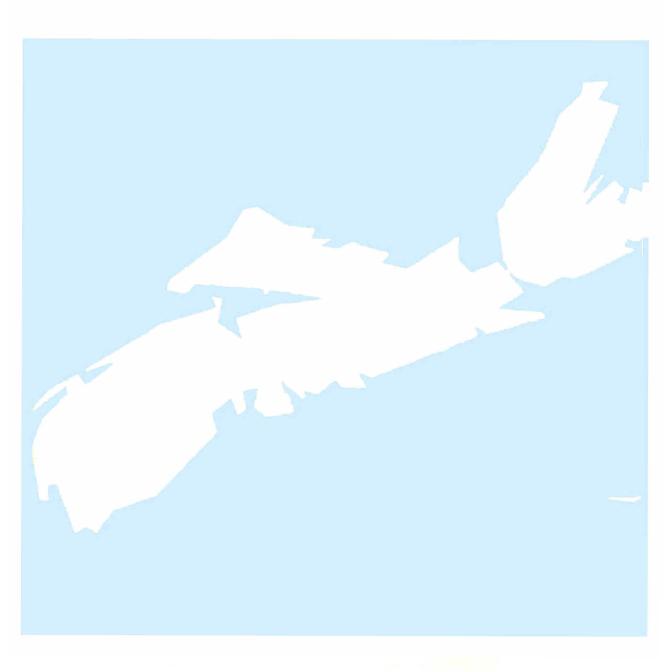
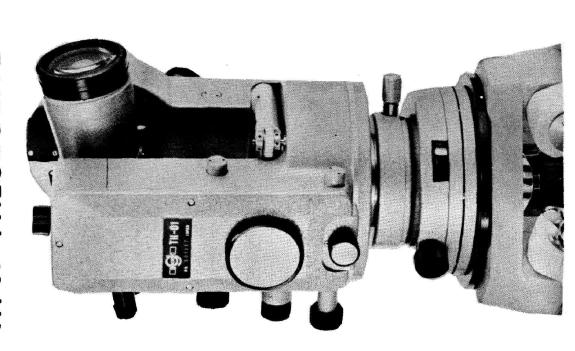
### The NOVA SCOTIAN SURVEYOR



JANUARY 1976

# TH-01- THEODOLITE

TELESCOPE



pe	Internal focussing, anallatic
	opiics
agnification power	28×
fective aperture	40mm
inimum focus	1.6m
adia	Ratio 1:100; Additional con-
	stant 0
ORIZONTAL CIRCLE	
ameter	100mm
raduation	20,
raduation of microscale	1,,

## SENSITIVITIES OF SPIRIT LEVE

Graduation of microscale

Graduation

Diameter

80mm

VERTICAL CIRCLE

Vertical circle coincidence level 30" per 2mm Plate level 20" per 2mm Circular level 10' per 2mm

# VERTICAL CIRCLE COINCIDENCE LEVEL

Manual

Type Range of coincidence level

DIMENSIONS 168mm×183mm×275mm

5.9 kg.

WEIGHT TRIPOD

353 7145 5/8" x 11" Wide Frame

PHONE OZALID-BANDA

P.O. BOX

HALIFAX N.S. UGHES-OWENS

### The NOVA SCOTIAN SURVEYOR

Published four times a year by

### THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS INCORPORATED

Ivan P. Macdonald President

Burton L. Cain Editor A.C. Krasemann Business Manager Fred C. Hutchinson Secretary-Treasurer

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

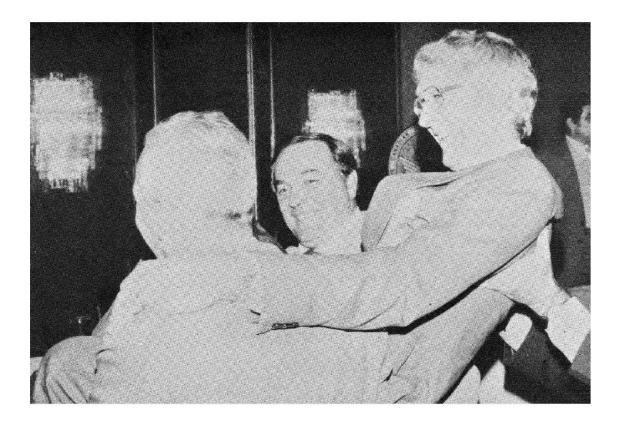
Founded 1951

Incorporated 1955

Vol 30

**JANUARY 1976** 

No. 82



### \*\* CONTENTS \*\*

Views, expressed in articles appearing in this publication, are those of the authors and not necessarily those of the Association  $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty$ 

ANTHONY C. KRASEMANN	3
PRESIDENT RICE'S REPORT	- 5
SLATE OF OFFICERS 1975-76	8
TWNETY-FIFTH ANNUAL MEETING	9
FINANCIAL STATEMENT	48
DETAILS OF EXPENDITURES	49
ACCEPTANCE OF PRESIDENCY	50
PUBLICITY	52

\* \* \* \* \*

A native of North London, England. Trained as an instrument and automatic Control Engineer with George Kent Limited and Luton Technical College.

Served in the R.A.F. from 1943 to 1947 as a Navigator Wireless Operator in Wellingtons and Mosquitos.

After the War joined the design team of Vickers Armstrong Supermarine Limited on the design of the first guided weapons carrying fighter.

Spent six years in Barbados as Works Manager of a Foundry and General Engineering Company and in 1965 immigrated to Canada.



Worked with Fairey Aviation, Nova Scotia Technical College and National Sea Products Limited prior to accepting position of Business Manager with The Association of Nova Scotia Land Surveyors.

### Nova Scotia Land Survey Institute

OPERATED BY

THE DEPARTMENT OF EDUCATION PROVINCE OF NOVA SCOTIA

CARTOGRAPHY (1 year)
PHOTOGRAMMETRY (2 years)
SURVEYING (2 years)
PROPERTY MAPPING (1 year)

FULL PARTICULARS FROM

### The Principal Nova Scotia Land Survey Institute

Lawrencetown, Nova Scotia.

**HP9815 Surveying Calculator** 

### THE NEWEST SURVEYING CALCULATOR

The HP9815 is HP's newest surveying calculator. Its price compared to performance is unparalleled for surveying computations. For example, consider these features:

### DECEPTIVELY SMALL

The small size of the 9815 is no measure of its capability. At only 13 lbs. (5.9kg) and measuring 13.6 in. x 13.5 in. x 4.0 in. (345mm x 34mm x 102mm), it is not as large as an attache case. The 9815 is almost as portable as Hewlett-Packard's hand held calculators, but has the problem solving power of a mini-computer. This unit uses little space on any desk and still retains the ability to solve the largest surveying problems.

### HIGH SPEED CASSETTE -A MAJOR TECHNOLOGICAL INNOVATION

Other than the HP9815's small size, the most visible hardware innovation is a built-in magnetic tape cassette. It is a dual track, ultra high speed cassette and operates almost 2½ times as fast as previous HP cassettes. Combining this speed with the processing ability of the calculator and the highly efficient software results in a number of features for surveying computations.

- Programs and data can be stored on the same tape -- no more tape swapping or magnetic program cards
- 2000 coordinate pairs can be stored for immediate use -- no more planning around the limitations of 50 to 300 point storage.
- Time to search the full length of the tape is only about 30 seconds. For most operations, the search time is 5 to 8 seconds or less -- no more long waits for the tape to fetch data or load programs.

 Programs or routines are loaded generally in less time than it takes to press the one or two keys to initiate the loading

 no more hunting for the magnetic program card or tape for the next routine.

### SILENT PRINTER, PROGRAM SECTION KEYS AND MORE

The cassette is only the beginning. There's the well known HP silent strip printer (2.25 in. or 57mm wide paper) that means no one else in the room is distracted or disturbed. Plus, there's full printer alpha capability for complete output identification, not just "magic" combinations of symbols to decipher. The keyboard has full trigonometric capability plus 15 special function keys. These special keys are used as program and routine loading keys. Pressing a special function key accesses and starts a program or routine. Each key is easily identified by a template which slips over the block of 15 keys.

The HP9815 has an auto start mode which, at turn-on, automatically loads the first file and runs it. This is just another feature which reduces the training time. Just turn the calculator on and select the program or routine by pressing a special function key.

### SOFTWARE DESIGNED FOR EASE OF USE

The surveying library is divided into two groups of programs. The primary group is for field data reduction (traverse, or location and detail work) followed by coordinate geometry design and layout programs. The second group handles most of the popular secondary programs which surveyors have requested over the past few years.

Ease of use is as important in software design as capability. For example, consider some ease of use features:

- Each program has a unique self-guiding display so the user always knows which step he's on.
- The number of program steps are minimized and the routines generalized to optimize the speed and efficiency of using the system.
- The user is never forced to write down any intermediate answers or repeatedly reenter data. For example, recall capability for previously calculated parameters such as bearings is provided.
- Movement between programs and routines is fast and convenient. Each uses data calculated and stored by the previous one.
- Modifications are provided to customize the programs to make output match specific needs or speed computations by eliminating features rarely used in your organization.
- Extensive error checking is done on data entries to catch miskeyed data before it is used in computations.

HEWLETT PACKARD (CANADA) LTD.

800 WINDMILL ROAD, DARTMOUTH, N.S. 467-7820

### \*\* PRESIDENT RICE'S REPORT \*\*

It is indeed an honour and privilege for me to have been the President of this Association during the past year and to be here today to preside over this our 25th Annual Meeting. I wish to thank all the members for coming to the meeting in such large numbers and also to our guests and visitors who have travelled for some distance to be with us today and share in our deliberations and festivities.

At this time I wish to render an account to you of my tenure of office and the activities of Council. You have already heard the reports of the various committees and I need not repeat their activities here except to say that I am pleased with the progress that has been made during the past year. Two years ago at an annual meeting in Dartmouth I stated that it would take three years to see the results of the restructuring of committees. I believe you will agree that we are seeing results already with such projects as, the Land Survey Brochure and Salary Study by the Protection Committee; Publication of The Nova Scotian Surveyor, and Liaison with the Association of Professional Engineers of Nova Scotia by the Communications group; a new revised Act is ready for the Legislative, speakers have been provided for service clubs and, the resolving of complaints has been a project of the Public Service group. Projects are underway by the Survey Standards group to raise the educational requirements and to prepare a new set of regulations. More projects will be undertaken and completed by the end of the third year along with new faces on the committees. I would certainly recommend that the committee structure and Workshops be maintained by the incoming executive for the betterment of the Association and to provide a better service to the public.

During the year, four regular Council Meetings were held plus three special meetings for a total of seven. These meetings, as in the past, were normally one day sessions held on Saturday. As the volume of business continues to increase, consideration will soon have to be given to regular monthly Council Meetings. To the members of Council, I thank you for your assistance, cooperation, support and near-perfect attendance. The business of Council during the year has been published in The Nova Scotian Surveyor.

During the past year it was my privilege to represent you at three provincial Associations and the Canadian Institute of Surveying Annual Meeting in June. In January I attended the meeting of the New Brunswick Land Surveyors in St. John, New Brunswick and in February the Ontario Land Surveyors Meeting in Sudbury. These I reported on in The Nova Scotian Surveyor. In June I attended the Quebec Land Surveyors meeting and the C.I.S. meeting in Fredericton. At all places I was very well received and I assure you that as Nova Scotia Land Surveyors you are held in high esteen by our sister Associations. Vice-President, Ivan Macdonald, represented the Association in Prince Edward Island in June and, in Massachusetts in October. In May, Councillor Keith AuCoin, while attending a Maritime meeting on Education in St. John's, Newfoundland, also represented us at the Newfoundland Land Surveyors meeting in St.John's, Newfoundland. There are two events taking place in our Sister can affect us in the future. In Ontario a vote is present-Associations which ly taking place on restructuring to include other disciplines of surveying such as photogrammatry, hydrography, and cartography. The feeling I got at the meeting was a 50 - 50 split and the vote could go either way. I might point out that the Quebec Land Surveyors have already restructured and these disciplines come under their Association. The second event which is taking place, commenced at the Quebec Land Surveyors meeting when their Minister of Lands and Forests announced the formation of a Crown Corporation of Cartography. It was the view of the government that this was in the best interest of the public, because the private sector was not meeting the full requirements. I could not help but think that similar action could be taken in Nova Scotia, if we do not continue to meet the requirements of industry and the public.

The most rewarding events for me during the past year has been to attend the meetings of Provincial Presidents. Two were held during the year, the first one prior to the Canadian Institute of Surveying meeting in Fredericton. At that time a working agreement between C.I.S. and the C.C.L.S. was approved by both the C.I.S. and the Presidents. It is now hoped that letters patent will be obtained

by the end of 1975, and that the Canadian Council of Land Surveyors will become a reality. At our October meeting in Ottawa, a resolution was passed authorizing the first projects for C.C.L.S. and in order of priority they are: 1) approach to Federal Government to stop requesting bids for legal surveys of federal property. In particular the approach will be to the Department of Public Works. 2) Standardization of Education requirements across Canada, and 3) Reciprocity.

A meeting is scheduled to be held within one month of receiving letters patent to organize and commence work on the projects. All other Presidents attending the meetings were very enthused and I am sure the Canadian Council of Land Surveyors will benefit all Associations and all land surveyors.

Over these 2 days many things will be said about our past 25 years. There is no doubt that much progress has been made since the first meeting was held in 1951. It is great that we can reminisce on the past but we must look forward to the future and ask ourselves, where dowe go from here? Although I have no crystal ball to tell me the status of this Association and Nova Scotia Land Surveyors ten or twenty-five years from now, it is my opinion that the educational requirements for Nova Scotia Land Surveyors will be at the University degree level or equivalent. With the advent of new and modern technology and the increase in educational requirements for survey technicians and technologists, I firmly believe that this is the route we must go. It is also my view and the view of Council that, to be fully accepted as professionals by society, then the degree is a must.

As for the Association - where will it be in the future - this depends on each and every one of us as members and especially the newer members. It depends on how much we want to put into it. The more we put into the Association, both financially and with voluntary work, the more we will get out of it. I do not see the Association increasing in any great numbers for some time due to the increase in educational requirements, however, once the proposed new Act is approved by the Legislature, I would expect that we will pick up some land surveyors who are not now members which will offset those we may lose due to increase in dues. The Association in the future must be a greater vehicle of service to the public. We must work towards better informing the general public as to: 1) when they need a survey, (2) how to go about engaging the services of a land surveyor, and (3) what to expect from a land surveyor. If this can be accomplished then we will hopefully have fewer complaints, because most of the complaints today are a result of a misunderstanding between client and surveyor or no understanding at all. Along with this we must continue to strive as individuals to self-discipline ourselves to the rules and regulations of our Association.

To sum up, I see our Association in the future maintaining our strength in numbers, increasing our basic educational requirements to the University degree level, and being of greater service to the public while maintaining protection for its members. I am sure that from within our ranks, now and in the future, surveyors will come forward to serve this Association so that it will some day fully meet the purposes for which it was founded, "service to the public and protection for its members".

I would like to thank all the members for the support and help you have given me during the past year. To the committees, chairmen and co-ordinators, thank you for all the work and time you have put into making this a successful year. I wish to thank all the members of Council for the support and guidance I received during the year. The work load was very heavy with the new Act, new Regulations, higher educational requirements, the hiring of our Business Manager and discipline cases to contend with. I would like to thank our Secretary-Treasurer, Garnet Clarke and our Business Manager, Tony Krasemann, for their efforts and work during the year. I would especially like to thank my Vice-President, Ivan Macdonald, who bridged the 100 mile gap between New Glasgow and Halifax for me and who also virtually took over my responsibilities for a period of eight weeks during the months of August and September.

My final, thank you, goes to the Convention Committee under the direction of Al Daykin for making this meeting a success.



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

This marker has won approval from professional Land Surveyors in the Maritime Provinces and in the U.S.A. Also in departments of federal and provincial governments - utilities and municipalities.

### SURVEY MARKER



Customized heads, bearing the initials or registry number of the individual may be supplied, but time must be allowed for manufacture.

Proven by years of use Enheat Surveyors Markers are now in use all across Canada and internationally from the Arctic Islands to the islands of the Pacific.

Another New Service From

### ENHEAT STEEL DIVISION

Manufactured By

Enamel & Heating Products Limited
AMHERST, N. S.



Atlantic Air Survey

Now with four mapping instruments two Wild B8's & Wild A8 Zeiss Stereometrograph and a large staff of mapping specialists. Drop in to see our new facilities at 650 Windmill Road, Burnside Park, Dartmouth, N.S

PRECISION COPY CAMERA AND ENLARGER

FULLY AUTOMATIC FILM PROCESSING AERIAL PHOTOGRAPHY TOPOGRAPHIC MAPPING ORTHOPHOTO MAPPING GESTALT SERVICE CENTRE FOR CANADA

ATLANTIC AIR SURVEY LIMITED P.O. Box 187, Dartmouth, N.S. 469-7901

### The Cooper Group

CRESCENT: LUFKIN: NICHOLSON: WELLER: XCELITE



Lufkin measuring tapes and rules with English and Metric graduations. Complete line of engineering and surveying tapes and accessories. For further information or catalogue contact:

The Cooper Tool Group Limited 164 Innisfil St. Barrie, Ontario L4M 4V5 Telephone (705) 728-5564

### THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

### SLATE OF OFFICERS 1975-76

PRESIDENTIvan P. Macdonald	39 Doull Avenue, Halifax, N. S.	H-477-1930 0-835-9955
PAST PRESIDENTEdward P. Rice	238 Elm Street, New Glasgow, N. S.	H-752-8291 0-755-3155
VICE-PRESIDENTKeith P. AuCoin	P. O. Box 1046, Windsor, N. S.	H-798-2963 0-424-3234
SECRETARY-TREASURERFred C. Hutchinson	149 Amaranth Dr., Dartmouth, N. S.	H-434-4659 0-469-9211
COUNCILLORS		
HALIFAX CITY *Doug MacDonald	47 Brook Street, Halifax, N. S.	H-477-7985 0-455-1537
**Stewart Cameron	21 Parmbelle Lane, Halifax, N. S.	H-443-3133 0-426-7665
HALIFAX COUNTY *Burton L. Cain	R. R. #7, Amherst, Cumb. Co., N. S.	H-667-7347 0-667-3818
**Allison B. Grant	13 Marilyn Drive, Dartmouth, N. S.	H-469-7661
WESTERN NOVA SCOTIA *Ronald C. Dearman	l Elm Street, Yarmouth, N. S.	H-742-7093 0-742-8960
**Brian D. Peel	R. R. #3, Waterville, Kings Co., N. S.	H-538-9826
EASTERN NOVA SCOTIA *Walter C. Rayworth	73 Spring Street, Amherst, N. S.	0-667-2017
**David T. Roberts	P. O. Box 300, Parrsboro, N. S.	0-254-2273
CAPE BRETON *Lewis O. Smith	P. O. Box 105, Port Hastings, N.S.	H-625-1516 0-625-2460
**Athol C. Grant	18 Mt. Pleasant Ave., Dartmouth, N. S.	H-463-2710 0-466-3486
COUNCILLORS-AT-LARGE *David R. Hiltz	21 Stevens Rd., Dartmouth, N. S.	H-434-0784 0-424-5803
**Marcellin Chiasson	17 Birchwood Crt., Port Hawkesbury, N.S. BOE 2VO.	H-625-1811

<sup>\*</sup> Term ends November 1976 \*\* Term ends November 1977

### THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

### TWENTY-FIFTH ANNUAL MEETING

### CHATEAU HALIFAX, HALIFAX, N. S.

### NOVEMBER 13, 14, 15, 1975

The Twenty-Fifth Annual Meeting of The Association of Nova Scotia Land Surveyors was graciously opened on Friday, November 14, 1975, by their Honours the Mayors of Dartmouth and Halifax. The Association President, Mr. Ed Rice, formally introduced them to the meeting and suggested that since we were in Halifax it would be appropriate if Mayor Morris of Halifax gave his speech first. Amid considerable banter His Worship refused this invitation saying that not only did ladies come first but it was also "Women's Lib Year". Lady Mayoress, Eileen Stubbs, commented that she doubted Mayor Morris' intentions in speaking second - she was certain that the main reason was that Mayor Morris wanted to make fun of Her Worships' remarks.

After considerable hilarity on the parts of both Mayors the meeting was formally declared open and the ribbon was cut to open the exhibition area in which both cities had an exhibit.

We of the Association wish to thank their Worships for their presence in our midst and for the honor of opening the Twenty-Fifth Silver Anniversary Annual Meeting, a happy beginning augured well for the rest of the proceedings.

### MINUTES

### FRIDAY, NOVEMBER 14, 1975 - 10:30 A.M.

President, E.P. Rice, called the Twenty-Fifth Annual Meeting to order and introduced the guests and visitors as follows:

Tom MacCullough - President, Canadian Institute of Surveying - Burlington

Dave Slessor - Surveyor General of Canada - Ottawa

Ed Anderson - Treasurer, M.A.L.S.C.E.

John Halnon - Secretary, M.A.L.S.C.E.

Jack Hill - President, Alberta Land Surveyors Association

Eric Topple - President, Association of New Brunswick Land Surveyors

Angus Hamilton - University of New Brunswick

Carl MacDonald - Vice-President, Association of Prince Edward Island Land

Surveyors

Willis Roberts - Executive Director, Land Registration and Information

Services, Fredericton

Bob Wiffen - President, Association of Newfoundland Land Surveyors

Tom Aylward - Secretary, Association of Newfoundland Land Surveyors

Llewellyn Schofield - Past President, M.A.L.S.C.E. and Honourary Member of The Association of Nova Scotia Land Surveyors

George T. Bates - Honourary Member - N.S.L.S.

Rusty March - Honourary Member - N.S.L.S.

Eric Millard - Honourary Member - N.S.L.S.

Rejean Blanchet - Secretary, The Quebec Land Surveyors Association

Donald MacQuarrie - Department of Energy, Mines and Resources - Ottawa

John Brown - Department of Energy, Mines and Resources - Ottawa

Archie MacLaughlin - New Brunswick Department of Natural Resources - Fredericton

Don Thompson - University of New Brunswick, Engineering Department.

President Rice asked the members to stand for a moment of silence for two of our Life Members, Mr. Fred Saltman and Mr. Ralph Kendall, who passed away during the year.

### MINUTES OF THE TWENTY-FOURTH ANNUAL MEETING

The President called on the Secretary-Treasurer, Mr. G.F. Clarke, to read the minutes of the Twenty-Fourth Annual Meeting. It was moved by G. F. Clarke and seconded by George T. Bates that the minutes of the Twenty-Fourth Annual Meeting be adopted as written and distributed. Motion carried.

 $\hbox{ President Rice introduced the Executive and Council Members to the member-ship. } \\$ 

### SECRETARY-TREASURER'S REPORT AND FINANCIAL REPORT - G. F. Clarke

This year has seen quite a high level of activity. One accomplishment was the approval of our proposed new Act by the membership which has been presented to the Legislative Council for their perusal.

During the year there were seven Council Meetings held November 9, 1974; December 7, 1974; March 15, 1975; May 31, 1975; September 20, 1975; October 18, 1975 and November 13, 1975.

Two Workshops were held on December 7, 1974 and May 3, 1975.

The membership statistics for the year are as follows:

New Members	14
Regular Members	251
Non Practicing Members	23
Associate Members	2
Life Members	13
Honourary Members	7
Arrears	<u>23</u>
TOTAL	318

A number of Regional Meetings were held throughout the province and the reports will be given later on in the meeting.

You will note on the Financial Report that due to a higher level of activity our expenditures are much higher than previous years. Our receipts for the year 1974 were a total of \$18,570.26 and, for the year 1975 they were \$24,127.50. Last year we had a total expenditure of \$11,549.29 and for 1975 \$30,564.25. This is about two and one-half times as much. This reflects the increased activity of the Association. (See Financial Report on Page 48).

It was moved by D. K. MacDonald and seconded by Bill Thompson that the Secretary-Treasurer's report and the Financial Report as presented and distributed to the meeting be adopted. Motion carried.

### SCRUTINEERS REPORT - G. F. Clarke

Two hundred and ninety-four ballots were prepared and only 244 ballots were delivered because of the mail situation. One hundred and eight ballots were returned for a percentage of 44%.

The following is the results of the election:

President - I. P. Macdonald Vice President - K. P. AuCoin Secretary-Treasurer - F. C. Hutchinson

Councillors:

Halifax City - S. W. E. Cameron
Halifax County - A. B. Grant
Western Nova Scotia - B. D. Peel
Eastern Nova Scotia - D. T. Roberts
Cape Breton - A. C. Grant
Councillor at Large - M. S. Chiasson.

It was moved by G. F. Clarke and seconded by L. R. Feetham that the Scrutineers report be adopted as presented. Motion carried.

### RESOLUTION COMMITTEE - G. F. Clarke

One resolution is presented for approval by the members at this meeting:

"Be it resolved that the annual fee for membership in The Association of Nova Scotia Land Surveyors be increased from \$50.00 to \$150.00 per year."

A short discussion period took place as follows:

Mr. Rusty March - years ago the daily charge was \$10.00 and the dues were \$10.00 a year. The proposed annual dues now would be possibly a bit more than a day's pay for some of the members.

Tom Swanson - questioned that at last year's Annual Meeting there was an expenditure of \$5,500.00 but the proposed expenditure of this year's Annual Meeting increased by \$1,000.00 and asked if this was realistic.

Ed Rice - one reason why we charged the 10.00 registration fee was to cut down on costs.

Don Eldridge - I fully realize the value of having a full time Manager for an Association such as this and I am very glad to see that we could come to the point where we now have a full time Manager. There are one or two items that I would like to bring to your attention in bringing a proposal like this before an organization such as this. This is a momentous move on the part of the Association to jump from \$30.00 dues to \$150.00 dues. I suspect strongly that those who are full-time employed in land surveying this will not bother very much but it will create a temporary hardship for those people who are working for government and are having their dues paid by government. This kind of thing was not introduced into their budgets and it could well mean that those who are having their dues now paid by government will probably have to foot this kind of bill themselves. This is a good move but a tremendous jump and it may cause a little bit of a hardship and I suspect that you are a little low in assuming that you possibly may only lose something like 40 members.

Ed Rice - I would like to point out that the official dues of the Association at this time are \$30.00 plus a special levy which makes a total for the year of \$50.00.

BOARD OF EXAMINERS - J. F. Archibald, Secretary - A. F. Chisholm, Chairman

The members of the Board of Examiners for the year ending October 31, 1975 were as follows:

- Prof. A. F. Chisholm, P. Eng., N.S.L.S., Chairman
- E. P. Rice, N.S.L.S., President The Association of Nova Scotia Land Surveyors
- H. B. Robertson, N.S.L.S., representing the Deputy Minister, Department of Lands and Forests
- Arthur H. Abbott, P. Eng., N.S.L.S., appointee of the Association of Professional Engineers of Nova Scotia term ending June 1975
- A. T. Swanson, P. Eng., N.S.L.S., the Association of Professional Engineers of Nova Scotia, succeeding Mr. Abbott as the new appointee

Roy A. Dunbrack, N.S.L.S.,

J. F. Archibald, N.S.L.S.

The Board held four regular meetings during the past year. Also one special meeting was held with the Regulations Committee of the Association of Nova Scotia Land Surveyors' Council.

A second special meeting was scheduled to be held prior to the 1975 Annual Meeting.

Examinations were held on December 18, 19 and 20, 1974 and May 20, 21 and 22, 1975, in which some 71 candidates wrote one or more subjects with the success ratio being 64% for the Intermediate candidates and 49% for the Final candidates.

During the year the following twelve candidates completed their final examinations and supplied the necessary affidavits in respect to their surveyor-intraining period to the satisfaction of the Board as of the dates indicated below:

Name	Residence	<u>Date</u>
Wayne D. Hardy	Sydney	Dec. 11, 1974
Paul C. Stone	Dartmouth	Dec. 11, 1974
Clinton Curtis Garland	Dartmouth	Apr. 15, 1975
George Robert Sellers	Elmsdale	Apr. 15, 1975
Lloyd Kenneth Taylor	North Lochaber	Apr. 15, 1975
Stephen O. Vaughn	Halifax	Apr. 15, 1975
Daniel B. Burke	Amherst	July 15, 1975
Robert R. Wentzell	Halifax	July 15, 1975
Roderick K. MacInnis	Dartmouth	Sept. 15, 1975
Christopher P. Masland	Chester Basin	Oct. 15, 1975
Richard J. Surette	Windsor	Oct. 15, 1975
Lorne Paul Zinck	Halifax	Oct. 31, 1975

### A. F. CHISHOLM'S REMARKS TO 25TH ANNUAL MEETING

Again, it has been a pleasure to have served you during the past year, a year that was noteworthy in some ways, routine in others. Perhaps noteworthy because of the routine, for after a good many years there is evolving a routine procedure for handling the applications of would-be surveyors.

Let me list the routine now being observed; all applicants must complete a form prior to or coincident with the beginning of their apprenticeship or period of on-the-job training. A form has evolved for recording of all pertinent data relative to the history (in so far as we are concerned) of each candidate.

The year brought an important change - the first several applications for approval of a topic for the new requirement - a technical report, a thesis if you like. The first technical reports were received and were approved by the Board. One in particular was of extremely high quality, although interestingly both had a number of pen corrections, of spelling, grammar or added punctuation. I am frankly annoyed that in presenting such a report a candidate would permit it to be presented with that sort of hand corrections. The reports could also be improved by better arrangement of material. While obviously we cannot expect the candidate to be an accomplished writer and author, one does expect that the mechanical part, the typing, the spelling would be perfect.

I would like to recognize the other Board Members: -

Perennial Joe Archibald - Secretary - superlatives don't describe this mild-mannered man.

President Ed Rice - first year man - made an outstanding contribution.

Roy Dunbrack - another old-timer who as usual contributes more than his share.

Bert Robertson - sitting in for the Deputy Minister - listens mostly, but when he speaks, then it is our turn to listen for he will have something to say.

APENS representative. Up to their annual meeting held in June it was Art Abbott, an able representative and very interested and involved in our affairs; since June, Tom Swanson - Tom is bringing a fresh outlook, maybe in some respects unorthodox but he is obviously a shrewd person who will contribute to our work and be a credit to APENS.

As you may have guessed, I amindeed satisfied and pleased with the Board of Examiners. One obviously does not know for how much longer the Board will continue in its present format - it's due for a change, if and when the constitution is changed by the Nova Scotia Legislature.

I regret that I was unable to be here in person to present this report.

It was moved by J. F. Archibald and seconded by R. A. Dunbrack that the Board of Examiners' report be adopted. Motion carried.

Mr. Rice explained to the membership that this year the new members were given a conditional license to practice until tomorrow night at which time they will receive their certificates at a ceremony during the Banquet.

### NOVA SCOTIA LAND SURVEY INSTITUTE - Phil Milo

This has been a very eventful and busy year for the Institute.

We moved into our new building in April with normal graduation exercises being conducted in May. Our new quarters consist of some 60,000 square feet of floor space set within 260 acres of real estate.

Our building was officially opened by the Minister of Education, Dr. William Gillis and the Minister of Finance, Mr. Peter Nicholson, on October 17, 1975. This was a beautiful autumn day and we were pleased to have with us so many friends from near and far. Dr. Gillis unveiled a plaque commemorating the great contribution made to the Institute by the late J. A. H. Church.

It will be the policy of the Institute to endeavour to serve the community of Lawrencetown and district with its facilities in addition to providing regular programs and training for students in surveying and mapping.

At the moment the Institute offers the following programs:

Survey	graduating 1976	32
Survey	graduating 1977	41
Photogrammetry	graduating 1976	5
Photogrammetry	graduating 1977	7
Cartography	graduating 1976	19
Property Mapping	graduating 1976	16
Survey Assistant	graduating 1976	8.

Things have changed quite a bit since J. A. H. Church began the Institute as one instructor with one class. The instructional, administrative and maintenance staff now total 16.

At the beginning of October the Institute organized and offered a 2 1/2 day seminar on remote sensing. This was designed to show those of us who are not expert in this field the general state of the art at the present time. We think the seminar went well and was useful to the 75 or 80 in attendance.

At the moment weare arranging a one-day seminar on Surveying in Integrated Areas to be offered on Thursday, January 29, 1976. This presentation will be made by Messrs. P. Kierstead and A. W. McLaughlin under the sponsorship of the Land Registration and Information Service, Fredericton. This seminar is being offered primarily for the benefit of surveyors in western Nova Scotia.

- G. E. Streb retired on October 31, 1975 from his position as Assistant Director of Adult Education. He served the Institute directly as Principal from 1963 to 1968. Subsequently in his work with the Department of Education he continued as a good friend and wise counsellor.
- It is apparent from the new building and grounds furnished for the Institute that we continue to enjoy the wholehearted support and encouragement of the Department of Education, Government of Nova Scotia. Our immediate links with the Department are Messrs. E. A. Green, C. J. Williams and H. P. Timmons. We record here our thanks to them for their endeavours on our behalf.

It was moved by Phil Milo and seconded by Tom Swanson that the Nova Scotia Land Survey Institute report be adopted. Motion carried.

### DISCIPLINE COMMITTEE - Ivan P. Macdonald

The Discipline Committee which has served for the past year was appointed from the new Council immediately following the 24th Annual Meeting.

The committee consisted of:

Ivan P. Macdonald - Vice President, Chairman

A. E. Wallace - Vice Chairman

B. L. Cain - Recording Secretary

V. J. Comeau

R. C. Dearman

D. R. Hiltz

D. K. MacDonald

C. J. MacLellan.

The Complaints Committee referred two complaints to the Discipline Committee in January 1975 because through the normal process of investigation the complaints were not settled to the full satisfaction of all parties concerned.

The complaints are summarized as follows:

- 1. One Surveyor had six separate complaints against him:
  - a) paid for work not performed
  - b) surveyor-client and second surveyor communication problem
  - c) client's plans and papers not returned
  - d) excessive time lapse between time of survey and producing survey plan
  - e) insufficient subdivision plan and legal descriptions not consistent with plan
  - f) failure to correct error in survey to satisfaction of client and Department of Lands and Forests
- 2. Another surveyor had a complaint against him when he became increasingly involved in a survey of a property which was conveyed by tax deed but never located on the ground. At first the client request was for a surveyor's certificate for Mortgage purposes, then requested placement of survey markers and finally to supply plan for registration. The time lapse between the time of the survey and production of a survey plan resulted in a client-surveyor communication problem.

On February 1, 1975 the Discipline Committee met and acquainted themselves with the outstanding complaints. It was evident that the complaints were serious enough towarrant action. We engaged the services of Arthur R. Donahoe as our legal counsel, and requested that he attend our next meeting which was held on February 13th.

The meeting turned out to be an information meeting because the required committee quorum was not present and we could not discuss details of the complaints. Another meeting was planned and held on March 3, 1975 with a quorum present. This meeting directed the chairman to contact Mr. Donahoe and begin proceedings to hold a hearing with the first mentioned surveyor and all the interested parties. As a result of our legal counsel contacting all complaintants by letter and with a carbon copy to the surveyor, most of the complaints were satisfied. The hearing was temporarily called off because four of the initial complaints were satisfied. To date there are still two outstanding complaints which require further action by this surveyor.

Surveyor number two, has after many letters and telephone conservations, satisfied the complaintant by producing a survey plan sufficient to be filed in the Office of the Registrar of Deeds in the name of the land owner. This satisfactory action took place at the end of October 1975.

A complaint against a third surveyor has been referred to the Discipline Committee for the poor quality of work on the plans he signed and standard of field work which apparently lacks proper supervision. The complaintant stating that possibly the surveyor's competency as a Nova Scotia Land Surveyor should be questioned.

This latter complaint was supported by copies of plans and computer tape of closures and other calculations often different surveys which are questionable. For each of the committee members to study this material, it required circulating the one original set of supporting copies of plans and computer tape around to the members.

The committee had a final meeting on October 18, 1975 and concluded that a hearing be held for the two outstanding complaints.

Our Legal Counsel, Mr. Donahoe, stated that the Nova Scotia Land Surveyors Act does not make provision for a carryover of Discipline Committee members from one year to another, and, therefore, it would not be advantageous for the 1975 committee to start hearings because they would not be completed before a new committee was appointed from the new Council.

Mr. Donahoe is preparing a written procedure according to our Act, which must be followed in the process of holding hearings and making recommendations to Council to discipline a member surveyor.

The 1976 Discipline Committee will berequired to study the two outstanding complaints and act as they see fit. We, the 1975 Committee, offer our support and knowledge to assist the new committee so they may act as soon as possible.

The Committee wishes to thank all those members who contributed information and, in particular, Marcellin S. Chiasson for his interest in this important aspect of our Association work.

It was moved by Ivan P. Macdonald and seconded by Phil Milo that the Discipline Committee report be adopted.

Roy Dunbrack - I am very pleased to see that the Discipline Committee is taking some concrete direction. We have over the last number of years been saturated with a number of complaints, most of which have never been taken to a conclusion. I just hope that the Discipline Committee will carry these through to their conclusion. When you spoke of your legal counsel in drafting of procedures - I just wondered if the procedures that you are coming up with our in line with the proposed new Act?

Ivan Macdonald - no, he is going to interpret the proceedings as written in our Act at the present time, and these are the ones that we have to follow at the present. These are not clear cut procedures that may be to our advantage because we can recommend a variety of things which, if maybe the disciplinary procedures are too precise, it will not give us enough leeway to work out our problem.

Motion carried.

12:00 - RECESS FOR CIS LUNCHEON - Honouring International Women's Year

### 2:00 P.M. - COMMITTEE REPORTS

### PROTECTION COMMITTEE - J. S. POPE, CHAIRMAN

### PRIVATE PRACTICE - C. J. MacLellan

February 20, 1975 - All private practicing surveyors of Nova Scotia were invited to attend a meeting at the Nova Scotia Power Corporation Rooms in Halifax. Approximately twenty were in attendance. Discussions concerned the following:

Schedule of Fees - The revised Schedule of Fees as presented to the Annual Meeting was approved subject to one clarification, viz: the factor of 2.5 shall apply to the hourly rate paid to the employees and not to the hourly payroll costs of the employee.

The negotiating procedure as set up by the Private Practice Committee with L.R.I.S. was approved. The ARDA III program was discussed and it was agreed that we should endeavor to meet with the proper authorities so that we would have some input to the writing of the new program. The meeting adjourned without discussing remaining items on the agenda including negotiating procedures with Nova Scotia Housing Commission, percolation tests, new planning regulations, etc.

May 12, 1974 - A meeting was held at Truro with representatives of the Nova Scotia Department of Lands and Forests to discuss the ARDA III program. The meeting was very information. Evidently, the average cost per mile for establishing woods, boundaries in Nova Scotia varies greatly. The problem seems to be in establishing an acceptable standard for establishing woods boundaries and a follow up procedure to assure that the standards are being maintained. The Department of Lands and Forests agreed to appoint two people to work on a Committee with the Private Practice Committee to establish an acceptable standard and inspection of wood lot boundaries.

June 4, 1975 - A meeting was held in Antigonish with two representatives from Lands and Forests to discuss standards for establishing wood lot boundaries. A suggested standard was agreed upon and forwarded to Nova Scotia Department of Lands and Forests.

July 15, 1975 - A meeting was held at Bridgewater. Items discussed were as follows:

Problems of surveyors certifying work done by unqualified people. Generally existing negotiating procedures with L.R.I.S. and Nova Scotia Housing Commission were considered acceptable except possibly in the Halifax area. It was observed that Department of Lands and Forests "farm out" little, if any, survey work. This could be for budgetary reasons; however, perhaps we could do more to make them aware of services available from the private sector. It was suggested that the Regulations Committee should conduct regional meetings, similar to that conducted by the Act Revision Committee to explain proposed changes.

It was agreed that strict implementation of survey regulations is the best way of maintaining good survey standards and is a good basis for disciplining surveyors who are certifying plans prepared by unqualified people and depicting substandard work.

After considerable discussion itwas agreed that it was very difficult to impose set rates for all areas of the province for such things as mortgage certificates, stake outs, etc.

July 16, 1975 - A letter was written to the Association Chairman expressing concern over lack of action in dealing with regulation infractions.

August 28, 1975 - A meeting was held at Sydney. Discussion was as follows:

The L.R.I.S. bulletin should include information pertaining to standards, trends concerning property mapping, etc. in addition to upcoming projects. It was suggested that the newly appointed Relations Committee could provide more input to local planning committees throughout the Province. The Association should sponsor more upgrading courses; perhaps at some central location such as Truro; copies of new survey rates should be distributed to all surveyors; an advertisement should be run in various newspapers from time to time listing the names of all Private Practicing Surveyors.

September 11, 1975 - A meeting was held in Truro. Discussion was as follows:

ARDA III program - the main problem is lack of enforcement of survey standards. Schedule of Fees - it was agreed that the minimum fee for a mortgage certificate (even if only in letter form) shall be Seventy Five Dollars. It was also agreed that clients should be charged a minimum hourly rate of Twenty Dollars for a licensed Nova Scotia Land Surveyor. All EDM equipment, etc. would be extra.

The Association should hold short courses, seminars, etc. suited to the particular needs of the ordinary land surveyor. This could include lists of suitable text books, information pertaining to coordinate systems, etc.

Considerable discussion concerned regulations. It was suggested that a special meeting be held between the Regulations Committee and Private Practicing Surveyors to discuss regulations. This meeting could run one or two days and perhaps invitations could be extended to Mr. Archie MacLaughlin, former Director of Surveys, Province of New Brunswick and Mr. Willis Roberts of L.R.I.S.

Private Practicing Surveyors are continuously coping with regulations designed by various government departments. We hope that this Committee will eventually obtain a concensus of opinion from the various meetings and present a brief to the appropriate government department.

Our meeting with the Department of Lands and Forests to discuss the ARDA III program was very helpful and this Committee should have done more as a follow up. We are certain that meetings with representatives from L.R.I.S., Department of Municipal Affairs, Department of Health and other government departments would be helpful to all concerned.

In conclusion, we recommend the following:

- 1) Since one of the major problems facing not only the members in Private Practice but this whole Association seems to be the lack of an acceptable standard of surveying, we cannot continue to wait and let various planning authorities and government agencies set regulations governing standards for this Association. More emphasis, therefore, must be placed on the establishment of acceptable regulations and the enforcement of same. This step is mandatory if we, as an Association, wish to continue as an independent body.
- 2) That the Schedule of Minimum Fees, as presented to the Annual Meeting last November, be accepted.
- 3) That all licensed surveyors be invited to participate in Private Practice Committee meetings.

It was moved by C. J. MacLellan and seconded by Ed Hingley that the Private Practice report be adopted. Motion carried.

### SALARY REVIEW COMMITTEE - S. E. MacPhee

There were 111 replies from the Questionnaire that was sent out. We have three or four proposed changes to the review Questionnaire. These generally are a further breakdown of some of the sections that were on the existing Questionnaire. The average income from the 111 Questionnaires that were received was \$13,590.00 per year. This does not include extra income such as profit-sharing or whatever and I might add that the proposed annual dues of \$150.00 or 1.1% of that \$13,590.

### COMMUNICATIONS - CHAIRMAN, W. E. SERVANT

### THE NOVA SCOTIAN SURVEYOR - B. L. Cain

During the past year we have met our main objective which was the publication of four issues, all of which were published on time; however, due to the mail strike the October issue could not be circulated.

We are presently printing 400 copies of each issue, with an actual mail-out of about 360.

In these days of inflation, one of our big concerns is cost, with printing costs increasing about 50% in the past two years. Through the efforts of our Business Manager, Bob Daniels, and the assistance of Mike Crant, four more advertizers were added to our list this year with the number of advertizers at an alltime high. Effective in July, our advertizing rates were increased approximately 30%; however, due to our limited circulation, we did not feel that an increase equal

to that in our printing costs could be justified. In the coming year, we will be looking at alternatives to our present format in order to reduce costs.

We feel some sense of failure in that the Committee which was set up two years ago toprovide the material for the "Surveyor" has been ineffective this past year with no input from a large segment of those who had indicated that they would be contributing. Our objective is to strengthen and improve the Committee structure in order to generate more ideas, interest and input.

We would encourage the use of the "Surveyor" as a media for the discussion of current and some very relevant issues of concern to our profession, such as the proposals in Dr. Love's report on survey education. Letters to the editor are most welcome.

We wish to thank all those who have faithfully contributed items for publication over the past year, and for the efforts of those who actually helped in putting the "Surveyor" together.

Special thanks to Dot Lowe for her typing, patience and not infrequent reminders that the deadlines were drawing near, and that the material should be in. Unfortunately, forme, my carwas parked across the street from Dot's office making it easy to observe my whereabouts and prompting many a reminder that the material really should have been in two weeks ago.

It was moved by B. L. Cain and seconded by I. P. Macdonald that the Nova Scotian Surveyor report be adopted. Motion carried.

### LIAISON COMMITTEE - D. K. MacDonald

At the moment the liaison is all taking place with APENS. I hope that the Association does not see this Committee as only being able to have liaison with the engineers. I would like to see any liaison required with anyother professional group or any area of government jurisdiction or whatever, that we might be able to effectively act as liaison for the Association. We are primarily a response Committee, we do not initiate or generate material to liaison and we look to either, in this case, the Engineers' Council or our own Council or Members to bring forward matters which they wish to have our Committee pursue.

Since the last recort at the 1974 Annual Meeting we have held five meetings with the Engineers. All of these meetings took place in the APENS Board Room which they kindly provided this facility on a continuous basis to us at no charge. The Committee makeup, both on the part of the Surveyors and the Engineers, was the same until June of this year when the Engineers at their Annual Meeting In June changed certain of the members on their Committees.

I would like to mention, again this year, that we have been very pleased with the conduct of the Engineers and their attitude. They have been very understanding in discussing some of the problems we face because of our rather peculiar historical relationship with Engineers, in that they were entitled to practice as land surveyors without any, or very little, control by the Association and the new Act which we are putting forward in the hopes of resolving to a degree some of the potential problems. They have been very interested in attempting to analyze the amended draft Act which we presented to them in the spring.

After a review by their Consulting Engineers' Committee, which is comparable to our Private Practice Committee, they turned it over to their Solicitor for his scruting, to see what adverse affect any sections of our proposed Act might have on their operations and it boiled down to about five items. I am not going to go into detail on these items at this time because, as a result of Committee Meetings, it was decided that representatives of our Legislative Committee should meet with this Consulting Engineers' Subcommittee of theirs, to get the most direct dialogue between the two interested parties rather than having the Liaison Committee

to continue to act as a go between on specific details once we had pinned down the points of potential contention. We thought it was better if the members of the Legislative Committee, who were intimately familiar with the detail of our Act, would speak directly with their people. It followed from this that our Solicitor also met with their Solicitor, as well as exchanging telephone calls and letters. I won't go into details now because the Legislative Committee will be covering the same matter insome depth later on at this meeting. I would like to point out that that has been a principle and certainly the most pressing activity of the Liaison Committee this past year.

On two occasions we had quest speakers - one a representative from the Department of Lands and Forests to speak to the group on the Nova Scotia Coordinate Control System. As a result of the discussions with the engineers it has become somewhat apparent that many of them were not too familiar with what the system was and its potential usefulness to them from a purely engineering point of view. By mutual agreement, it was felt that a speaker on this topic might be useful to some of their membership so that they might get a better idea of what it could do for them.

On another occasion, we had a representative from the City of Halifax to speak to the group on the Halifax City View Plane By-law. There was a slight potential there for some problems in terms of who should be defining the view planes effect on any building. The City of Halifax has stated categorically that it is to be done by a Nova Scotia Land Surveyor but, we felt that it might be useful to point out the implications of the View Plane By-law and the fact that it was quite comparable, not directly but very closely, to a horizontal boundary of land. The implications of violating it on a project if it reached the state of construction where it is a violation of it, it could be extremely costly to the developer and his supporting engineering architectural people.

This is the type of activity we have been involved in and, as I say, we only initiate material to cover when we have not been provided with grist for the mill from our respective membership. We would like to see suggestions from our members for any areas that they feel we could usefully cover.

It was moved by D.K. MacDonald and seconded by Phil Milo that the Liaison Committee report be adopted.

Roy Dunbrack - at the end of Doug's report he asked for suggestions on how the Liaison Committee could more effectively operate and one area which I would like to see the Liaison Committee explore would be to act as an extension arm of the Private Practice Committee. We have heard some reports with regard to various government agencies that they are operating with and they said that time does not permit them to fulfill their desires on meeting with the government parties with regard to regulations which we, as land surveyors, have subjected them to. I was just wondering if the Committee might explore that.

Doug MacDonald - we would certainly be quite willing to explore it. To liaison with someone you have to be sure that they are willing to liaison with you. Our experience in the past has been just a bit difficult to establish lines of communication with them. I certainly agree that on specific situations we certainly will be more than happy to try and establish these lines of communications. I do not see much chance of establishing any formal periodic meetings with any of these groups as we have had with the Engineers, but certainly on specific situations, I think that there is a great deal of merit in Mr. Dunbrack's suggestion.

Motion carried.

### CERTIFIED SURVEY TECHNICIANS AND TECHNOLOGISTS - John C. MacInnis

This Committee was appointed by the Council of 1975 to work with the Founding Committee for the proposed Survey Technicians and Technologists Association. As I am also a member of the last mentioned committee, the report is in fact a report on what these Technicians have done in the past year.

The Founding Committee has met more than once a month in the past year using the Conference Rooms of one of the local survey firms and an aerial mapping firm.

The Committee has devoted its attention to:

- 1) General organization of the Committee
- 2) Classification of Members
- 3) Application Form
- 4) Preliminary preparation for a General Meeting.

The time for the first General Meeting is subject to the approval by Council of the Proposed Classification and Application Form, which has only recently been sent to Council for their comments.

The Committee has also prepared a brief history of the Survey Technician in Canada along with a Name and Address Form to obtain names of interested persons in the Proposed Association for the mailing list that is to be prepared within the next month. These forms are available at the C.I.S. booth.

It was moved by J. C. MacInnis and seconded by L. R. Feetham that the C.S.T.T.N.S. Committee report be adopted as presented. Motion carried.

### SURVEY STANDARDS - CHAIRMAN, K. P. AUCOIN

### EDUCATION - A. E. Wallace

Last year in the report from this Committee youwere presented with regulations which basically dealt with (a) the articling time required for students and (b) depending on the students' qualifications, the sets of exams he would be required to write.

You were also informed by last year's report that our first aim for 1975 would be the preparation of an educational by-law.

Our first meetings in 1975 were devoted to preparation of an educational by-law, however, little progress was made because the questions were raised:

Who would provide instructions in the subject?

Who would examine the students?

In other words, how would an educational by-law, which fundamentally increased our standards be implemented?

We were aware at that time, of the work of the Joint Committee on Certification Standards for Land Surveyors within the Atlantic Provinces, and of the fact that this Joint Committee had asked to have a report prepared by Dr. Love. We decided to wait for Dr. Love's report and hoped our questions would be answered. The Education Committee forwarded Dr. Love's report to you late in August and you were informed that the report was accepted and approved by the Joint Committee on Certification Standards for Land Surveyors in the Atlantic Provinces, and that your Education Committee had examined and studied the report, and were consequently drafting regulations pertaining to education which reflect the proposals in the Love Report.

Our draft regulations are:

SECTION 1 To qualify for membership in the Association pursuant to Section 11 (f) of the Act a student must:

- (1) (a) graduate in Surveying Engineering from University of New Brunswick, or from an equivalent programme in a University (Toronto, Laval) and
  - (b) article for two years as required, and
  - (c) pass an examination in Professional Practice and Law.

OR

- (2) (a) complete examination in all the technical and related subjects as required by or for a degree in Surveying at University of New Brunswick, and
  - (b) article for five years as required, and
  - (c) pass an exam in Professional Practice and Law.

OR

- (3) (a) be a Dominion Land Surveyor or be a member of an Association of Professional Land Surveyors in a jurisdiction other than Nova Scotia that has objects similar to those of the Association and requirements for membership no less exacting than those in effect in Nova Scotia, and have successfully completed exams as required in the regulations, and
  - (b) article for one year, and
  - (c) pass an exam in Professional Practice and Law.
- SECTION 2 (1) An application to be a student shall be made to the Secretary and shall be accompanied by evidence satisfactory to the Board of the applicant's educational standing, two references as to his good character, and his articles.
  - (2) No articles that have been executed for more than thirty days shall be submitted under subsection 2.
  - (3) When an application under this section is approved by the Board, the secretary shall register the applicant as a student and notify the parties to the articles by mail of the registration.
- SECTION 3 (1) A member of the Association who is a party to articles may, with the consent of the student and the approval of the Council, transfer the articles to another member of the Association.
  - (2) Upon cause being shown to the Council, the Council may transfer articles from one member of the Association to another member.
- SECTION 4 (1) Articles must be served at least fifty per cent of the term in actual survey work in the field and at least twenty-five per cent of the term in office work pertaining to surveys.
  - (2) The student must file with the secretary at the close of each year of service a record of his training, certified by the member of the Association to whom he was articled.
- SECTION 5 (1) Examinations of students and applicants for membership shall be at least annually and at such place or places as the Board shall designate from time to time.

- (2) A candidate for examination shall give notice thereof inwriting to the Board at least one month before the date of commencement of the examinations.
- (3) To obtain pass standing in Professional Practice and Law, a candidate shall obtain not less than fifty per cent of the total marks obtainable.
- SECTION 6 (1)

  A student who commences his term of articles (before the estimated day new Act will be proclaimed) is entitled to be examined under the rules and regulations of the Board in force on the (1 day before new Act is Proclaimed).
  - (2) Subsection (1) expires on the (6 years after Act is proclaimed).
- SECTION 7 (1) Where an applicant for membership has met the academic and experience requirement and has been refused, or when an applicant for re-admittance has paid the required dues and has passed any required examinations, and his application has been refused, the Board or the Council, as the case may be, shall, upon the written request of the applicant received by the secretary within fifteen days of the receipt by the applicant of written notice of the refusal, conduct a hearing of the matter.
  - (2) Section 22 of the Act applies mutatis mutandis to any hearing conducted under this section except that upon any such hearing the Board or the Council, as the case may be, may make findings of fact by such standards of proof as are commonly relied upon by reasonable and prudent man in the conduct of their own affairs.
- SECTION 8 The Board may delegate to the Board of Examiners of the Atlantic Provinces Federation of Land Surveyors, any or all of its responsibilities set forth in these regulations.

\* \* \* \* \* \* \*

As an explanation to Section 8, and in order that you understand which part of Dr. Love's report the Education Committee endorses, we include in this report the following paper which was presented to your Council from the Education Committee:

\* \* \* \* \* \* \*

This paper is to recommend that the Association, pursuant to Dr. Love's report on Training and Qualification of Land Surveyors, write a memorandum to the other Atlantic Provinces to seek agreement for the formation of a Federation of the Association of Land Surveyors and of the Association of Survey Technicians and Technologists of the Atlantic Provinces.

### PROPOSED STRUCTURE

This would be a Federation of the Associations of the provinces as they now exist, or as they would be organized, in the case of Technicians.

NAME: The Federation of Land Surveyors and Certified

Survey Technicians and Technologists of the

Atlantic Provinces of Canada.

MEMBERSHIP: By Provincial Associations of Surveyors and

Technicians and Technologists.

**FUNCTIONS:** 

- a) To set and control qualifications and standards for land surveyors, technicians and technologists in the Atlantic Provinces.
- b) To grant certificates or diplomas recognized in each of the Atlantic Provinces.
- Foster professional pride and professional development and the general welfare of the Associations.

FEES:

Paid by each Association, based on the numbers in each Association. These fees could be taken from the treasury of each Association and should not amount to a very large sum. Main expenses of the Federation will be for examinations. This cost would be covered by the examination fees, although it may be found necessary to bonus examining costs. Present practice would indicate the proper procedure for financing examinations.

The Federation would consist of the Provincial Associations, as already established. The constitution should provide a Council, consisting of:

- a) The President of each Provincial Association of surveyors.
- b) The President of each Provincial Association of Technicians and Technologists.
- c) Two members from each of the Associations of Surveyors.
- d) One representative from each Province, chosen by the Director of Surveys of that Province or his equivalent.
- e) The Principal of the Nova Scotia Land Survey Institute.
- f) The Director of the Survey Programme in the College of Trades and Technology of St. John's, Newfoundland.
- g) The Head of the Department of Surveying of the University of New Brunswick.

The Chairman and a Secretary-Treasurer, who would also do the work of a registrar, should be appointed by the Council. For the first meeting, it is suggested that the Head of the Department of Surveying at the University of New Brunswick act as Chairman.

### **BOARD OF EXAMINERS**

The Council will appoint two Federation Boards:

- a) a Board of Examiners for Surveyors, and
- b) a Board of Examiners for Technicians and Technologists.

### COMPOSITION OF THE FEDERATION BOARD OF EXAMINERS FOR SURVEYORS

- a) The Head of the Survey Department of the Engineering of the University of New Brunswick, or his designate.
- b) A member of the Federation Council from each of the Provinces. This member should be designated by the Surveyors' Association of each province as the member to act on the Examining Board when he is appointed to the Council.

c) Two representatives of government chosen in rotation from New Brunswick, Prince Edward Island, Nova Scotia and Newfoundland. In order to begin the work, it is suggested that the first two be from New Brunswick and Prince Edward Island.

The Examining Board should elect a chairman and secretary; the Council should name those to act for the organizational meeting.

### COMPOSITION OF THE FEDERATION BOARD OF EXAMINERS FOR TECHNICIANS AND TECHNOLOGISTS

- a) The Head of the Surveying Department of the College of Trades and Technology, St. John's.
- b) The Head of the Nova Scotia Land Survey Institute.
- c) Three surveyors named from the Federation Council.
- d) One Technician named from each of the Provincial Technicians' Associations (eight or nine members).

### DUTIES OF EACH FEDERATION BOARD

The Examining Board would:

- a) name examiners for each subject
- b) assess fees for examinations
- c) set the time, place and nature of the examinations
- d) recommend to the Council those who are to be certified
- e) keep accurate records and provide transcripts to students and authorized persons when required
- f) set the honorarium for setting and marking examinations.

### PROVINCIAL CERTIFICATE

The Federation Board of Examiners for Surveyors will obtain the examination in Professional Practice and Law from the appropriate Provincial Board of Examiners. The Association of Nova Scotia Land Surveyors will issue a Provincial Certificate only after a student has obtained a certificate from the Federation Board.

### SUMMARY

The three methods by which a Canadian citizen may become a Nova Scotia Land Surveyor will be:

- The holder of a degree in Surveying Engineering will obtain a certificate from the Federation Board after he has articled for two years as required, and has passed the examination in Professional Practice and Law as set by the Board of Examiners for Nova Scotia Land Surveyors.
- 2. A Dominion Land Surveyor or a member of an Association with standards acceptable to the Federation Board will obtain a certificate from the Federation Board after he has articled and has passed the examination in Professional Practice and Law as set by the Board of Examiners for Nova Scotia Land Surveyors.



### INFORMATION

DRAFTING, DESIGN, REPRODUCTION, SURVEYING, TECHNICAL SCHOOL MATERIALS & EQUIPMENT; LETRASET & ACS TAPES; WADE DI-LINE & DI-LAR, TRANSTEX & TRANSLAR PAPERS & FILMS; DRAWING TABLES.



norman wade company Itd

429-5002



### **INFORMATION**

DRAFTING, DESIGN, REPRODUCTION, SURVEYING, TECHNICAL SCHOOL MATERIALS & EQUIPMENT; LETRASET & ACS TAPES; WADE DI-LINE & DI-LAR, TRANSTEX & TRANSLAR PAPERS & FILMS; DRAWING TABLES.



norman wade company Itd

429-5002

3. Other applicants will obtain a certificate from the Federation Board after completing examinations in all the technical and related subjects for a degree in Surveying at the University of New Brunswick, has articled for five years as required and has passed the exam in Professional Practice and Law as set by the Board of Examiners for Nova Scotia.

Each of the above will then be qualified for a Provincial Certificate and for membership in the Association of Nova Scotia Land Surveyors.

\* \* \* \*

In summary we make the following recommendations:

- 1) That the regulations as presented in this report be presented to the membership for approval in principle, and after approval forwarded to the Legislative Committee for adoption after technical editing.
- 2) That the Council establish a special committee whose function will be to ensure that the necessary steps are taken for the formation of the Federation of the Association of Land Surveyors and Certified Survey Technicians and Technologists of the Atlantic Provinces of Canada.

The Education Committee extends its thanks to the Joint Committee on Certification Standards for Land Surveyors in the Atlantic Provinces for initiating the tremendous task performed by Dr. Love.

In closing, I wish to thank the members of my Committee who were able to attend and contribute to each meeting.

Al Wallace moved for the adoption of this report and that it be published in the 1975 Annual Meeting report.

I intend tomorrow to move for approval in principle of the level of academic attainment and the apprenticeship requirements reflected in the 1975 report of the Education Committee.

Mr. W. E. Servant seconded the motion.

Ron Chisholm - I for one don't feel I can vote for it, in principle, as it is right now. Generally, I think it is very good but there are a few items I would like to bring up and probably get the feeling of the members here right now.

Ron Chisholm -do not agree with Section 1(1)(a) would like to see it reworded to read: "holding a degree in surveying from a University approved by the Board of Examiners." I feel that this would keep the authority where it belongs with the Board of Examiners. Section 1(2)(a) - these courses that they provide may not meet with the approval of the membership of our Association, but we will be obliged to accept those people. I think that the authority has effectively been moved from another body other than our own. In other words, we will pass on the power to others to determine who will become members of our Association. Would like to have it read: "complete examination in all the technical and related subjects as required by the Board." This would put the authority, I think, where it belongs.

Al Wallace - this is exactly identical to what the Education Committee would hope for as well.

Phil Milo - under the present system the students at N.S.L.S.I. are articled to me as a Nova Scotia Land Surveyor. It would appear that under Section 2, he would have to be articled for five years and there is nothing here to allow for that two years at N.S.L.S.I. to be part of that articling time, which means that he would have to spend seven years when he goes through our school. Is this an

intent to make that seven years or could this be changed before the regulations are put forward?

Al Wallace - I think that your point is well taken, but this would be a decision of this Federation Board. If they felt that a course at any technical institution could be credited in the five years, they would decide and the applicants would be notified. I do not think that we want to put those kind of decisions in regulation form because the first thing we ask what about the survey program at St. John's, Newfoundland, or the survey program at Ryerson. I do not think that we can put those kind of answers to questions in regulations.

Phil Milo - have you not precluded those answers in the wording as it now stands?

Al Wallace - no.

Jack Hill - Section 2(a) - do you mean that the exam will be equivalent to the degree of courses at the University of New Brunswick or the actual examination - how would this operate?

Al Wallace - the person who was not able to attend University would no doubt go there to write the necessary exams after studying on his own. It will be very difficult no doubt for a person to become a surveyor without attending university although the door would be left open.

Jack Hill - would this be handled through the University or through the Council for the Board of Examiners?

Al Wallace - everything would be handled through the Federation Council and the Federation Board if it was adopted.

Jack Hill - I just mention this because we have a similar problem in Alberta. We have also had problems with 2(b) - we feel that persons coming up sort of through the ranks can at least obtain the academic standing and he is still at work so to speak, he gets a lot of practical experience which is basically the way articles used to operate. To ask him to article for five years as to against University graduates two, seems to be a little bit backwards.

. Al Wallace - we feel that it is going to take him five years or more to do the necessary study on his own. He would, of course, be articled long before he finished passing the necessary form of exams.

Ed Hingley - assume that he goes to the University of New Brunswick for five years - this time at University is it considered to be articling on his part?

Al Wallace - no. There is a possibility that perhaps he would be credited for work during the summer. This again has been an item which the Education Committee has not agreed on. Some feel that one year after graduation is sufficient, others feel that two is not enough, perhaps a compromise might be that the student may be able to use time between courses as articling time and then one year after graduation if he made up a year in summer work, then perhaps he could still qualify a year after graduation. The Board of Examiners may accept time spent on summer work.

Rejean Blanchet - I suggest that the Universities should notbe involved in the regulations, that it should be done by the Board of Examiners.

Jim Doig - you should be aware that possibly the Principal of the Nova Scotia Land Survey Institute might not be a registered surveyor.

Al Wallace - this has been considered.

The adoption of this report was carried.

### REGULATIONS COMMITTEE - D. C. Clarke

The Regulations Committee has worked during the past year on the preparation of Regulations respecting land surveying standards, to accompany the proposed new Nova Scotia Land Surveyors Act. These proposed regulations are to replace Sections 9 and 10 of the regulations of the Board of Examiners under the present Act.

Committee meetings have been held over the past year, in addition to individual work by each Committee member. A special meeting was held with the Board of Examiners early in the summer, to receive the feelings of the Board on the tentative draft prepared by the Committee.

Much of the material contained in this proposal has been gleaned from the Survey Regulations of other Provinces and States. Our Committee has gathered the material together, and using our Nova Scotia Regulations as a base, have tried to prepare a set of more professional survey standards.

A revised draft of the proposed Regulations was prepared and distributed to the membership several months ago. Now that everyone has had a chance to study the proposal, we are in the process of attending Regional Meetings in the various areas, to answer questions and hear suggestions and criticisms. To date we have attended one Regional Meeting in Antigonish, and have received input from several written submissions.

I would ask Councillors, who may be considering inviting members of this Committee to their Regional Meetings, to please schedule the meetings as soon as possible. We as a Committee feel we have gone as far as we can on our own without further input, and, if such is not forthcoming, we will advance to the next step, which is to seek legal advice on putting the proposal into the proper legal form for approval.

During the past year this Committee has spent nearly four hundred dollars for typing, printing and mailing. We have budgeted twice that amount for the coming year to cover travel to the Regions, legal fees, etc.

It was moved by D. C. Clark and seconded by Ronald Chisholm that the regulations Committee report be adopted. Motion carried.

In closing this portion of the meeting Mr. AuCoin announded that there will be two seminars held within the next two months - one at Dalhousie University and one in Lawrencetown on the use of the Nova Scotia Control System. The one at Dalhousie University will beheld December 4 and, the one at the Nova Scotia Land Survey Institute at Lawrencetown will be held on January 29, 1976. There will be a seminar for the eastern part of the province sometime in the Spring. The lecturers will be Mr. Archie MacLaughlin and Mr. Philip Kierstead, both New Brunswick Land Surveyors.

At this point in the Meeting, President Rice announced that a prize donated by Norman Wade worth \$600 would be drawn for, called the "Members' Participation Draw" with the view to getting as many as possible to attend the business sessions. This draw was won by Sandy Cameron.

### PUBLIC SERVICE - CHAIRMAN J. F. DOIG

### COMPLAINTS COMMITTEE - G. F. Clarke

During the past year there have been eleven complaints directed toward the Association ranging in order of allegedly misconstruing boundary lines, false information on plans, high fees, undercutting by other surveyors, lack of research, etc.

Two of the complaints have been serious enough to be directed to the Discipline Committee.

Two of the complaints have been resolved and the rest are still under investigation.

One alleged surveying by an unqualified person, however, on further investigation this was found to be under the supervision of a Nova Scotia Land Surveyor, and so has been resolved as far as we are concerned.

It was moved by G. F. Clarke and seconded by John MacInnis that the Complaints Committee report be adopted as presented. Motion carried.

### PUBLICITY COMMITTEE - R. C. Dearman

This is a fairly short report because we did not have a full year. Publicity Committee Chairman was appointed at the Workshop on February 1.

During the month of March, Walter Rayworth and Marcellin Chiasson were added to the Committee.

The Committee has had a few meetings and some radio and newspaper coverage has been given throughout the year. Since the three members of this Committee come from the three different Regions of the Province, we feel that we have given fair coverage throughout the Province, with the exception of the Halifax-Dartmouth and County area. For this reason, we are asking that a member from the Halifax-Dartmouth and County be added to the Committee. If there are any volunteers we would ask that they contact any one of the members of the Committee.

Newspapers and several radio stations have been contacted and they will be reporting on our 25th Annual Meeting.

In the near future we are hoping to have some of our members of our Association involved in the publication of a series of informative articles for the public, participation in radio talk shows and also T.V. coverage.

Although we are members of the Publicity Committee, we feel that the job of selling our Association to the general public is a job of each and every member and, therefore, we would appreciate any assistance you may give us. If you have any suggestions regarding providing speakers for service clubs or any area we can provide publicity to the public, we would appreciate it if you would contact one of the members of the Committee.

R. C. Dearman moved and Walter Rayworth seconded the adoption of this report. Motion carried.

### LEGISLATIVE COMMITTEE - F. W. Roberts

The other members on this Committee are Murray Banks, Roy Dunbrack and Ken Robb.

You will all recall that at last year's Annual Meeting in Amherst, the Legislative Committee presented the first draft of a proposed new Land Surveyors' Act. The draft Act was presented at that meeting, purposely for your discussion and comment.

During the early part of this year, the Legislative Committee attended Regional Meetings throughout the Province to ensure that the proposed Act received exposure to the widest range of our members and to entertain their comments. I believe the more informal atmosphere of the Regional Meetings was conducive to frank and open discussion, and allowed a more detailed Consideration of all aspects of the proposed Act. Meetings on a Regional basis were held in:

Lawrencetown - February 11th
Truro - March 10th
Dartmouth - March 24th
Cape Breton - April 5th.

The comments and revisions arising out of these meetings were incorporated into a new draft which was presented at a Special General Meeting held in Halifax on June 14, 1975. At that time, the membership passed a motion adopting and approving the Act as amended on that date. The resolution further authorized the Legislative Committee to take all necessary steps to have the said Act passed by the Legislature of the Province of Nova Scotia.

Subsequent to the Special General Meeting, the Act was further revised by the Legislative Committee and Solicitor to incorporate the amendments which were passed on June 14th. The new Act was formally presented by our solicitor to the Legislative Counsel for the Province, Mr. Graham Walker, on September 12th. We received a letter of acknowledgment from Mr. Walker and he commented that he would be reviewing the proposed legislation indue course. He indicated the earliest the legislation could be presented to the house would be at the Spring sitting, providing, of course, the Minister of Lands and Forests agrees to present it.

Some sections of the proposed Act will affect the engineers of this province, and partly for this reason, but also because we would hope to gain the support of APENS before the Law Amendments Committee, a copy of the approved Act was forwarded to the Association of Professional Engineers of Nova Scotia. The Act has been the subject of discussion at the Joint Surveyors - Engineers Committee, and two members of our Legislative Committee have met with a committee of Engineers to help clarify and explain the particular areas of difficulty. As a result of these meetings and discussions, APENS has written our President, Ed Rice, stating their Association's position with respect to certain sections of our Act. I believe it is fair to say that we have resolved the majority of the problem areas with one exception: That exception being Section 18 which deals with corporations.

At this time, it has been agreed that a further meeting between our Committee and the engineers along with our respective solicitors is necessary to achieve a complete clarification and understanding in order to develop a mutually agreeable resolution of the matter.

Should the developments of these meetings make it necessary to revise Section 18, in a way which would change its original intent, your committee requires further direction from the membership as the wording of the motion made at the Special General Meeting on June 14, 1975, only empowered it to pursue governmental approval if the intent of the Act was not changed.

If a change of intent is required, in order to gain the support of APENS and if we are to proceed to the Legislature next Spring, it would then become necessary to call a Special General Meeting, probably early in the year, to approve of any resulting changes. This presents a serious problem to our Committee in terms of timing, unless some acceptable alternative to a General Meeting is found.

In order to reconcile this situation we intend to pursue the matter further during the "Old Business" section of this meeting.

In respect of the new regulations which will have to be made and which are now being worked on by other committees, we will not yet correlate these regulations into a package until weare sure that we have determined the exact shape and form of the final Act. The regulations, however, will become paramount once the Act is finalized.

Moved by F. W. Roberts and seconded by Phil Milo that the Legislative Committee report be adopted as presented. Motion carried.

Doug MacDonald - Section 18 is primarily to enable us to regulate and control the actions of Nova Scotia Land Surveyors practicing land surveying. This Act will make improvements over the present situation. It will not require any change in the intent and, I think, every attempt should be made in avoiding any roadblocks in getting this through with APENS.

Tom Swanson - Section 18 - unless there are some modifications APENS Council would recommend opposing the Act. I understand that the Liaison Committee has already set up meetings between the Association and APENS members and I think there have been some suggestions as to how the difficulty may be overcome but, I should say quite clearly, that some modifications in the Act will be required.

Don Eldridge - without the support of APENS you will not get the Act passed.

Roy Dunbrack - we must respect the power and authority and we wish to continue to liaison with APENS. I don't think that we should back track in any way, shape or form from our original intent and in that regard, I appreciate Doug MacDonald's comments with regard to intent. With regard to intent I believe that the Committee needs the direction of the members at the meeting here today and, I would like to make a motion as follows:

BE IT MOVED "that the Legislative Committee, with the approval of Council, be empowered to make the necessary changes, if required, in Section 18, and to pursue governmental approval of the Act, as long as the intent remains to regulate and exercise authority over the practice of Professional Land Surveying in the Province of Nova Scotia."

John MacInnis seconded this motion.

Tom Swanson - I would like to clarify whether the motion is intended to give the Council of the Association, together with the Legislative Committee, power to negotiate with engineers or engineering firms to carry out Professional Land Surveying in Nova Scotia.

Roy Dunbrack - we do not know at this time what position APENS has taken except by a virtue of a letter that they have forwarded to us.

Motion carried.

### SATURDAY, NOVEMBER 15, 1975 - 9:00 A.M.

### EDUCATION & SURVEY REGULATIONS BY-LAWS TO THE ACT - K. P. AuCoin, Chairman

Mr. AuCoin referred to the Cooperative Program set up at the University of New Brunswick for the purpose of assisting students in finding summer employment.

This is a very important part of the surveying training at U.N.B. and this morning we have with us Mr. Don Thompson of the staff of U.N.B.

Don was born in Montreal, grew up in north western Ontario and attended Public and High School in Ontario. He came to U.N.B. in 1962 and received his B.Sc. in Surveying Engineering in 1967. He spent a year and a half in private practice in Alberta and returned to U.N.B. where he received his Master of Science in Surveying Engineering in 1970. He then worked one year in Private Practice in the Carribean area and two years in Private Practice in western Canada, which involved legal surveys for western and northern Canada, offshore work for the Petroleum Exploration on the east coast. He then returned to U.N.B. in 1972 to continue his studies toward his Ph.D degree. He is responsible for the Cooperative Program at U.N.B. and gave his report as follows:

When the Cooperative Program started in 1972 John MacLaughlin went out and did a lot of missionary work on behalf of the Department of Surveying Engineering and since John left, on education leave, about a year and a half ago I have taken over his responsibilities at the University for this Cooperative Educational Program.

I would like to point out what Cooperative Education means at the University of New Brunswick and how it is our attempt to keep it directly involved in the Surveying Engineering and hopefully, in the end, we will be able to turn out better and more useful graduating students for the benefit of the Surveying Engineering industry.

In our estimation it is a cooperation between the people in surveying industry and the educators at the University to combine their efforts with students and in the end turn out a better trained person to serve the Surveying Industry in the coming years.

The reason for asking the help of the Surveying Industry came up prior to 1972. It was realized at the University that the people there are deficient in certain teaching matters and it is basically impossible for university professors to give students the practical training that they require to carry on in their careers. We decided to ask the Surveying Industry to help us train these people and, in fact, what it is doing, or we hope it will do, is the Industry will actually train these people for themselves or assistant training so that we hope to be able to give any sound theoretical background to the students and we are asking the people in Industry to give these people sound practical experience on the job training so that the students can better serve in the surveying community.

The way that we have implemented this, as we have not asked anybody in the community or companies, or anyone, to actually put their name on a dotted line and say, yes, every year we will take five students and give them summer jobs or anything like this. This is the way that Cooperative Education normally works at other places, with the special problems in the surveying engineering, in that it is for one thing and generally seasonal and, for another, it is very difficult to plan. For those people that can see that far ahead if they think that a surveying engineer could be worked into their organization, if they could help train this person, and give some meaningful employment in their discipline, then we ask them to help the student during the summer, to give them some responsibility, and let him use his initiative to a certain extent and at the end of a period of employment to actually report on the student. In other words, his work record that the employer turns in becomes part of his academic record. At the University the regulations for a degree now state that a student must have a minimum of at least six months' practical training before he gets his surveying engineering degree. The other part of this program is that he must also write two technical reports based on his summer experience. They are supervised reports by the members of the Department of Surveying Engineering and copies of these reports are sent out to the person who employed the student for their purusal and to make comments on.

We now have one hundred and thirty students at the University of New Brunswick registered in Surveying Engineering. The students are interested in all aspects of the surveying profession, although, in past years, we may have been lax in pointing out to students that the land surveying profession was a worth while pursuit. Of the one hundred and thirty students at the University, it is estimated that roughly one-third of them or forty-five students are generally interested in pursuing a career in land surveying. To sort of back this up, during the past summer in the Cooperative Education Program, seven students started their article time during their summer employment. These people were from New Brunswick, Alberta and British Columbia who were articling and attending University and participating in our Cooperative Program.

We believe there are students who are interested in the land surveying profession and one of the reasons that I am here to speak to you today, is that one

of our problems is that we did not place any students in Nova Scotia last summer. We would like, if you can see your way clear, to have you support us in any way you can or if you can give us any suggestions.

## SURVEY REGULATIONS - D. C. Clark

The draft of the proposed regulations respecting land surveying standards was prepared to accompany the new Nova Scotia Land Surveyors' Act and replace sections 9 and 10 of the Regulations of the Board of Examiners under the existing Act. We have revised the regulations of the Board of Examiners and, using them as a base, have added Sections taken from the Survey Regulations of other provinces and states and tried to come up with a set of Standards which yield a more professional survey to the client and yet will not create undue hardship to those of us who do not have all the latest survey equipment.

Some sections we feel are less restrictive than those of some of the other provinces and, therefore, we would recommend that a review be carried out each year of all regulations to keep them from becoming outdated. We are anxious to get your comments as soon as possible. We have had several submissions and will try to attend any Regional Meetings in the near future. We are anxious to complete this phase so that we can proceed to get the draft in proper legal form for presentation for approval.

Dave Clark moved and Bill Thompson seconded, that the draft regulations respecting Land Surveying Standards be approved in principle.

Roy Dunbrack - I would like to make an amendment to the motion "that this portion of the regulations as submitted be: 1) approved in principle, 2) submitted for technical editing to a person or persons appointed by Council, 3) turned over to the Legislative Committee, who in conjunction with their solicitor, will put this portion of the regulations into a form acceptable for presentation to Government, 4) submit along with other segments of the regulations to the membership for approval, 5) proceed to seek governmental approval."

Ivan Macdonald - seconded.

Don Eldridge - I don't think you can approach government with regulations for an Act that has not been passed. I think that you will have to wait until the Act is passed before you approach government.

Roy Dunbrack - we recognize the fact that we cannot submit regulations to government which are geared to the new Act until the new Act is approved, but we have so much work to do between now and the time that we hope the new Act will be approved. There are many questions that we should be working at and if, in the spring, we gain governmental approval of the Act, that these should fall right on its tail. We hope that by June the Act will be approved.

Doug MacDonald - would like to speak in favour of Roy's proposal in that I think the technical editing and the review by the Legislative Committee to make sure that everything fits together and also think that the Regulations Committee will require some explanatory notes be prepared for them. I don't think we should go to the Regions until we feel that every aspect of the draft regulations are in their most final form.

Dave Clark - it was our intention to follow the procedure as Roy has laid it out anyway.

The amendment to the motion was carried.

The original motion was carried.

# CERTIFICATION STANDARDS COMMITTEE - A. E. Wallace, Chairman

Keith AuCoin introduced the other members on this Committee as follows: Carl MacDonald from Prince Edward Island, Walter Murphy from New Brunswick and Bob Wiffen from Newfoundland.

Al Wallace moved and Doug MacDonald seconded that "The level of academic attainment and the apprenticeship requirements suggested in the 1975 report of the Education Committee be approved in principle."

Al Wallace - it is difficult to express the aims and goals of the Education Committee in one ortwo pages. We have been talking about things for over two years now and we have all kinds of things in our minds.

I would like to enlarge on what Don Thompson had to say to us this morning. Some members thought that the Education Committee was recommending that we put ourselves in the hands of the University of New Brunswick to educate our future surveyors. This is certainly not our intention. We know now that after hearing Mr. Thompson that the University has open ears and that they would welcome input from us in order to get a course set up that we would desire.

We, I think that I would have to include the rest of Atlantic Canada because Nova Scotia is not in itself large enough or, is their demand sufficient to support a University program, need the three other provinces to support this program. Without their support it is unlikely that any University is going to listen to our profession as to what we require. This is the reason for the possibility of a Federation.

This Federation, as the report suggests, would be such that we will still have the control of our own members. The majority of the Federation Board would consist of members of the Survey Associations in Atlantic Canada. The Board would be governed by an Atlantic Council. The majority of members of this Atlantic Council would also be from the members of our Association.

The Education Committee needs direction to proceed to ensure that the necessary steps are taken and that there are discussions with the University and the other provinces if we are going to increase our standards. We need guidelines which would be the result of this motion if it is voted in.

Ron Chisholm - I'm concerned with proposed structure of the methods laid out in the report. Any organization that does not have control of the certification of its members will lose control of that organization. On page 4 - the Federation will consist of the Provincial Associations, as already established. The constitution should provide a Council, consisting of: - a total of 23. Our representation, in this organization, at best is four. Board of Examiners has a total of seven. Our representation from this organization, is one at best, provided that he is made chairman he has no voice at all. We should have control better than that. I am sure that there will be opportunities to discuss this further and probably restructured in a way that we can still hold better control over these members.

Al Wallace - you are correct in your figures as far as this Association is concerned. I think that the voice of the average member of the Association of New Brunswick Land Surveyors or Newfoundland Land Surveyors would be similar to our own and, therefore, I was referring to their numbers and ours as really one voice of the Council or the Federated Board. This Federated Board is only bringing these applicants up to the degree level. From there our own Provincial Board does have control and once one was accepted by the Federated Board he would then have to apply to Nova Scotia to become a Nova Scotia Land Surveyor through our Board of Examiners or to New Brunswick if they adopted something similar to these suggestions to become a New Brunswick Land Surveyor and you would write the exams in Professional Practice and Law as set by the New Brunswick or the Nova Scotia Board as the case

would be. All the Atlantic Board is doing is bringing the person to the qualifications we want before he applies for membership in our Association.

Fred Roberts - I have some difficulty now in rationalizing what is going on. Looking at our Act, I see that there shall be a Board for the examination of students and applicants wishing to qualify as a Nova Scotia Land Surveyor. I think that your regulations, as proposed to set up these qualifying requirements, under Section 11(f) of the Act and, it goes through a series of requirements, and Section (f) being the one that says that has successfully passed examinations; I would presume that examinations that would be referred to in that Section (f) would be the one which the Board has set up under its authority. In reference to your report it appears that the Federation Board will set the examinations. The Federation Board will decide whether the person is qualified and then will recommend back to the Nova Scotia Land Surveyors Association before he can become a member of that Association.

Al Wallace - I want to stress that the motion I made does not have to do with the actual wording in these sections that we are referring to. The motion that I made is asking that this Membership does approve of the degree level and the apprenticeship requirements as are outlined here in principle. To answer your question you are right that it is suggested in the Education Committee's report that the examining of the students would be done by the Federated Board because of Section 8 which says - "The Board may delegate to the Board of Examiners of the Atlantic Provinces Federation of Land Surveyors, any or all of its responsibilities set forth in these regulations." The Education Committee wondered if we could have a section like that in regulations, but all we are doing is trying to get our aims down on paper so that the Legislative Committee or Legal Council, or whoever, can put things in the proper form. We certainly don't think that the Education Committee can do that.

Fred Roberts - we have a draft Act which sets out a procedure to examine applicants for admission to the Nova Scotia Land Surveyors Association and regulations will be set up under the Act by that Board to examine applicants and now I find us in a position that we are looking somewhere else at another Federated Board who is going to assume that duty and responsibility and furthermore this Association may delegate its powers and authorities under this Act, presumably if it is approved, to pass this over to someone else.

Glen Braithwaite - would like your Committee on Education to justify the necessity for advanced training as set forth by your report.

Mr. Martell - I certainly realize that we have to upgrade our standards but if I had a young man just coming out of school with intelligence and asked me - what do I have to do to become a land surveyor? Do I go to this man and I tell this man that you must get a degree first that will take you seven years, you must article for five years, this will take you twelve years before you can qualify as a Nova Scotia Land Surveyor. Would someone explain to me why the school at Lawrence-town cannot claim a name in just subjects of surveying alone in two years or possibly three years, article a year and come out? How are we going to get anymore surveyors?

Al Wallace - if I understand your question correctly you are suggesting that educational qualifications should be in line with what the regulations are demanding what is to be done. I don't think we can put in regulation form professionalism and the need for higher education to serve the public.

Doug MacDonald - about twenty years ago a young man came to me inquiring as to the best road to go and he acted on my advice and went to the Survey Institute and he has regretted it ever since, not because of any deficiency of the Institute, it was all it claimed to be at the time, but what it was it wasn't sufficient enough for that young man to reach the goal of his desires. That young man was me. I don't think that what we are proposing here today is in any way jeopardizing any current members. There is at least ten years lead time built into what we are proposing. We have an oversupply of Nova Scotia Land Surveyors at the moment contrary

to improper misconception because 90% of the members practically cannot make a decent living in land surveying so they are Nova Scotia Land Surveyors but they are working in all other various areas. This may indicate an oversupply of land surveyors not a shortage. We have enough land surveyors to get us through this period when some people think that when moving to the degree level will virtually cutoff the supply of surveyors. I wish we could quit looking at just land surveyors. The rest of Canada and the greater portion of the civilized world have for sometime now recognized that surveying is a much broader area than you find today. I don't think that we can continue the traditional approach of looking at just a land surveyor as a very narrow specialist out there on woods lines or staking cottage lines and certainly my advice to young people today is to avoid getting them into this straight jacket. It is my understanding that the Department of Education of Nova Scotia has no intentions and are quite emphatic that they will not raise the Institute to a professional level school. As a result of this we have to go, in my opinion, to a degree level.

Phil Milo - with respect to the University as compared to N.S.L.S.I. and Technical Institutes that we are now finding people dropping out of the degree program and being sent tous because they do not want to go the University route. They prefer the technical orientation. It is time that this Association started to look beyond legal boundary surveyors. It is a fairly narrow field if you look at the broad spectrum of surveying today and, I think, very definitely it should be and must be a goal of this Association to have within its membership people who are specialist far beyond or different from legal boundary surveyors. We need photogrammetrists, we certainly need geodesists and we need other specialized agents as well and we need those people as members. I would suggest that it is not reasonable that we require all legal boundary surveyors to be geodesists and/or photogrammetrists and/or the other specialists. I, therefore, say that (1) having a degree of itself will not raise the standards of surveying in the province of Nova Scotia. New standards and the importance of those standards is the only way that that would improve and, unless those standards are improved, the public will not view us as professionals, regardless of how many letters we have after our names.

To refer to a remark made by Ron Chisholm yesterday, when he said in his text we are recommending that all survey applicants to become members of our Association must pass the technical and related subjects required for a degree in surveying engineering at the University of New Brunswick, we are, whether we mean to or not, passing over the responsibility for the subject matter of our Board of Examiners to U.N.B. Whether we say eventually that they have done a good job or whether they haven't, we certainly have no longer control of deciding what subjects and standards will be reached. I would hope this morning that the regulations draft as it has been proposed be rejected.

Bert Robertson - The Board of Examiners met with the Education Committee from New Brunswick and Prince Edward Island and the purpose at that time was to standardize the education requirements and the examinations for the three provinces. At that time no mention was made of the Federation and, at this time I think I would have to say that I am not in favour of the resolution as it stands regarding the Federation.

Keith AuCoin - we will put off the vote on this subject until this afternoon.

Don Eldridge - I think you are evading an issue. I think that now is the time, it is a very important matter, you are avoiding a decision. The general feeling of the members of the Association on the Nova Scotia section is against this.

Ed Rice - we have Dr. Love, who is part author of the report, and he is coming on as second speaker this morning. I think we should hear him out before we take a vote on it. I would like to see the motion tabled to this afternoon.

Stu Cameron - you have a motion on the floor and if we are going to stick by the rules the only way you can table that motion is to put it before the members and ask them if they want the motion tabled for this afternoon.

Roy Dunbrack - on the point of order I would suggest that the mover and seconder remove the motion and then we have no question on the floor.

Al Wallace - I wouldn't hesitate to remove the motion but I really don't like to give the impression that we are playing politics here. With the seconder's support I will remove the motion at this time.

Glen Braithwaite - I would like to propose that the motion be tabled.

Ivan Macdonald - seconded.

Motion defeated.

# DR. LOVE'S REPORT

Mr. AuCoin introduced Dr. Robert Love who is a native of Fredericton, New Brunswick. Attended Fredericton High School, and holds three degrees from three different Universities. He has been a School Principal. He has been in the Canadian Army for five years. He was Professor at U.N.B. in Economics and Education. He was director of summer sessions for fifteen years. Organizer and director of U.N.B. extension services and obtaining the status of continuing education at U.N.B. He is presently retired from that position and carries on work in the nature of consultation for us. He and his wife have one daughter and they presently live in Fredericton. Dr. Love has been engaged bythe Committee for Certification Standards in Atlantic Canada to prepare a report on that very nature. I would like to introduce you to him today to discuss his report as follows:

As you know New Brunswick has introduced recently much legislation on resource control, expropriation, land use and community planning and I guess all provinces are doing this but New Brunswick has moved fairly rapidly. This has caused some uneasiness and complaining on the part of the public. Much of the new legislation requires more accurate land surveys, better methods of land titles, descriptions and title registrations. The government appointed a task force to investigate the complaints. I was named Chairman of this force and as such I became familiar with the problems. I must say that I came to have a very healthy respect for surveyors.

The Joint Council on Certification was given assistance by Col. Roberts of the L.R.I.S. and it was while working with these two groups that I was able to prepare the survey paper.

The importance of surveying goes without question. The increased pace of economic activity and the recognition of the amount of useful land is limited accompanied by the great increase of land values are putting increased pressures on land use or emphasing the necessity for accurate surveying for land titles and descriptions which are dependable and easy to locate and use. Legislation controlling land use and restricting ownership and the establishing of better land registration and information services has brought topublic attention the importance of land surveying, the need for improved land information and the necessity for professional confidence in those responsible to these important functions. Improvement in survey methods and the use of instruments have made possible more accurate surveys and have made surveying a much more skilled and important demanding practice. Procedures suitable for the early settlements in this area are no longer satisfactory.

The re-establishment of the present title as based on proper markers and retracements of old surveys relating to new markers to meet the higher standards and more demanding needs of the present times present a difficult and pressing problem.

The advantages of an Atlantic Certificate is: (1) To ensure high standards throughout the area and to assist all concerned to reach a high level of qualification of confidence and performance. (2) To aid those who are planning to qualify in the survey area as technicians and technologists and registered surveyors

by outlining the quick cut training program common to the area which will avoid confusion following the multiple programs that now exist. (3) To encourage interchange of surveying personnel in surveying work. Provincial firms can operate in the whole area without problems of jurisdiction. (4) Improve the general standard of surveying in the area. (5) Establish a clear line of entrance from High School to University.

It is recognized that there is reluctance on the part of provincial groups to open their field of work to groups in other provinces. Any change which is made which jeopardizes any one who now has a job and is making a living as a land surveyor he must protect those people.

As the standards for legal surveying are raised and keeping with the increasing technology of surveying and the stricter regulations controlling the land use the importance of the technicians and technologists is increasing. There is a trend to the formation of engineering and consulting firms covering all phases of development including legal surveying from the first concept to the completion of There is also the trend to the formation of survey firms to cover all phases of surveying, community planning program, control of sewage and sewage disposals, stricter highway design requirements and more closely controlled regulations covering the health of the population and the developing of the general environment, have all acted together to place demands on survey work and increase the need for surveyors and, in particular, for technicians. All of these added to the needs of the Land Registration and Information Service have made the need for more and better trained technicians pressing and obvious to any observer. Technicians are also needed not only to assist the land surveyor but the interest of economy, to carry out under proper supervision, much of the work now requiring the time and services of a full-trained surveyor.

The demand exists for technicians with the surveying and consulting firms and also themany government departments, utility companies, construction companies, as well as the surveyors in private practice. The large consulting and surveying firms are not particularly interested in doing small jobs. With this growing need and the increasing importance of the technicians and technologists the need for organizations, setting standards and qualifications and controlling practice have become evident. This is why, I think, the technicians and technologists should be tied in on the Federation Board if at all possible.

Bob Feetham - was wondering when you were approached to prepare this paper was it made known to you that we had a Canadian Council of Land Surveyors about to be incorporated?

Dr. Love - no, I did not know about it at the time but I did find out about it after. This move, if you do it, will make it possible to meet the national level. I think a National Certificate would be a great thing.

Mr. Doig thanked Dr. Love for preparing the paper and speaking to the group.

LAND TITLES DIVISION - Willis F. Roberts, Executive Director of L.R.I.S.

Ken Robb introduced Willis F. Roberts as follows:

Our next speaker is the Executive Director of the Land Registration and Information Service, an agency of the Council of Maritime Premiers. He is a registered member of the Association of Professional Engineers of Nova Scotia, a registered Professional Forester and a registered New Brunswick Land Surveyor.

Our speaker has had thirty years in surveying, photogrammetry, photography and land management. He holds a degree in Forest Engineering from the University of New Brunswick and has been a guest lecturer since the course began. He is a past

president of the Canadian Institute of Surveying. Our speaker's discourse here today is of vital interest to Nova Scotia Land Surveyors.

First, may I extend my congratulations to you and your Association on your Silver Anniversary.

Secondly, I would again invite you to see the L.R.I.S. exhibit especially to view model one of our computerized land titles system and do avail yourself of the property maps of Halifax and Dartmouth.

For the past two and one-half years, we in L.R.I.S. have been attempting to establish a system of controlled surveys throughout the Maritime Provinces. Speaking of Nova Scotia, this has been difficult for us to produce a product that you could use because the geodetic data was not available. It has now become available and, we are now capable and ready of publishing data regarding the monuments that are in the ground. This responsibility and function and your liaison has been with the Surveys and Mapping Division in Summerside. Final values are being publisted now and I have here the final book published according to National Topographic Map Series in a county sequence.

Their function will be from now on increasingly of working with the Government of Canada in the re-adjusting to the North American Grid and in conversion of our forty thousand monuments to metric and a republication again in 1980. Although we are not happy with this publication, we believe that the money we put in it is worth it today and will survive for the next five to six years into a new and better publication when the metric system is produced.

The Surveys and Mapping Division has issued these books to the Land Titles Division. This is the Division that you people will be working with day by day and face to face and that will be your liaison. In other words, we will be publishing Pictou County, about ready now; Halifax County November 30; Halifax and Dartmouth City February 28, 1976; Guysborough and Antigonish Counties March 31, 1976; Kings Colchester, Hants, Inverness, Cumberland and Annapolis during the fiscal year 1976-77. We have started the survey and the monuments are in and have started the survey in Lunenburg County and the monumentation is completed in Victoria County.

The Survey and Mapping Division supply this to the Land Titles Division and, under the Land Titles Division, a series of regional offices are to be established in the Maritime Provinces in order that the program of the Land Titles Division may be implemented and administered on a decentralized basis. It is anticipated that there will be seven regional offices located in the Province of Nova Scotia. Offices are presently being established in Halifax and New Glasgow.

These offices will beresponsible for the execution of divisional programs in the district. A district will comprise the lands presently contained in one or more of the counties of the provincial division of lands. The operations in the regional offices will be associated with property mapping, parcel indexing, maintenance of the coordinate system, distribution of plane coordinate system and mapping system information, the examination and approval of subdivision surveys and the examination and approval of Land Titles.

The staff of the regional offices will be comprised of administration, professional and technical employees. The number of employees in a regional office will average twenty-four persons. Some of these employees will be Land Surveyors, Survey Technicians and Draftsmen (persons).

## Land Surveyor

The Land Surveyor in the regional office will be responsible for liaison with members of the surveying profession, planners and personnel of Government agencies located and working within the district served by the offices. He will be responsible for the inspection, densification and maintenance of the Control Survey System in the district and the distribution of information. He will be responsible for the examination, approval and registering of subdivision plans in an

integrated survey area and, he will be responsible for the continuous maintenance of a series of property maps depicting the parcels of land in the district.

The Land Surveyor will supervise employees in two units, the surveys unit and the drafting unit. The surveys unit consists of a senior technician and two junior technicians and the drafting unit consists of two drafts persons. Additional persons are employed on a casual basis to meet requirements from seasonal changes in work and special projects.

The staff of the regional office will perform the operations for inspection and reconnaissance of Control Surveys. The construction and survey of new monuments in a district will be negotiated by the Surveys and Mapping Division in keeping with presently established procedures.

# Coordinate System Information

The Surveys and Mapping Division is preparing booklets containing sketches and coordinate date for all control survey markers. The booklets are prepared for the monuments contained on a 1:50,000 map sheet of the National Topographic series. These booklets will be distributed through the regional office. A distribution list will be maintained. As amendments are prepared for the booklets, they will be distributed according to the regional listings.

When regional offices have been established for an area, then inquiries for control survey information should be made to the regional office.

# Inspection Program

The inspection of the control monument system has recently been carried out for Pictou County. The total number of monuments placed in the County to date is 1,546. Forty (40) of these have been confirmed as destroyed and an additional fifty-two (52) have not been located. It is expected that a portion of the unlocated monuments will be found by doing some additional relocation surveys. There was a requirement to place 614 reference posts in the County. These posts have been obtained and will be placed by regional office staff during the next few weeks. The inspection indicates that approximately 5% of the monuments are at present unuseable.

As a result of the inspection, some existing sketches will require updating. Revised sketches will be prepared at the regional office. Copies of the revised data will be circulated in due course. Current data can be obtained through contacting William Thompson at 752-1331.

The inspection of monument locations in Antigonish County is presently underway. Progress will depend on weather conditions during the next few months.

Canada said that they must be metric by 1980. All specifications for contracts, design, planning, etc. is issued in the metric. We are a mapping business and a survey business that comes before that. We supply the basic tools from which they do the mapping, soit means that we should be near the 100% metric by January 1, 1977. We are hoping that we will have our mapping instruction issued and out sometime next September. In the survey end it will not happen until 1980 because we must wait for the re-adjustment in the North American Grid and then convert that to metric and publish it. The mapping will be 100% metric.

Mr. Servant - will there be an automatic mail out of the revised additions and corrections?

Mr. Roberts - if you buy your book or resident of the County it is registered in there and, it is up to that surveyor to inform you of it and there might be a fee.

Mr. Rusty March thanked Mr. Roberts for speaking to the group.

# EDUCATION COMMITTEE - K. P. AuCoin

We have been giving some consideration to the re-wording of the motion to read as follows:

Al Wallace - I move on behalf of the Education Committee "that the Association of Nova Scotia Land Surveyors give approval to the objective of establishing educational requirements for certification as a Nova Scotia Land Surveyor to be equivalent to the backelor level of University graduation as approved by the Board of Examiners of The Association of Nova Scotia Land Surveyors."

C. J. MacLellan - seconded.

Ron Chisholm - I approve.

Rusty March - I am speaking in approval of the motion, however, I think I would be a little happier if the motion was worded in such a way that a time limit, that is the day that when this is to occur, be stated.

Tom Swanson - I would like to speak as a member of the Board of Examiners of N.S.L.S. I speak in approval of the motion, the Survey Institute at Lawrencetion is not training at the level that the surveyors of Nova Scotia are required.

Phil Milo - I'm against, what I am objecting to is the worshipping of the bachelor level. I have absolutely no reservation in saying to our Board of Examiners - by all means set good exams, set the exam in any technical reports, planning, subdivision, etc. that you want and make sure that they apply to the objective of this Association. I say, please do not make your aim to set an exam which shows the person had a bachelor of science in psychology, civil engineering or for that matter surveying engineering. All I am saying is, please let the Board of Examiners bring the standards up and, by all means, if a student at Nova Scotia Land Survey Institute shows himself incapable of passing those exams do not give him a license. I am highly in favour of this. What I object to is that the approach we seem to be taking, even though the motion has been changed, it still directs our attention to a bachelor level from a University. Now if that is the result I am happy with it, I do not quibble with saying let's go to that level if that is what is required to raise the standards of surveying in the province. I am saying let's not make that the standard and then try to meet it. Let's find out what the standards really have to be to raise our standards of surveying and then let the educators keep to that standard if they can and, if they can't, let them get out of it.

Jim Doig - against, because primarily I think it is coming too soon. What is being proposed here is a rather drastic change. The necessity for this change has been approved from a group which has 85% of its membership from a University level. A detailed analysis should be provided which, hopefully, might show why this change is necessary and how such a change would improve the level of service to the public. It is not good enough, in my mind, simply to call for a change which is seen by many outsiders to be simply a personal promotion scheme on the part of those already registered.

Bert Robertson - I speak in favour of the motion. It is time we got started to raise our educational qualifications to the equivalent of a bachelors degree. If we don't do this we are going to be left too far behind the other provinces, we are already too far behind now.

Stewart MacPhee - I am in favour of the motion. The remarks made by Mr. Milo and Mr. Doig are the remarks of two individuals who perhaps, because of the position they are in, are not exposed to the condescending attitudes of the other professionals in their dealings with land surveyors in private practice.

Mr. Hill (Alberta) - The motion I see here is almost identical to what Manitoba have adopted, Saskatchewan, British Columbia and our own province of Alberta. Over a number of years we have tried to get a course at the University that would bring the input into our Association at the bachelor level.

Walter Servant - I am speaking in favour of the motion. I would like to point out that the survey firm that I head up at the present time has been requiring for some years now staff with an educational background higher than the technical schools have been turning out.

Jim Gillis - I am against the motion, for the same reasons as Mr. Doig. I would like to ask Al Wallace, that in view of this motion, does this mean that you are going to start completely new with this draft of regulations?

Al Wallace - the work of the future Education Committee will, if this is passed, have a target which they can mould their future regulations around. Of course, these regulations will have to come back to you for approval. They will also have an instrument which they can talk intelligently to the University people with and to the other provinces, if this is the aim, to get an educational system which will be approved by all Atlantic Canada. This motion has nothing to do with the present education nor did the report of this morning.

Glen Braithwaite - I am against the motion. I think that we are not dealing with a matter of education but we are dealing with a matter of competence. What actually improves the competence of a surveyor, is it education, or is it some other I think that we are all hung up on professionalism and for that matter University education. As far as professionalism is concerned only the understanding and willingness to have professionalism or, to have integrity and the respect of good ethics will improve the competence of a surveyor. This must, of course, be complemented with a solid education in his field of specialty. No one here has yet indicated why we should have a regulated standard. The only reason is that we come up to the required educational standards of other provinces. Due to the physical position of the other provinces their survey systems have been different. The Maritime Provinces have a unit system and, of course, because the western provinces have a system that came about there and because their regions aremuch broader than it is here, they have gone to a cultured system. This cultured system is based on solid geodesy. The system that we use is not based on geodesy. We are expecting to introduce, in this area, a system of integrated surveys. One of the strong points of integrated surveys being the ease of which it can be used. we tell ourselves that we must increase and improve our standard of education. I am not against a person trying to improve his educational standard by going to University but, I feel it should be up to the individual to want to go to University and not up to us to force that individual to go to University. It is up to us to see that our standards are at a reasonable level that is acceptable. It is not University that makes us a professional, it is not a degree, it is ourselves.

Bill Crooker - I am for the motion. We are not trying to catch up with other provinces. I think that if we take a bachelor level we are establishing an education training plateau. I think we are saying the bachelor level will be our plateau from which we can work, if he accepts a certain standard.

Doug MacDonald - I am for the motion.

Those in favour of the motion 57, contrary minded 25. Motion carried.

\* \* \* \* \* \*

President Rice introduced Walter Snook from Moncton, N.B. the first Secretary of the Association.

# INSTALLATION OF NEW OFFICERS

President Rice asked the Past Presidents to escort Mr. Ivan P. Macdonald to the platform.

Mr. Feetham, as a Commissioner of the Supreme Court of Nova Scotia, asked Mr. Macdonald to repeat the following:

#### OATH OF OFFICE

I. IVAN PURDY MACDONALD, DO HEREBY SOLEMNLY SWEAR THAT DURING MY TERM OF OFFICE AS PRESIDENT OF THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS I SHALL DIS-CHARGE 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 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 15TH DAY OF NOVEMBER 1975 A.D.

L. R. FEETHAM

A COMMISSIONER OF THE SUPREME COURT OF NOVA SCOTIA

IVAN PURDY MACDONALD

For Mr. Macdonald's acceptance speech see page 50.

President Macdonald then introduced the new Council Members:

- Vice-President K. P. AuCoin

F. C. Hutchinson - Secretary-Treasurer

S. E. Cameron - Councillor

A. B. Grant

п

B. D. Peel D. T. Roberts

11

A. C. Grant

11

M. S. Chiasson

# NEW BUSINESS

It was moved by L. R. Feetham and seconded by D. L. Eldridge that Hoyes A. Cameron be made a Life Member of the Association.

Motion carried.

## NOTICE OF RESOLUTION

F. C. Hutchinson, Secretary-Treasurer, moved the following motion:

"Be it resolved that the annual fee for membership in The Association of Nova Scotia Land Surveyors be increased from \$50.00 to \$150.00 per year."

Seconded by D. K. MacDonald.

Ed Rice - I am speaking in favour of the motion and would like to explain the organization chart of the Association.

Bob Feetham - if we do approve this \$150.00, what is the amount in the new Act?

Ivan Macdonald - the due structure in our Association, at present, under our Nova Scotia Land Surveyors Act must be approved by the Governor-in-Council.

Ken Robb - under the new Act it will be a By-law which will be approved by the membership.

Bob Wiffen (Newfoundland) - I concur with what Ed says. Your Association cannot operate efficiently if you cannot hire solicitors. You have to be able to hire surveyors in your own Association to go out and investigate the complaint. Our fee in Newfoundland was increased from \$50.00 to \$150.00 last year.

Jack Hill (Alberta) - we have 170 active members and about 35 inactive and our fee structure was raised last year from \$100.00 to \$150.00. The non active members pay a fee of \$25.00, even the students pay a fee of \$25.00 which includes from 120 to 130 students at the moment. With the present increase next year the figure is going to be raised, I am sure, from \$150.00 to \$200.00. According to our By-laws which come under the Land Surveyors Act we now have the fee structure to be raised from \$200.00 plus a special levy of \$50.00.

Ivan Macdonald - what is your definition in Alberta of a non practicing member?

Jack Hill - he is a member who by choice is not in active practice as a land surveyor, he cannot sign plans, he cannot vote at our Annual Meetings. He is in receipt of all of the information that all of the other members receive, etc. He comes to meetings and takes part in discussions but he cannot vote. We do not have a full time Manager only have a part-time Secretary-Treasurer.

Don Eldridge - I am against the motion. Has there been any other avenue looked into by your committee for obtaining some support for the Association?

Ed Rice - Yes, I did approach the Department of Development to see what assistance was available. For Associations like us certain projects, for example, the one we did last year we might get a percentage like 80% reimbursed. The brochures that we distributed, 10,000 across the province last year, on land surveying and the cost of that was over \$500.00, 80% could be obtained back from that. At the present time our budget is mainly concerned with education, discipline and legislation. For these items there is no grant from the government.

Archie MacLaughlin (New Brunswick) - I do not think that a professional body should go to the tax payers to pay their way.

Doug MacDonald - I am in favour of the motion.

Burt Cain - I am in favour of the motion.

Al Wallace - I am in favour of the motion and would like to take this opportunity as a past member of Council to stress the need, not only for money, but bodily help as well in our Association. John Dunning - I am in favour of the motion.

Roy Dunbrack - I am in favour of the motion, I would like to assure Mr. Eldridge that the \$150.00\$ will be well spent.

Ivan Macdonald - I suspect that the committee structure that Ed Rice has instigated some years ago has generated more interest in our Association because you can see that it involves around 34 persons in our Association, and this is over and above the active Council Members. We held two workshops last year where all of the committees got together and interfaced back and forth with each committee, we have a coordinating effort within the developing aspects of our Association and, in particular this past year was the Legislative Committee and the Surveying Standards.

Joe MacLellan - I am in favour of the motion.

Motion passed.

Mr. Rice - I would like to thank everyone voting on the motion.

Ken Robb - I would like to suggest now that Council give serious consideration of setting up a committee to look into the aspects of a fee structure in relation to non practicing members.

Bert Robertson - the dues of \$150.00 cannot be collected until you have approval of Governor-in-Council to do so, until then the fees are still \$30.00 and that is all that a person needs to pay.

\* \* \* \* \*

Monsieur le president,

Je m'en voudrais et vous pourriez peut-étre me reprocher de ne pas avoir dit quelques mots en français, a titre de representant de l'Ordre des Arpenteurs-geomètreurs du Quebec.

Ces mots seront pour vous exprimer ma satisfaction et ma graditude. Mon épouse Yolancle et moi n'onblierons jamais le chaleureux accueil que vous nous avez reserver et l'attention de tant d'instand don nous avons bénéficier. Merci beaucoup.

Personnellement j'zi suivi avec attention et grand intérêt vos dèlibérations. Les sujet traites ou plutôt le sujet d'importance majeure dont nous avez discute, l'èducation ou la formation professionnelle, est grande actualite même au Quebec et je note avec joie que vous avez l'intention d'exiger une formation universitaire de vos futurs membres. C'est un grand pas que vous avez decide de faire la. Il est facile de constater l'intérêt souleve par ce probleme chez nos membres. L'assistance exceptionnelle pour cegenre d'assemblee, que nous retrouvons ici vaut beaucoups plus que les discours et beaucoup plus significative.

Monsieur le president encore une fois felicitations, et merci beaucoup.

Rejean Blanchet, A.G.

## MEETING ADJOURNED

Mr. Macdonald moved and Ed Rice seconded that the 25th Annual Meeting be adjourned. Motion carried.

Mr. Macdonald declared the meeting adjourned.

Respectfully submitted,

Land 1 Clarke,

Garnet F. Clarke,

Secretary-Treasurer.

# THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

# FINANCIAL STATEMENT

# OCTOBER 1, 1974 TO SEPTEMBER 30, 1975

	<u>1975</u>		<u>197</u>	1974	
Cash on hand October 1, 1974	\$10,338.98		\$ 3,318.01		
Receipts	24,127.50		18,570.26		
Expenditures		\$30,564.24		\$11,549.29	
Cash on hand September 30, 1975		3,902.24		10,338.98	
TOTAL	\$34,466.48	\$34,466.48	\$21,888.27	\$21,888.27	
The cash on hand September 30, 1975, consists of the following:					
<ol> <li>Nova Scotia Savings &amp; Loan D</li> <li>Bonus Savings Account</li> <li>Current Account</li> </ol>	ebentures			\$ 2,800.00 465.60 636.64 \$ 3,902.24	
DETAILS OF RECEIPTS					
			<u>1975</u>	1974	
Dues: - Current Arrears Associate			\$12,709.00 548.00 30.00	\$11,762.45 588.00 30.00	
24th Annual Meeting			4,893.08	2,894.50	
Examination Fees			3,164.00	2,170.50	
The Nova Scotian Surveyor			1,198.50	948.99	
Subscriptions			50.00	-	
Professional Stamps			54.00	17.50	
Interest on Debentures			9.00	19.73	
Interest on Savings			613.91	67.59	
Membership Certificates			17.00	2.00	
Canadian Council of Land Surveyors - Travel Assistance		-	69.00		
Telephone - Yellow Page Advertising		624.66	-		
Special General Meeting - Meals		136.55	-		
Miscellaneous			21.00	-	
Refund			58.80		
	TOTAL RECEI	PTS	\$24,127.50	\$18,570.26	

# DETAILS OF EXPENDITURES

	1975	<u> 1974</u>
24th Annual Meeting	\$ 6,473.02	\$ 3,857.92
Board of Examiners	3,502.54	1.654.43
Professional Stamps	74.80	49.02
Postage	534.36	270.25
Stationery	741.10	244.48
Council Meetings	377.56	586.10
Stenographic Services	1,563.13	557.64
Delegates to Conventions	1,483.19	940.44
Telephone and Telegraph	209.07	18.14
Workshops	572.61	733.53
N.S.F. Cheques	38.00	99.00
Bank Charges	54.03	19.08
Honorarium	1,000.00	500.00
Flowers	17.90	16.05
Roll of Members	419.08	400.27
Addressing Machine Plates	41.13	5.77
Typewriter Maintenance	68.00	38.00
Regional Meetings	205.90	88.00
Delegates to Provincial Presidents' Meeting	460.53	204.00
Private Practice - Expenses	-	124.38
Advertising - Executive Secretary	166.38	127.20
Books Purchased	12.00	26.00
Post Office Box Rental	8.00	8.00
N.S.L.S.I. Prize	8.00	8.00
Metric Conversion	<del>-</del>	47.52
Travelling Expenses - Steno for Annual Meeting	74.84	-
Business Manager's Salary	3,908.28	-
Returned Cheque	5.00	-
Miscellaneous Printing - Administration	527.45	-
Members Hand Book Reprinting	406.81	-
Printing Reports - 24th Annual Meeting	269.08	-
Office Equipment	129.47	-
Office Rental	600.00	-
Telephone Advertising	67.50	-
Miscellaneous	80.00	-
Special General Meeting	623.26	-
Council & Workshop Travelling Expenses	123.26	-
Grant to 25th Annual Meeting Committee	500.00	-
Miscellaneous Meeting	35.75	-
Discipline - Committee Meetings	82.72	-
Protection - Information Brochure	587.22	710 07
Communication - The Nova Scotian Surveyor	2,254.12	710.97
Survey Standards - Education (Travelling Expenses)	267.80	-
Joing Certification (Travelling Expenses		- 275 30
Regulations - Printing	155.75	215.10
Regulations (Travelling Expenses)	55.80	-
Technicians & Technologists (Grant)	200.00	-
Public Service - Legislation - Printing	902.36	-
- Travelling Expenses	333.10	
TOTAL EXPENDITURES	\$30,564.24	\$11,549.29

Respectfully submitted,

G. F. Clarke, Secretary-Treasurer.

Ernest Boehk

## \*\* ACCEPTANCE OF THE PRESIDENCY \*\*

To all the Past Presidents, fellow members and friends, thank you for the convidence you have shown in me. When I was lifted to the shoulders of such an honoured group of Past Presidents and bodily carried to the dais, I wondered whether it was good to start in the office of President with both feet off the ground.

It is reassuring to see so many Past Presidents here today to witness yet another chapter in the life of our Association. You know what lies ahead of me in the next year because you have already served. We would not be where we are today if it was not for the diligent and continuous work of each of you. You know that I must getboth feet back on the ground immediately.



Our Association has had a good year because Ed Rice kept his feet on the ground even in the times of the province-wide telephone strike. Thank you Ed for all your help.

Thanks to you too Garnet Clarke, our retiring Secretary-Treasurer, for the many many hours spent on the work of our Association.

Within the next year we must follow the course laid out for us by the hard working Committees. For instance, the Legislative Committee has our new Act in final form; the Education Committee has presented new regulations governing academic standards and the Survey Regulations Committee is actively involving as many members as possible in the finalizing of new standards for surveys. Each of the other Committees within our structure is also active and working for all of us.

In the next year it is my hope that our new Act will be a reality, that our education standards be established and, that the standards for surveying will attain a higher professional level.

Let's move on into the next twenty-five years with the spirit of the past guiding us forward.

MONROE Alpha 325

3767 Howe Ave. Halifax, Nova Scotia Telephone (902) 454-6405



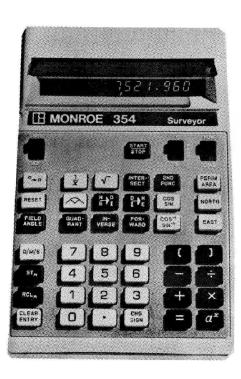


The Monroe Alpha 325 is more powerful and easier to use than any other mid-priced desktop computer in the world because:

- Built into the Alpha 325 are over 100 preprogrammed operations for logarithms, trigonometry, statistics, metric conversions and the ability to compute in degrees, grads, radians and degrees, minutes and seconds.
- Programs and data are stored on a tape cassette.
- By itself, the Alpha 325 holds 416 program steps plus 12 data registers.
- All arithmetic operations are performed algebraically, just as they're written on paper. Plus parentheses four levels deep.
- It has both a printer and display, yet it takes up less room on your desk than the average in-basket.

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

# 354 Micro Surveyor



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

The Micro Surveyor does any kind of calculation you could ask for. Right there in the field. When and where you need it. Including all kinds of intersections, vertical angles, circular arcs, you name it. The Micro Surveyor knows what to do when you feed it bearings, azimuths, and field angles. It does direction/length to latitude and departure conversions. And vice versa. And, as you work your way around a traverse, the machine is accumulating the total area, including curved sections, and perimeter.

For the very first time, there's a portable calculating machine that works your problems exactly the way you think them. But, that's only the beginning. The Micro Surveyor does the really tough stuff, too. Like balancing, area cut-offs, horizontal and vertical curves. That's because it's a dual program machine, which means you can have two different 80 step programs in memory at the same time. Right out there in the field it will run curve stakeouts, compass and Crandall adjustments and three-point resection.

The display is big and bright. It tells you about angles in degrees, minutes, and seconds

—in quadrants or azimuths. And on those rainy days? The Micro Surveyor is a draftsman's dream. Helping with subdivision layouts, cut and fill, and every other type of calculation you could get into. And, because it's so compact, the Micro Surveyor is right at your fingertips on the drafting table.

# PUBLICITY

The Association was fortunate in being able to arrange a radio interview for one of our long standing members, Mr. Rusty March, on Thursday, November 13th. During the talk on the historical aspects of surveying in Nova Scotia "Rusty" brought to thepublic's attention that the Association's Silver Anniversary was being celebrated that weekend.

Mr. Willis Roberts of Land Registration Information Service gave two talks, one on radio and one on T.V. on the modern approach to land surveying and how, with the land registration system, he initiated under the four Premiers of the Atlantic Provinces; it is expected that a lot of the difficulties experienced in the buying and selling of land would be obviated.

The Association wishes to thank both of the speakers and C.B.C. for the interesting talks and also for the fact that it brought the Association to the public's notice.

# DEPARTMENT OF SURVEYING ENGINEERING UNIVERSITY OF NEW BRUNSWICK

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

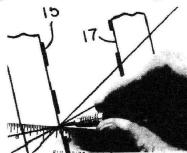
Further information from

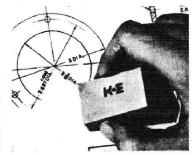
# Chairman Department of Surveying Engineering University of New Brunswick

Fredericton, N.B.

# With new HERCULENE Static-Free Drafting Film you can use ink or pencil and erase again and again.







# And that doesn't even scratch the surface.

It's the only film with a surface that's "engineered" for superior pencil take, excellent ink take and adhesion.

Permits repeated "ghost-free" erasing, without surface degradation.

Is static-free, to repel dirt, dust, eraser particles.

Won't cling to diazo cylinders or itself.

Makes fast, crisp reproductions.

Waterproof, oil proof, stain proof.

Unaffected by heat or aging.

Almost indestructible.

The most cost-effective drafting medium available today.

You can't afford *not* to draft on HERCULENE Static-Free Drafting Film. Write for brochure and samples.

6061 Young St., Halifax, Nova Scotia





Such are the hazards of being a pioneer that the name Tellurometer should be taken by some people as the generic term for all Electronic Distance Measuring equipment. But there is, of course, only one Tellurometer Company and range of equipment, albeit a large one with an increasing number of different models suitable for practically every application.

# Survey instruments

CA1000. A lightweight microwave system for geodetic survey. It has an accuracy of 5 parts per million and a range of 30km (181/2 miles). Its operation is so simple that the remote station can be manned by unskilled personnel.

CD6. A lightweight infra-red system with a high accuracy over a range of up to 2km (11/2 miles), which makes it ideal for cadastral survey. Signal reflection is from a suitable target/reflector, so a remote instrument is not needed.

MA100. A well established cadastral infra-red instrument ideal for use in civil engineering and underground applications. A mean square error of only 1.5mm is guaranteed, but many users claim 1mm or better.

#### Ruggedised equipment

MRA3 and MRA5. Two microwave systems of extremely rugged construction ideal for use under severe environmental conditions. The MRA5 features antenna separation for integral or remote (up to 25m/27 yd) operation and a fully automatic numerical display gives less than 20 seconds measurement time.

#### Position fixing systems

Systems based on the well established MRB201, integrated with plotters and computers and using auto-tracking antennae, are ideal for use in plotting and position fixing for such work as precision dredging, cable laying, off-shore rig positioning and aerial survey.

For worldwide service, contact:

UK: TELLUROMETER (UK) LTD. Roebuck Road. Chessington, Surrey KT9 IRO.
SOUTH AFRICA: TELLUROMETER (PTY) LTD, P.O. Box 23, Plumstead, Cape.
USA: TELLUROMETER USA, 89 Marcus Boulevard, Hauppaige, NY11787.
CANADA: TELLUROMETER CANADA LTD, 1805 Woodward Drive, Ottawa K2C OP9
AUSTRALIA: D. R. JOHNSTON & CO. (PTY) LTD. Stanhill 21. Queens Road, Melbourne SC2. JAPAN: OKURA TRADING CO. LTD, 3-6 Ginza Nichome, Chuo-Ku, Tokyo 104

TELLUROMETI a PLESSEY Company

Tellurometer is a Registered Trade Mark.