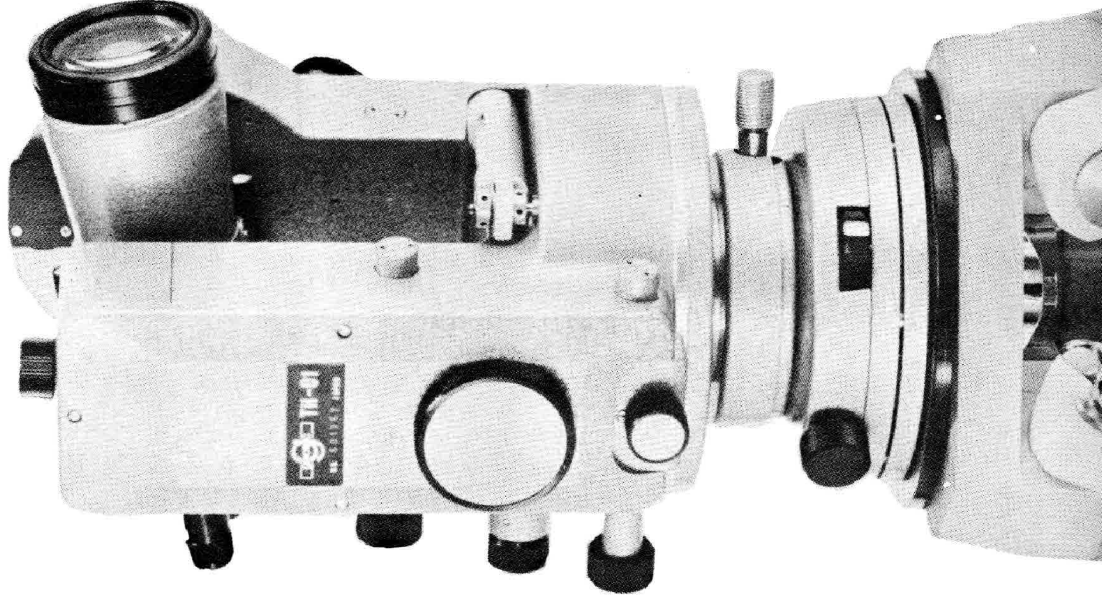


The NOVA SCOTIAN SURVEYOR



OCTOBER 1975

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TELESCOPE Type

Internal focussing, anallatic optics

Magnification power

28 X

Effective aperture

40mm

Minimum focus

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Stadia

Ratio 1:100; Additional constant 0

HORIZONTAL CIRCLE

Diameter

100mm

Graduation

20'

Graduation of microscale

1"

VERTICAL CIRCLE

Diameter

80mm

Graduation

20'

Graduation of microscale

1"

SENSITIVITIES OF SPIRIT LEVELS

Vertical circle coincidence level

30" per 2mm

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The NOVA SCOTIAN SURVEYOR

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THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS INCORPORATED

Edward P. Rice
President

Burton L. Cain
Editor

A.C. Krasemann
Business Manager

Garnet F. Clarke
Secretary-Treasurer

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

Founded 1951

Incorporated 1955

Vol 30

OCTOBER 1975

No. 81



Finance Minister Peter Nicholson and Col. J.F. Doig, Principal, at the official opening of the Nova Scotia Land Survey Institute in Lawrencetown.

- C O N T E N T S -

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

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* * * * *

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

** ROLL OF PRESIDENTS **

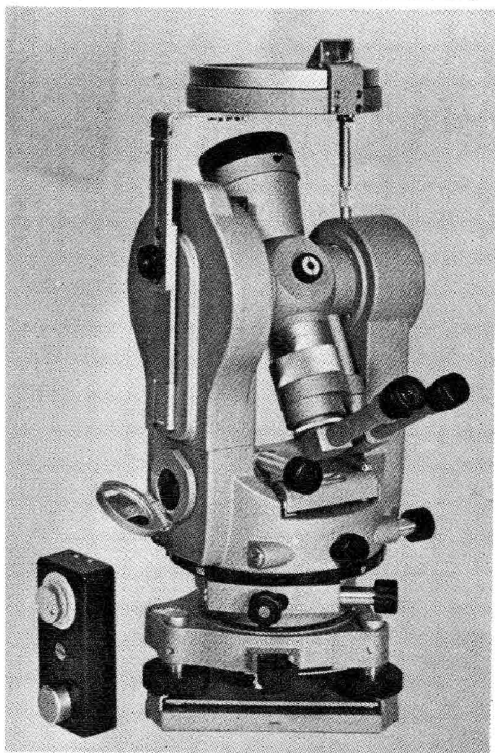
E. O. Temple Piers	1951 - 1953 - (Two terms - The Association of Provincial Land Surveyors)
J. D. McKenzie	1953 - 1954
*R. E. Dickie	1954 - 1955
J. E. R. March	1955 - 1956
R. E. Millard	1956 - 1956
*Freeman Tupper	1956 - 1957
Spencer Ball	1957 - 1958
Herbert Martell	1958 - 1959 - (Date of Annual Meetings were changed from February to November)
Walter E. Servant	1959 - 1960
Donald L. Eldridge	1960 - 1961
A. F. Chisholm	1961 - 1962
J. Ronald Chisholm	1962 - 1963
Joseph F. Archibald	1963 - 1964
Errol B. Hebb	1964 - 1965
H. B. Robertson	1965 - 1966
George T. Bates	1966 - 1967
John S. Pope	1967 - 1968 - (Name changed to The Association of Nova Scotia Land Surveyors, July 1/68)
Roy A. Dunbrack	1968 - 1969
George E. Streb	1969 - 1970
L. Robert Feetham	1970 - 1971
James F. Doig	1971 - 1972
William S. Crooker	1972 - 1973
James D. Chisholm	1973 - 1974
Edward P. Rice	1974 - 1975

** ROLL OF SECRETARYS **

Walter Snook	1951 - 1954
Roy Schofield	1954 - 1956
H. B. Robertson	1956 - 1962
E. P. Rice	1962 - 1972
G. F. Clarke	1972 -

* Deceased

- submitted by George T. Bates



SPECIFICATIONS

(* mark for 400 g)

TELESCOPE

length:	175 mm (6.9 inches)
image:	erect
objective aperture:	40 mm (1.6 inches)
magnification:	28 X
resolving power:	3"
field of view:	1°20'
minimum focus:	1.3 m (4¼ feet)
stadia ratio:	1:100
stadia constant:	0

HORIZONTAL CIRCLE

diameter:	80 mm	
graduation:	1°	* 1 g
micro scale, 1 div.:	10'	20 c
micro reading:	20"	50 cc

VERTICAL CIRCLE

diameter:	70 mm	
graduation:	1°	1 g
micro scale, 1 div.:	10'	20 c
micro reading:	20"	50 cc
vertical compensating range:	±5'	

LEVEL VIAL

sensitivity of plate level:	30"/2 mm
sensitivity of circular level:	10"/2 mm

OPTICAL PLUMMET

image:	erect
focusing range:	0.5 ~ 1.5 m
magnification:	2 X

WEIGHT

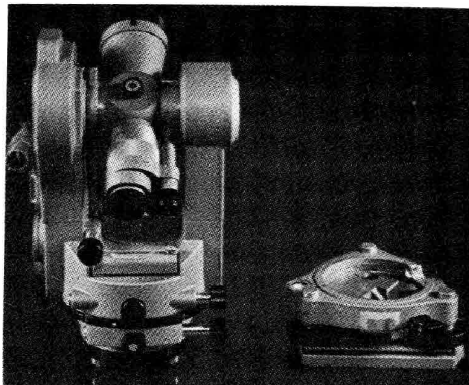
instrument:	5.0 kg (11 lb)
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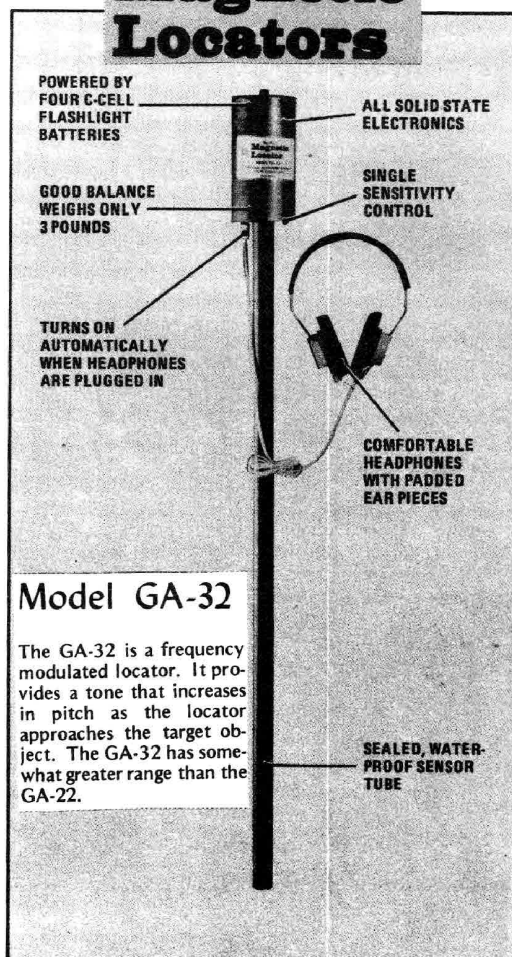
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** OUR TWENTY-FIFTH ANNIVERSARY **

The 25th Anniversary of The Association of Nova Scotia Land Surveyors is an event noted with pleasure by all members, and perhaps with a bit of extra pleasure by its charter members.

Since formation this Association has moulded the membership into a responsible group of land surveyors, dedicated to work in the public interest, and accepted by the public as such.

The growth record, since the first Annual Meeting, is well documented in The Nova Scotian Surveyor by Eric Millard, its capable first editor.

It is not necessary to detail this record here, as a complete set of these publications is held in the files of the Secretary. Rather, I will try to recall a few of the events leading up to the formation of the organization that might be of interest at this time.

We rightly celebrate this year as our 25th Anniversary. We might note, however, that the 50th Anniversary of the first attempt to form a Provincial Land Surveyors Association was passed several years ago.

As I remember that first attempt, which failed to get off the ground, was in the year 1921. The next attempt was in the year 1925. At that time I was working as an instrument-man under the late John R. MacKenzie. Mr. MacKenzie wrote to quite a number of land surveyors in the Province, trying to interest them in forming an Association at that time. The replies he received were not very enthusiastic, and Mr. MacKenzie left the province shortly after to work in the United States. That ended his attempt, but his letters were the seeds that germinated the next attempt the following year.

This one almost succeeded. As reported by Mr. Millard in The Nova Scotian Surveyor - Vol. 1, No. 1, November 1954, under the title Early Attempt to Form an Association, a Bill was presented to the Legislature on February 24, 1928. This Bill was called AN ACT TO INCORPORATE THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS, and received its first reading on that date. In Mr. Millard's report it was stated to have been turned down. If my memory serves it was shelved which amounts to the same thing. Also, as I remember at least one of the meetings mentioned in his report was indeed held at the Queen Hotel, because I was passing through Halifax at that time and drove my father home in my old Model T Ford.

Twenty years were to pass before the late E. O. T. Piers and I began the discussions that led in time to our present Association.

Mr. R. J. Milgate was at that time the Provincial Councillor for the Canadian Institute of Surveying and he obtained for us copies of laws of several other provinces relating to land surveys and to survey organizations. Mr. Piers then wrote to a number of land surveyors here suggesting we form an association and inviting them to a meeting at his home on Birmingham Street.

Eight land surveyors came to that first meeting. According to my failing memory, and I could be partly in error, their names were: - E. O. T. Piers, James D. McKenzie, Reginald E. Dickie, J. E. R. March, Freeman Tupper, Eric Millard, Walter Snook, Spencer Ball.

It was at that meeting the decision was made to go ahead with the organization of what is now our Association of Nova Scotia Land Surveyors. It is interesting to note this is the identical title that appeared on the petition for Bill 58, in the year 1928.

Also, at that meeting E. O. T. Piers and Walter Snook were appointed respectively Chairman and Secretary-Treasurer pro tem. Mr. Snook's duties as treasurer were very light as we had no funds at all at that time.

Quite a few meetings were held at the home of Mr. Piers and some at my home on Robie Street, mostly attended by surveyors of the Halifax and Dartmouth area. The reason being they were able to attend at little or no expense. One notable exception was the late Major Church, who came in from Lawrencetown to most of them at his own expense.

These meetings culminated in a petition to the Legislature to organize as an Association of Provincial Land Surveyors. The petition was granted and we came into existence under The Societies Act, with about as much authority, as the late Major Church said, "as a ladies sewing circle".

Our first Annual Meeting was held in the gymnasium hall of the old Nova Scotia Technical Building. Mr. Piers was elected President and Mr. Snook was elected Secretary-Treasurer. No doubt our previous pro tem appointments were contributing factors in these elections.

This un auspicious beginning was a far better start than we thought at the time, for because of the careful and responsible guidance given by the Association to its members, the Government saw fit on March 26, 1959, to have enacted The Provincial Land Surveyors Act. This Act with a number of revisions has served a very useful purpose in improving the survey situation in Nova Scotia up to the present time.

It has enabled The Association of Nova Scotia Land Surveyors on this, our 25th Anniversary to claim with justifiable pride, a large share, in fact, the lion's share, of the many improvements that have been made in the survey situation since we came into existence.

Heading the list of these improvements, in my opinion, is the general recognition by the public of the professional status of the Nova Scotia Land Surveyor. We all know the controversy surrounding the accepted definition of the word professional. A great man once said that commercial people are those who earn money to improve their social and financial standing, while the true professionals earn money in order to improve their work. By these criteria, and considering the cost of new survey equipment, the present day land surveyor is a super-professional.

Next, on the list, I would have to list three interdependent items, they are: (1) Elimination of the use of the Magnetic Compass as an important survey instrument. (2) The establishment of a plane co-ordinate system. (3) The complete revamping of our archaic land registration set up. All these things are, or are, about to be accomplished, and the solution of them has another pleasing feature. It is automatically eliminating the unlicensed and incompetent boundary butchers.

The technical and political complexities involved in the solution of these problems have shown the need of immediate revision of the present Act, and you have responded to this need. At a recent special general meeting your proposed revision was approved by the Association, and there is every reason to believe it will be approved when submitted to the Government.

Three of the original eight who met at the home of E. O. T. Piers more than a quarter century ago have passed away. They are E. O. T. Piers, Freeman Tupper and Reginald Dickie. In their memory, and on behalf of those of us who are still here, may I offer hearty congratulations and best wishes on the 25th Anniversary of The Association of Nova Scotia Land Surveyors.

- by J. E. R. March

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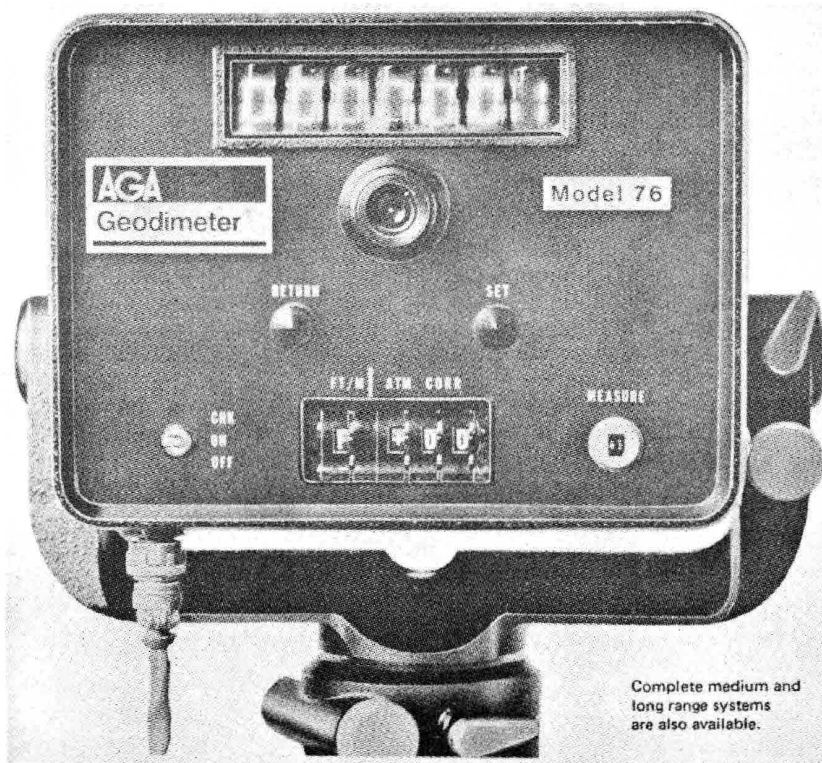
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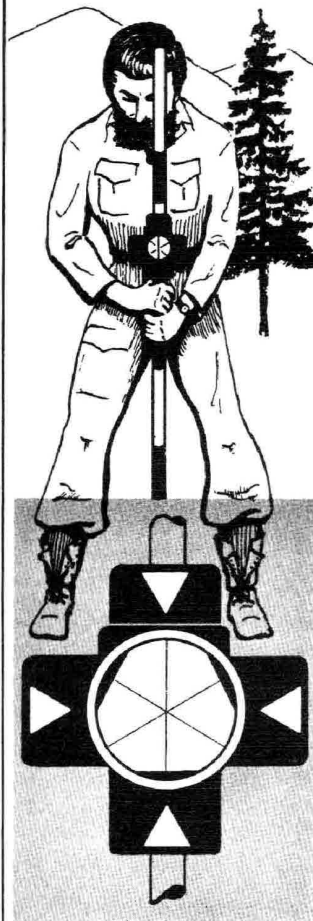
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THE HISTORY AND GROWTH OF AN IDEA
** AND THE RESULT OF HAVING TOO MUCH TO SAY **

The Nova Scotian Surveyor was originally set up to convey to the membership the results of the meetings held by those few who were responsible for the starting up of the present Association of Nova Scotian Land Surveyors. The membership at first could all be indicated by the fingers on one hand and then in the second year it was necessary to use the fingers on both hands.

The first few issues were eight page pamphlets, about 7" x 8" and to fill those eight pages required a lot of head scratching. Because promises of articles for the next issue were many and varied and contained many good intentions, they seemed to get lost in the promisors daily endeavours to make a living, the result was more head scratching but eventually enough material, such as it was, would be gathered together and another issue went to press.

It was decided that to try and offset part of the cost of the Nova Scotian Surveyor that we should look into the advertising angle and from this advertising of a few one shot ads, and a bit of skulduggery by the editor, like sending a copy of a competitors ad, as soon as it was received, to another firm, with similar equipment, resulted in a larger and more expensive ad from that firm. This was done on one or two occasions in desperation in order to try to offset 50 per cent of the cost of printing. With the continuing advertising, however, by a few companies who continued to place their ads in the Nova Scotian Surveyor, we were able to meet approximately one-third of the cost of printing at the end of 17 years. I was, I think, one of the happiest members of the Association of Nova Scotia Land Surveyors when the Annual Meeting decided that there would be an Editorial Committee set up to assist the editor of the Nova Scotian Surveyor. There were some who told me that I had gotten a raw deal, but to me I had been liberated and can only say, why did you wait so long to set up that Editorial Committee? Today you have a Quarterly Publication that is second to none and a credit to the Association. I can truly say that I am proud to have had the privilege to begin such a publication, that has finally become of age. To the Editor and staff I say you are doing a good job and keep up the effort. I do not have any of the early issues I sent them all to the Provincial Archives in Halifax, N. S.

- by R. E. Millard.

THE FIRST SURVEYORS IN HALIFAX

by George T. Bates, N.S.L.S.

Well-known to most Land Surveyors in Nova Scotia - to the older ones anyway - is that the first three Surveyors-General in this Province all had the same name, and were father, son and grandson. They were Charles Morris the first, second and third; and the third Charles Morris was the father of John Spry Morris, who also became Surveyor General, making four successive generations of the Morris family to hold that office.

When Cornwallis arrived at Chebucto on June 21st, 1749 Charles Morris the first was already quite familiar with this Province. Born in 1711, he had been a Captain of Provincials during the first siege of Louisbourg under General William Pepperell in 1745. When Governor William Shirley and his Council in Boston decided on British colonization for Nova Scotia that same year, Charles Morris was engaged to make a survey of the interior parts of the Province, and he was in command of one of the Companies of Provincials under Colonel Noble at Minas in 1747. Cornwallis appointed him Surveyor General of Nova Scotia in 1749, an office he held until his death in Windsor in 1781. He was appointed Judge of the Inferior Court of Common Pleas in April 1752, holding that office until June 27, 1764 when he was appointed assistant Judge of the Supreme Court of Nova Scotia. He became President of His Majesty's Council of Twelve in 1775 and became Chief Justice of the Supreme Court of Nova Scotia on April 30, 1776, following the death of the first Chief Justice, Jonathon Belcher. Morris was Chief Justice until May 1, 1778, when Bryan Finucane, the third Chief Justice of the Province, was sworn into office.

His was an auspicious career, similar to others who started life as land surveyors, and is perhaps worthy of further research.

Less well known, even to most of the older land surveyors, are the names of the land surveyors who came with Cornwallis as original settlers in 1749.

Thirteen transports carried these settlers, and all had arrived in the harbour by July 1, 1749. It was at first thought that the new town would be located at the southernmost tip of the peninsula - now Point Pleasant Park - but this was soon abandoned as the water off the Point was too shallow for shipping, the shore was rocky and dangerous and the whole point was too exposed to the elements. A new site was chosen, about a mile further north where there was more shelter, the water was deeper and defence was easier; however, the records say that the woods came right down to the shore and not one square yard of ground was to be seen anywhere.

So - the axes went to work and the principal lines were cut and cleared. It is a matter of record that the stumps of some of the trees that were cleared from the streets remained for 50 years after. By July 25, about 20 acres had been cleared, or 14 or 15 blocks of 16 lots. On August 1st, clearing had advanced to the point where the Governor and Council decided that the house lots would be ready for distribution by August 8th, so that the settlers could begin construction of their houses.

According to the early records, "The plan of the Town having been completed and the building lots marked out, in order to prevent dispute and discontent among the settlers, it was ordered that they should draw for the lots. Accordingly, at a Council held on the 1st of August it was resolved that on the Tuesday following, the 8th of August, all heads of families who were settlers should assemble at 7:00 o'clock with the overseers; and single men should form themselves into families, four to each family and each family to choose one to draw for them. Mr. Bruce, the engineer being present on the occasion, assisted in distributing the lots according to the arrangement and the whole were entered into a Book of Registry which was to be kept for the purpose and to constitute evidence of title and possession".

On August 30th, the sloop "Sarah" arrived from Liverpool with 116 more settlers, and two more streets were added to the north end of the town for their accommodation.

Most of the supplies for the new settlement were coming in from New England - sometimes as many as 20 vessels in one day. Some of these had more new settlers as well as supplies on board, forming a trickling influx that continued throughout 1749 and 1750.

In August 1750, the "Alderney" arrived in port with an additional 353 settlers, who were settled on the opposite side of the harbour, thereby giving Dartmouth its beginning. The first influx of German settlers arrived in September 1750, when 300 came, and these were augmented by the arrival in the Spring of 1751 by 958 more, and another 200 in June (who were settled at Dutch Village) and were followed by 1,000 more in 1752. The town spread northwards, as more streets and lots were laid out from Gottingen Street eastwards to the Harbour, and as far north as North Street.

In June 1753, about 1500 of these German settlers were embarked for Malagash Harbour, and the town of Lunenburg came into being. After this exodus, only about 15 German families were left in the north suburbs, which was known as German-town. Irish settlers were being located in the area south of the new town, generally around the Morris Street area, and this became known as Irishtown.

In the Spring of 1751, the surveyors were busy laying out garden lots for the settlers. These are what are known locally as the Five Acre Lots, and are generally located in the north end of the town. At this time the Indians were still hostile to the English settlement - they having had friendly relations with the French since 1604 - and there were numerous "incidents" that kept the settlers close to the comparative safety of the little colony. There were numerous rumors and threats of an Indian invasion during those first few years.

The continuous influx of settlers to the new colony would have kept all save organized and armed parties close to the safety of the barricaded settlement for awhile. The English garrison that came down from Louisbourg was at first located to the south of the new town in the area known as Irishtown and this, together with the outpost fort at Fort Sackville in Bedford, manned by Colonel John Gorham and his Indian Rangers of the Woods (Mohawks from New England) reduced the chances of success of an Indian invasion.

As this danger decreased with the passage of time, the surveyors began laying out the farm lots on both sides of the Harbour and Bedford Basin. The size of these grants were generally related to and dependent upon the occupation of the settler and the size of his family.

All of which is to indicate that those first surveyors in Halifax were very busy people, the work was hard since the area was densely wooded and the ground rough, and there was for a long time the danger of an unexpected foray by the Indians.

Five of the settlers who came with Cornwallis are listed as "Surveyors" on the Mess Lists. Three came on the frigate "Canning" and two on the "Baltimore". Two were married, but without children and three were either bachelors or widowers, including John Brewse (Bruce) the engineer, who came on the Baltimore with one male servant. His house lot was in Ewers Division, Block H, Lot 16, which is located at the southwest corner of Prince and Barrington Streets. He was still there with his male servant when the July 1752 Census was taken, but I have no further information on him at this time.

His fellow passenger on the Baltimore was Edward Halhead, who was accompanied by one female servant. The only location I have for him is Lot 7, Block E in the north division of the Five Acre Lots, which is one lot south of Duffus Street on the west side of Robie Street. It is possible, perhaps even probable that he

was the schoolmaster in charge of the S.P.G. school during the first few years of the town's history. His name does not appear in St. Paul's Parish Registers up to 1760, and he warrants further research.

The other single man was Joseph Littlewood, whose name appears on the Mess List of the "Canning". He was unaccompanied, and except for that Mess List, his name does not appear on any other of the records that I have seen. He may have been one of the settlers who took the first opportunity to get to New England after he arrived at Chebucto.

John Walker and his wife Elizabeth were passengers on the Canning, and he is listed on the Mess List as a surveyor and schoolmaster. His house lot was in Gallands Division, Block C, Lot 16, at the southwest corner of Prince Street and Bedford Row. His wife died two months after they arrived here, and was buried on August 29, 1749. Two years later, he married a widow, Lucy deBrhuls, on August 25, 1751. In the Census of 1752, there were apparently two John Walkers, both married, one living "within the pickets" (probably the above) with a family of five, the other living in the South suburbs with a family of six.

John Streitch and his wife, with one male and one female servant, also came on the Canning. He was located in Foreman's new Division, Block H, Lot 6, which was one lot north of Marchington's Lane on the east side of Argyle Street. There was a John Stretch on Lot 16, Block G, in the south suburbs, which was two lots south of Morris Street on the east side of Pleasant (Barrington) Street.

These are the first surveyors in Halifax, five of the original Halifax settlers, who came with Cornwallis. At this point, we have little information on them, other than their names, but there is no doubt that as surveyors, they would have an active part in carving out of the wilderness the new settlement that would become the Warden of the Honour of the North; and we would do well to recognize and honour their names on this, the 25th Anniversary of the Association of Nova Scotia Land Surveyors.



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S T A T I S T I C S

It is interesting to reflect on the growth of our Association as recorded in past issues of The Nova Scotian Surveyor.

In Volume 1, No. 1, November 1954, in an article entitled "A Call for Increased Membership", President, R. E. Dickie, reports that at the Annual Meeting in 1952 membership totalled 90

1953 " " 130

1954 " " 140. There were 300 registered land surveyors in Nova Scotia in 1954 and Mr. Dickie's plea was "we cannot afford to rest with less than fifty per cent of the profession in the Association. Our objective should be sixty, seventy, eighty per cent with ultimately one hundred per cent". The passing of our proposed Act may enable us to reach this ultimate objective of 100%.

Minutes of the FIFTH ANNUAL MEETING, November 29th and 30th, 1955, held in the assembly room of the Nova Scotia Technical College.

President - J. E. R. March

42 members in attendance

4 visiting delegates from New Brunswick

Total membership 189.

Financial report for the period December 21, 1954 to October 26, 1955:

Balance at December 21, 1954	\$ 417.77	
Receipts	478.90	
Expenditures		\$ 351.48
Bank Balance October 26, 1955	<u> </u>	<u>545.19</u>
	\$ 896.67	\$ 896.67.

Of interest was a statement by E. O. T. Piers that the usual rate charged for surveying services in the Halifax area was \$30 per day plus expenses.

Minutes of the TENTH ANNUAL MEETING, Lord Nelson Hotel, on the 21st and 22nd of November 1960.

President - Walter E. Servant

61 members in attendance

21 guests

Total membership 275.

Financial report:

Balance October 31, 1959	\$ 142.55	
Receipts	2,227.80	
Expenditures		\$2,236.11
Bank Balance October 31, 1960	<u> </u>	<u>134.24</u>
	\$2,370.35	\$2,370.35.

Minutes of the FIFTEENTH ANNUAL MEETING, November 5, 1965, in Halifax.

President - Errol B. Hebb

Number in attendance not reported

Total membership reported as 256 (Comparing this with 1960 it appears that either a number of members had been removed due to a non payment of dues or there was error in the printing. Time does not permit further checking to verify this).

Financial Statement:

Bank Balance October 1, 1964	\$1,725.06	
Receipts	4,151.46	
Expenditures		\$3,695.13
Bank Balance September 30, 1965		<u>2,181.39</u>
	<u>\$5,876.52</u>	<u>\$5,876.52.</u>

It was noted that Mr. Joe Archibald was appointed Secretary of the Board of Examiners, a post which he still holds today.

Minutes of the TWENTIETH ANNUAL MEETING, November 5, 6 and 7, 1970, at the Holiday Inn, Dartmouth.

President - George E. Streb

95 members in attendance
17 official guests
12 exhibitors
total membership 262.

Financial Report:

Cash on hand October 1, 1969	\$ 2,674.12	
Receipts	8,741.92	
Expenditures		\$ 7,569.73
Cash on hand September 30, 1970		<u>3,846.31</u>
	<u>\$11,416.04</u>	<u>\$11,416.04.</u>

Schedule of Minimum Fees adopted.

"FROM THE PAST"

The following are simply items of interest or humorous quotes from early issues of the "Surveyor".

It was reported at the executive meeting on October 16th, 1954, that the approximate cost of 150 copies (of the first Nova Scotia Land Surveyor) consisting of 4 pages each would be approximately \$12.00. The cost today including mailing is approximately \$500.00 per issue.

Volume 2, No. 2 - February 1955 -

From an article "I am Proud to Be a Land Surveyor" by President, J. E. R. March:

"The gambler gets his greatest thrill when he picks up his cards and sees four aces, or a royal flush. The speed maniac gets his after that needle quivers well beyond the century mark. I got mine by reaching down some hole and pulling out the water preserved point of a corner stake, placed there perhaps a century ago by one of our early land surveyors, or by pulling the moss, like a green blanket, off a carefully built mound of stones that may have been the object of many a search, or by counting the growth rings to a center line blaze and finding they check to the year with the survey return held in my hand. Yes, I am proud to be a land surveyor."

Volume 2, No. 4, August 1958 -

From an article entitled "Eliminating the Further Use of Magnetic Bearings" by J. E. R. March... "This Association has taken the lead in the changeover to the use of Astronomic Bearings, in property surveys and descriptions. Our efforts have met with considerable success, and we should not rest until the use of Magnetic Bearings in surveys and conveyances has been entirely eliminated."

Now some twenty years later, with the implimentation of the Co-ordinate Control System, let's hope that Rusty's dream is about to come true.

Minutes of Executive Meeting, Monday, October 16, 1954 -

Resolved that the following resolution be presented at the next Annual Meeting:

WHEREAS all the Provinces of Canada and the Board of Governors, Dominion Land Surveyors, all require that University graduates shall write full final exams.

And WHEREAS we are seeking to standardize Land Surveyors Examinations throughout Canada, be it resolved that this Association, respectfully requests, that the Board of Examiners do likewise in respect to the Nova Scotia Provincial Land Surveyors Examinations.

Article entitled "Land Surveyor's Examination" by Major J. A. H. Church, appearing in Volume 2, No. 3, May 1955:

"It is indeed lamentable that of the three oldest provinces in Canada only Quebec should have set a high standard for some time past."

"....if your executive will appoint a dour Scot you must expect a report which he believes to be necessary.

It would appear that the final responsibility for examination should rest with the Provincial Association as it does in every other province."

The following quotes are from an article by Reginald E. Dickie, entitled "The Granting of Lands and Surveying in Nova Scotia", appearing in Vol. 3, No. 8, August 1956:

"Nova Scotia probably presents the Land Surveyor of the present day with more diverse and difficult problems than any other Province in Canada". The first and greatest contributing factor to these difficulties is the fact that it is the oldest and earliest settled province in Canada, and secondly, following this and closely allied with the early settlement, was the lack of any planning and also the lack of training or experience on the part of those early land surveyors."

"In many cases these men (early appointees as Deputy Surveyors) apparently were old seamen, using marine compasses as quite often the bearings given are in marine terminology, North-east, by East, etc."

"Another thing of the utmost importance is the study of the idiosyncrasies of the old-time surveyor." To illustrate he made the following comments on the work of specific surveyors:

"His lines very crooked and his chainage very unreliable, often varying as high as 10 per cent."

"....an exceptionally straight line, his chainage very dependable."

"his chainage being very good, rarely overrunning more than a chain to the mile (that was considered good)."

"his centres were first hacked down and later hacked up."

"....ran a good straight line. In the early days his chainage along the roads and streams was fairly good, but his distances running back had quite excessive overruns, often amounting to as much as 20 per cent."

"his lines were very crooked and often overran as much as 100 to 200 per cent."

"....very reliable; both as to courses and distances."

A brief article entitled "Be Careful Where you Cut" appearing in Vol. 8, No. 14, February 1958. It appears that a Mr. "X" was very keen on having his lot surveyed. The Deputy Crown Land Surveyor being very busy and unable to make the survey suggested that Mr. "X" undoubtedly had some idea of the boundaries of his lot, and thus could start well within those bounds without danger of cutting across the lines. Mr. "X" replied that that was precisely what he was afraid of, his property being surrounded on three sides by Crown Lands and without knowledge as to where his own lines were, he was afraid that he might cut on his own lot.

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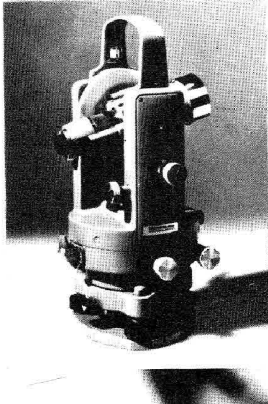
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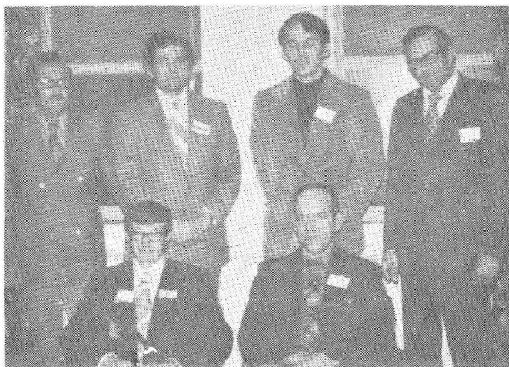
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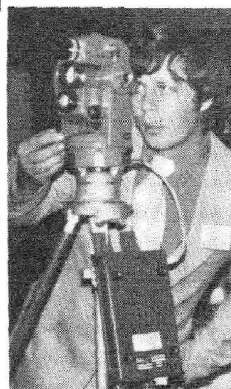
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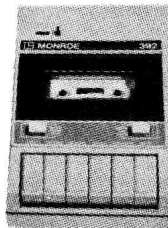
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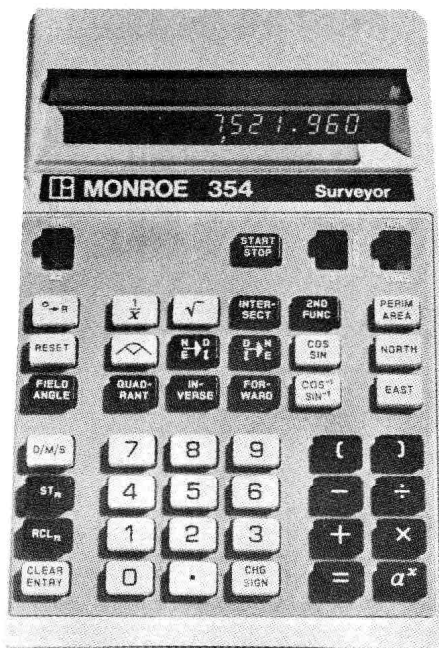


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354 Micro Surveyor



To The Editor:

Last night I attended a meeting of surveyors in Private Practice. Some of the more heated discussions centered around survey standards and improving our public image, the schedule of fees and the need for electronic measuring equipment to obtain precision commensurate with today's needs. I realize that these topics have been discussed before, but I did not realize how long these discussions had been going on until an old copy of the Novascotian or Colonial Herald was brought to my attention.

The following article, originally published in the Fredericton Royal Gazette and reprinted on the Novascotian on January 28, 1830, indicates the attempts of the Crown to bring some order out of the chaos created in subdividing an unknown and virtually unexplored wilderness with equipment that, even then, was acknowledged to be inaccurate and inadequate for the purposes required.

VARIATION OF THE NEEDLE

"We have great satisfaction in announcing that the Department of Crown Lands has undertaken a series of observations on the Magnetic Needle, in order to ascertain the amount of variation in different parts of the Province, and to endeavour to form correct data by which lines run formerly may be reproduced in an accurate manner, and new ones extended on the relative courses which were intended at the periods of the different surveys. From careful examination of old lines in the vicinity of Fredericton, and from reports of several of the officers of that department, it would seem that the Needle is now retrograding from the westerly variation which it has so long pursued: - but it must be acknowledged that the inaccuracies of surveys made in the forest, the instability of the marked objects, and the want of a perfect adjustment of the instruments used at those times, as well as some of those used for these examinations at the present day, create a degree of doubt on the subject, which must remain until further experiments shall prove the fact. In countries where landed property is defined by means of the magnet alone, the ascertaining of the amount of variation at different periods is a subject of the deepest importance - scarcely less than the decisions of the judicial department; and we are happy to say that it occupies the serious attention of the enlightened and benevolent officer who superintends the landed interests of the Crown, and who, by his Deputies, exercises so large a portion of the ministerial duty of determining the *meum et teum*. It cannot fail to afford general gratification when we state, from the best authority, that the possibility of much litigation in respect of divisional lines will be precluded by a more particular and scientific survey of the lands to be in future disposed of by the Crown. Care will be taken to determine the true meridian in different parts of the Province by means of an excellent set of astronomical instruments belonging to the Department of Crown Lands; after which all allotments will be conveyed in reference to that standard. A system like this cannot but greatly diminish the evils attendant on the uncertain course so long pursued in the colonies, be a source of comfort to the present generation, and produce lasting benefits for posterity."

This article received a reply from "a superannuated Deputy, in the Land Surveying Department" published in the Novascotian on February 25, 1830, which read in part"

"..wherein does the proposed method differ from the former usage of these Provinces? Shall we not still be embarrassed with the inaccuracies and disagreements of Instruments and Eyes, and Doubts respecting the progressive motion, etc. and also with the ignorance and carelessness of Practitioners? - now would it not be more efficient to cause, at least, one of the lines, in each and every Grant, to be run and permanently marked: and explicitly inserted in the Grant; to be and continue a criterion and standard, whereby the apparent variation, from the original course, might be ascertained from time to time, whenever any of the relative, subdividing, or supernumerary lines, may be required to be produced; be the Grant old or new."

This query of the sagacity of the New Brunswick Department of Crown Lands in going to such considerable effort and expense to determine the March of the Compass, when the obvious solution to our superannuated correspondent was to simply cut and mark at least one line of the Grant, could not fail to raise a response from our neighbours to the North. The reply came in the March 10, 1830 issue of the Novascotian. A gentleman from Fredericton writing under the pen name of Sigma endeavoured "to answer in a spirit of humility and submission" the questions posed by the previous correspondent. He wrote: "I must premise that he is guilty of one prime omission, which in a manner creates the difficulties that he has conjured up. In mentioning the purpose of preventing erroneous surveys; no notice is taken of the paramount purpose of obtaining correct data for the reproduction of lost lines, and for extending boundaries of long standing on paper, which have never been established on the ground.

.....It is said, that the clumsy expedient of running out the provincial grants, by the 'compass', was the effect of necessity, caused by the paucity of talent in these countries at their early settlement, in consequence of which, the true north could not be conveniently referred to; and in justice to the individuals consecutively at the head of the surveying department; it is but fair that this fact should be named. Whether much ability has subsequently been spread over these Countries, at the service of their surveyor-generals, will be held dubious, with those who frequently hear the sarcasm that our 'Surveyors should breed their sons to the bar;' or who remember the anathematical declaration of a high personage, that one-half of the Deputies should be hanged, and the other half transported."

He then goes on to state that it is impossible to map any great extent of land based solely on the use of a compass due to the considerable difference in declination and that the only solution is the use of true meridians. Sigma finishes with a final job of his pen at our "Supperannuarian" with "...the cure, I say, which he proposes for a malady, which by implication he admits does exist, is utterly useless, and beyond the power of any geodesic alchemy to apply. Unfortunately, the fixed bounds he speaks of are as yet but a desideratum, and where are the funds of their creation? A desideratum too, only to those who dare not soar beyond the antiquated mode about to be exploded, and who have not yet learned "to wish, as duteous sons, our fathers were more wise!"

People are always generous with advice and the next to contribute was a gentleman signing himself as "the Woodman". His solution was published in the Novascotian on November 14, 1832. Judging from the lapse in time from the previous article, the mail delivery hasn't improved much in the last 145 years. He writes:

"I shall, with the utmost deference to the superior abilities of the above mentioned writer, as well as with due respect to their suggestions on this subject, humbly attempt to point out what appears to me to be the most fertile source of errors in the present mode of surveying lands in this province, and suggest such remedies, as, with a little legislative aid, the most simple and illiterate professor of the chain and Theodolite in the province, as well as the most scientific, may put in practice with credit to themselves, and important advantages to the community."

1. Let a sum of money be voted by the Legislature, and be placed in the hands of responsible individuals, for the purpose of procuring from Europe or the United States, a good warranted Theodolite for every Deputy Surveyor in the province who shall be obliged to purchase and pay for the same, or resign his situation. Let them be marked or engraved with a certain mark, in a conspicuous part of the Instrument, and let a penalty be attached to the using of any other. This will banish a parcel of trash of instruments, that are unfit for any other purpose, than sowing the seeds of discord and litigation.

2. Let a sum be voted as above, for the purpose of establishing permanent works in each county, in the place of the true meridian.

3. Let each surveyor, at least once a year, adjust his Theodolite by the above works, and report to the surveyor-general his observations thereon...

4. Let one fit and proper person be appointed to attend each Deputy as a chainbearer, who shall give a bond with sureties, for the faithful performance of his duty, and be responsible for errors; ...

5. Let surveyors be authorized to take the affidavit of such persons as can prove an old boundary, and let the same be transmitted to the surveyor-general, the surveyor retaining a duplicate; let suitable forms be furnished to surveyors for this purpose.

6. Let surveyors keep correct field books, in which every survey is to be entered as it is made, the names of the chainmen and flagmen, and of one or two of the assistants and the time employed."

The Woodman also includes instructions on proper methods for chaining and testing survey equipment. His comment that..."the present mode of land surveying in Nova Scotia is, and must continue to be, the never ending cause of litigation and all its destructive effects on society", fairly well sums up his feelings on surveying and could possibly explain his description of a typical survey crew at work:

"The surveyor peeps through his compass sights, fancies he sees a tree, bush, or stump, at some distance, to which, through bush, windfalls, etc., he hopes he can go, and sets off at full speed, his axemen and chainmen bringing up the rear; arrived at the object (or one very like it) he takes in like manner a fresh departure, gains some other true or fancied object, and again (something like finding the exact place where the rainbow rests), sets out in quest of another, his Chainmen in the rear determined right or wrong not to be left behind. Others take more pains; they select one of the most intelligent persons in the group of rustic assistants, dub him flagman, and are compelled to rely on his honour and abilities (if he have any of either) that he will not budge 6 inches from the appointed place until the surveyor from time to time comes up, although he or his first cousin, interested in the survey, might chance to save a house or barn by slight and constant jostling to one side, during each of the many sights that tracing a mile only, through thick forests lands, requires.

We shall now return to take a peep at the chainman, toiling over hill and valley, through brush, windfalls and ravines, totally unaware of the importance of the trust confided to them, and the positive and relative consequences of the slightest inaccuracy in their important duty.

They are totally unaware of the consequences of having the chain perfectly straight or level, and the probability of its breaking in two places at the same instant, and their joining the parts that remain in their respective hands, without observing the third portion, consisting of a few links that has sprung aside out of sight, too little probably to excite their suspicion, having never perhaps seen or handled a chain before - an event of frequent occurrence, and probably not discovered until some time after, when the surveyor by chance observes it, and not knowing when or where it happened, is utterly at a loss where to commence revising and correcting and, therefore, never attempts it. The losing of one or two arrows (generally composed of slips from any twig) and not until the intended distance is measured, discovering they are left behind, often occurs; and as this can arise from negligence alone, the chainmen to save the trouble of measuring the distance over again, too often continue to replace them with others from the first convenient bush, guess at the distance run, and at the end of the line produce the whole number of arrows to the surveyor and make all appear to be fair.

As the survey advances, the paper and its apparatus become requisite. Two or three sheets are usually pasted together, sometimes stitched, and a few lines to represent Meridians traced on them; protracting commences from notes usually written on scraps of old letters, etc. and the protractor, the parallel ruler, the compass and scale are in their turns employed; sheet after sheet is added as the work gets forward a gazing, gaping and wondering around, of about to be freeholders, admiring this wondrous assemblage of the tools of science, and the profound abilities of the man of knowledge, who so dexterously handles them

It is obvious that "the Woodman" had very low regard for surveying as then practiced and hemakes one wonder how any boundary survived over the years without being challenged in the courts. Such insults to surveyors were not left to go unchallenged and "An Old Woodman" rose to the defence of the profession in the February 5, 1834 issue of the Novascotian. He acknowledged that errors do occur since surveyors, like other men, are not infallible but that, if errors were as frequent or as excessive as we were led to believe, the number of boundary disputes brought before the courts did not reflect it. He then went on to give his own solution to boundary disputes:

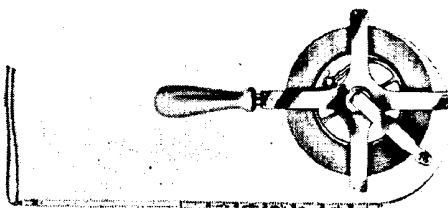
"I apprehend that were surveyors and other influential persons, more generally to use their exertions in promoting the private adjustment of disputed boundaries, and were the parties more willing to take their advice, and act less under the influence of a litigious spirit, many ruinous law suits about boundaries as well as other matters, which now occur, would be avoided. And if in addition to this, it were made obligatory upon adjoining properties, at the request of either party, to fix by a proper survey such metes and bounds as have not been previously made between then or have been lost and to re-mark or renew these lines and bounds every five or seven years, either by themselves, or, if either party require it, by some other competent person - if such a regulation were made and duly enforced, much cause of future contention and litigation would be prevented - existing errors would, as far as practicable, be corrected with much more facility - and the necessary reform in the land surveying department be gradually attained without subjecting the country to the theoretical speculations of 'the Woodman', or even calling him forth from his present obscurity - for the purpose of annihilating, with their labors, the whole fraternity of the Nova Scotia Land Surveyors."

This is by no means the end of the continuing dialogue that has led and will continue to lead to the gradual improvement and enlightenment of the surveying profession in Nova Scotia but the deadline for this letter was yesterday.

- I am, Sir, Yours &c.
A Procrastinator.

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Letter to the Editor:

The perceptiveness and restraint of Mr. A.F. Chisholm's review (July Issue) on the report of the Graham Royal Commission were impressive. And your system of self-regulation is the envy of us in the States.

The history of registration, or licensing, of professional practitioners in the United States is a story of the continuous degeneration of the practitioners' control. When occupational licensing gets in the way of an upward economic surge of a class of people the licensing law will generally give way.

A series of bills were introduced in the 1975 Legislature of California to transfer the staffs of licensing boards to the Director of Licensing and to reduce the boards to advisory status. Introduction of the bills was made with some fanfare about a book that "proved" the corruption in the current licensing system.

The book was a collection of selected quotations of unsupported testimony offered in past years at hearings concerning proposals to amend various licensing laws.

The bills to create a licensing czar appear to be dead at this time, but the trend in the United States is in that direction. Except for a recent law in New Jersey, we were never blessed with self-regulation as Canadian practitioners are.

The first engineer registration law in the States was Wyoming's 1907 law (it set up five categories of civil engineer - three of which were in surveying). This law provided that it would be administered by three practitioners appointed by the Governor of Wyoming. As other states enacted licensing laws they were generally modeled after the Wyoming act, but the conscript fathers of Virginia and Washington placed licensing under a czar. Later there were several other states converted to the czar plan. It is the "model law" of the Council of State Governments.

Several states that retained independent boards have been faced with pressure to put "public" or "lay" members on the licensing boards. South Dakota has two "citizen" members of its State Board of Engineering and Architectural Examiners. California has three "public" members of its State Board of Registration for Professional Engineers. These "public" members are usually lawyer-politicians. Massachusetts has had at least one proposal to make a majority of the board "public" members. Each legislative session in California considers proposals to make the licensing boards anywhere from 50% to 100% "public".

It frequently occurs that an employer will give his hired help a raise in pay when that employee, or those employees, pass the licensing test. Employers use that device to encourage self-improvement, and the raise is because of the expanded capability of the employee, not because of his license. If the surveyor or engineer could not get a deserved raise for want of a license he would turn to collective action such as the labor union or a lobby group.

Occupational licensing laws are observed, ignored, or modified, to just the extent that social pressures demand, and I doubt that the license itself has much influence in setting a worker's pay.

I suspect that the Nova Scotia Land Surveyors will be faced with many, and worse, attacks on their licensing machinery in the years to come.

by William A. White,
Executive Director,
California Council of Civil
Engineers and Land Surveyors.

To the Editor:

One of the chief problems of editing The Nova Scotian Surveyor was the proof reading. I would set up the article and take it to the printers and they would set it in type and run me a sheet and it was amazing what turned up on some of the proof sheets; items that had no relation to what I had given them, so a new set was made, and after two or more tries we would agree on what was to be in The Nova Scotian Surveyor for that particular issue.

Finally I would receive a proof run of the full paper and I used to think that someone there was trying to sabotage the effort - whole paragraphs were left out or placed in the wrong item. The result would be that it finally was mailed to Edward Rice at least a month late if things went in a normal manner. On several occasions Ed would receive it when it was supposed to be there. This was more by accident than by intent - it is amazing what can happen sometimes.

I am enjoying The Nova Scotian Surveyor more now than ever. One reason being that I do not have to sweat over it and proof read it. The other reason is that it is now a mature paper - it has grown up, so to speak.

....R. E. Millard.

**** COMMENTS FROM THE EDITOR ****

I wish to express my sincere appreciation and thanks to those people who have made an effort to contribute articles for this issue of the Surveyor and I am sure the reader will find them of value and interest in this the 25th year of our Association.

Our founding Editor, Eric Millard's statement The Nova Scotian Surveyor "has grown up, so to speak" - I must disagree with. On reviewing most of the early issues, I feel that they provide a tremendous record of the efforts, foresight and diligence of our early members which was presented in a most acceptable manner.

I appreciate the letters to the editor which have been received and would encourage more letters on contentious issues or topics of interest. Let's use the Surveyor more as a means of discussing current issues.

.....B. L. Cain.

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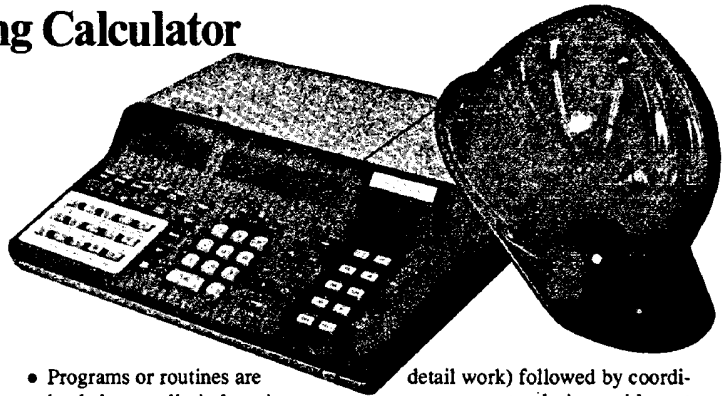
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The small size of the 9815 is no measure of its capability. At only 13 lbs. (5.9kg) and measuring 13.6 in. x 13.5 in. x 4.0 in. (345mm x 34mm x 102mm), it is not as large as an attache case. The 9815 is almost as portable as Hewlett-Packard's hand 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 $2\frac{1}{2}$ 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
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- 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.

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** C O N C E R N **

by

Philip M. Milo, Head, Survey Department
Nova Scotia Land Survey Institute

It has fallen to the Land Survey Institute in Lawrencetown, to train most of the Nova Scotia Land Surveyors registered since the late Major Church founded the course at the end of World War Two and, therefore, since our Association was formed.

Probably it would be fair to say that no surveyor now practicing in this province has not had some connection with N.S.L.S.I. either personally or indirectly through contact with those who have graduated from the Institute.

All members have by now received the Report on "Proposals for Training and Qualification of Land Surveyors, Survey Technicians and Technologists in Atlantic Canada". As a Nova Scotia Land Surveyor and as a graduate of the Institute I read the report with great interest and concern.

All too often, in the past, reports have been "adopted" by the members on the basis that if some are prepared to study same and give approval, the rest of us simply vote on the whole thing according to their recommendations rather than making a personal effort to study the thing ourselves. I implore the members not to allow this to be the case in this instance. The Education Committee is now drafting regulations which will reflect the proposals in the LOVE report. The membership is, therefore, expected to have read and discussed the LOVE report and its rather tremendous implications. Also the Education Committee will be looking for guidance in drafting new regulations which reflect the recommendations of the LOVE report. This is to take place in a week or so and the importance of the matter can be compared only to the drafting of the new Act.

A question which must be answered at some point by each member is "what is the prime objective of all this?" One possible answer is supplied by the Standards Committee Report, which I received in the same envelope. I would hope that, if one accepts the general implications of the Standards Committee, and if improving the standard of surveying in this Province is an acceptable aim, then the LOVE report should be considered in this light. This is not to exclude such things as: - (i) future demands on surveyors, (ii) technological advances, (iii) responsibilities which will rightly fall on surveyors and other considerations as being proper aspects from which the report can, and should be, studied.

Another area which must be considered is that of expanding our Association to bring in people other than those whose primary concern is the delineation of property boundaries. Surely, we are reaching a time in our history that has already been surpassed by other Associations. The Association of Professional Engineers of Nova Scotia is an example of this sort of thing. Engineering is much too broad a field to require all its membership to have an equal educational background. Some members are qualified in Civil, some Mechanical, some Electrical and so forth. Why not for us? Why can't we have surveyors as members of our Association who have special areas of qualification? Examples such as photogrammetrists and survey engineers come to mind. If that is reasonable, would it then be a necessary stipulation that each and every one be qualified to deal with legal boundary problems? Possibly those who specialize in design, engineering, or control don't need licenses to survey property boundaries - even though our Association would be enhanced by their membership. With this is the obvious inference that maybe those who are licensed Nova Scotia Land Surveyors under the present system would not need all the qualifications to cover all other specialty areas.

No proper discussion can take place, however, unless all members at the Annual Meeting have read and are concerned with the LOVE report and the Standards Committee Report. In order that your views be considered, you must be present at the meeting.

**** ARE YOU A PRICE FIXER? ****

Is a schedule of minimum fees a form of price fixing? It is for lawyers in the United States according to a June 1975 decision by the Supreme Court of the United States.

The decision was made following suit brought by purchasers of a home in Virginia who had obtained the same price for a title search from twenty different lawyers many of whom quoted the applicable county minimum fee schedule, a schedule, it is interesting to note, that was dropped after the suit was filed.

Are land surveyors, engineers, lawyers, etc. then open to suits for price fixing here, right here in Halifax? The answer to that will have to come from someone else, I'm not a lawyer nor do I have a legal training but I'm still sure that eventually a schedule of minimum fees which must be charged by members of the applicable association will be ruled invalid by some group with the power to make it stick.

One supposes that the lawyers in the particular county of Virginia put up the usual arguments that each job listed in the schedule must cost at least the listed amount or it won't be done properly - that for a lawyer to receive less would mean that he would have had to shortcut and, therefore, not have carried out all the procedures necessary to protect the public.

I suppose that one paying lip service to a minimum schedule consoles himself by saying that all jobs are different - there never is one that costs the minimum, that in any case it is a recommended minimum, that there is no penalty for charging below or over the recommended, that there normally is no way any disciplinary group of the applicable association would ever find out if charges were more than or less than the recommended schedule.

Should there be a schedule of minimum fees? - should there be price competition? - let's try another question - how many of you don't shop for name brands at discount houses or don't buy your gasoline where the sign says 4¢ off?

- A. F. Chisholm, P. Eng.

CANADIAN CRIMINAL CODE
PERTAINING TO THE DESTRUCTION OF BOUNDARY LINE EVIDENCE

- submitted by Murray J. Banks -

The following two sections of the Canadian Criminal Code 1974 are printed here as a reminder to all Land Surveyors of the law pertaining to the destruction of boundary line evidence:

INTERFERING WITH BOUNDARY LINES

398. Every one who wilfully pulls down, defaces, alters or removes anything planted or set up as the boundary line or part of the boundary line of land is guilty of an offence punishable on summary conviction. 1953-54, c. 51, s.383.

INTERFERING WITH INTERNATIONAL BOUNDARY MARKS, ETC. - Saving provision.

399. (1) Every one who wilfully pulls down, defaces, alters or removes,

- (a) a boundary mark lawfully placed to mark an international, provincial, county or municipal boundary, or
- (b) a boundary mark lawfully placed by a land surveyor to mark a limit, boundary or angle of a concession, range, lot or parcel of land,

is guilty of an indictable offence and is liable to imprisonment for five years.

(2) A land surveyor does not commit an offence under subsection (1) where, in his operations as a land surveyor,

- (a) he takes up, when necessary, a boundary mark mentioned in paragraph (1)(b) and carefully replaces it as it was before he took it up, or
- (b) he takes up a boundary mark mentioned in paragraph (1)(b) in the course of surveying for a highway or other work that, when completed, will make it impossible or impracticable for such boundary mark to occupy its original position, and he establishes a permanent record of the original position sufficient to permit such position to be ascertained. 1953-54, c. 51, s. 384; 1960-61, c. 43, s. 11.



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STRETCHING THE TAPE - - -

An office manager was asking a girl applicant if she had any unusual talents. She said she had won several prizes in cross-word puzzle and slogan writing contests.

"Sounds good," the manager told her. "But we want somebody who will be smart during office hours."

"Oh," said the girl, "This was during office hours."

* * * *

A tired-looking man dragged himself through his front door and slumped into a chair. His wife came out of the kitchen and looked at him with misgivings.

"Busy day at the office, dear?" she asked sympathetically.

"Terrible," he answered with a heavy sigh. "The computer broke down in the middle of the afternoon and we all had to think."

* * * *

A pretty young lady presented a check at the bank window for cashing. The teller examined it quickly, and asked, "Can you identify yourself?"

Whereupon the young lady dipped into her purse and pulled out a small mirror. She glanced into it for a moment, and then looked up and said, "Yes, It's me all right."

* * * *

A certain woman with a reputation as a "manhater" announced suddenly she was to be married.

"Goodness gracious!" exclaimed a friend. "I thought you despised all men."

"Oh, I do," replied the bride-to-be calmly, "but this man asked me to marry him."

* * * *

At the side of the road a woman looked helplessly at a flat tire.

A passerby stopped to help her. After the tire was changed, the woman said, "Please let the jack down easy. My husband is sleeping in the back seat."

* * * *

The small girl watched fascinated as her mother smoothed cold cream over her face and patted her wrinkles. "Why do you do that?" she finally asked.

"To make me beautiful," said her mother. Then she started to remove the cream with a facial tissue.

"What's the matter?" asked the girl. "Giving up?"

* * * *

Judge: "The last time I saw you I told you I didn't want to see you here again!"

Prisoner: "Yes, your honor, that's what I told these policemen. But they wouldn't believe me."

* * * *

Two Labor leaders were in a hotel lobby in Washington following a conference, and watched as two pretty girls met and kissed each other.

"There's another thing that isn't fair," remarked one.

"What's that?" asked the other.

"Women doing men's work!"

* * * *

An old villager had been offered two dollars if he would let the artist paint him.

He hesitated for awhile.

"It's easy money," prompted the artist.

"Sure, yer right," was the reply; "I was jes' thinkin' as how I'd git the paint off afterwards."

* * * *

The stingy salesman, while on an out-of-town sales trip, sent his wife a check for a million kisses as an anniversary present. The wife was quite annoyed and sent back a postcard: "dear Chuck, Thanks for the anniversary check. The milkman cashed it for me just this morning."

* * * *

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