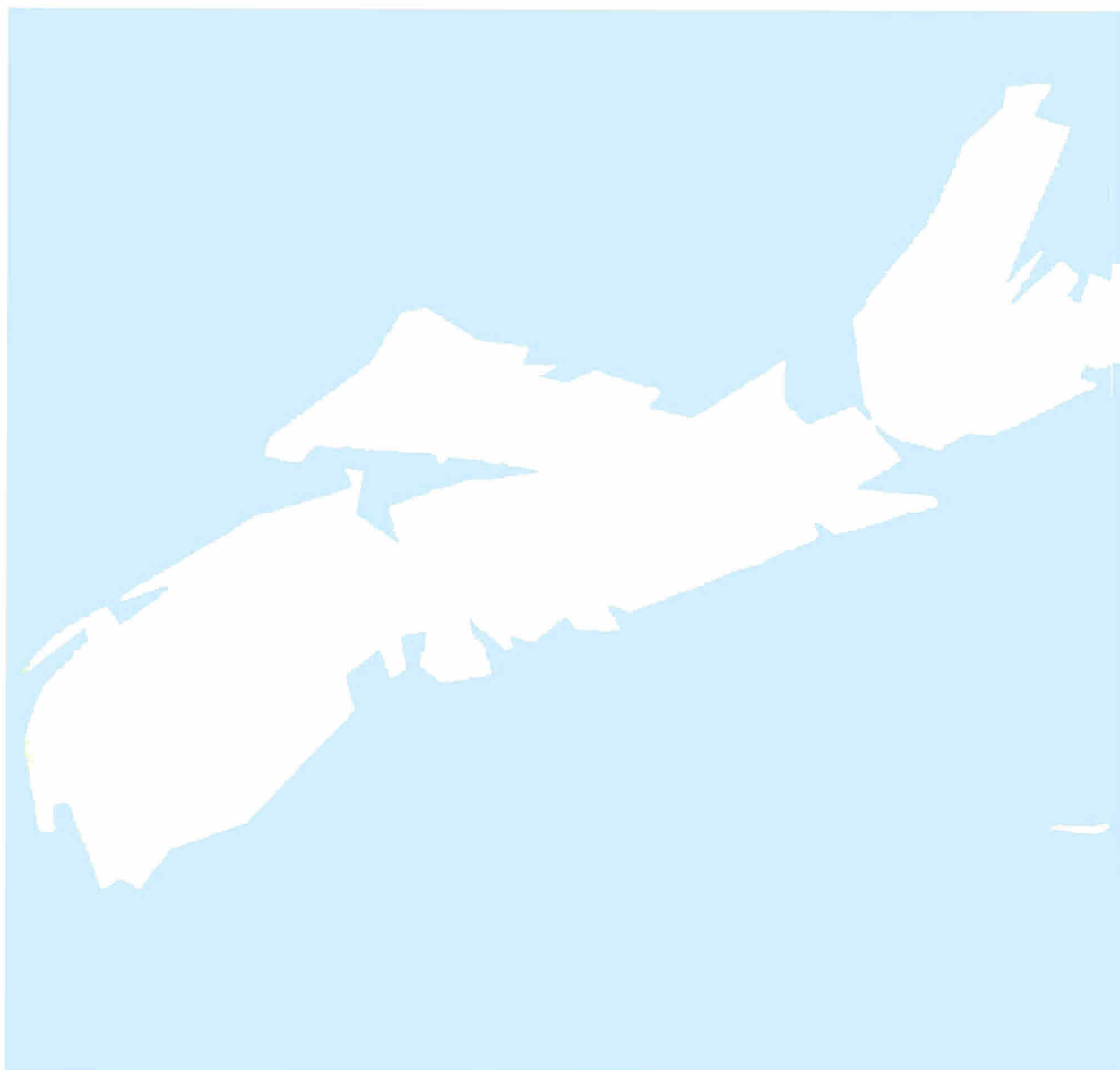


The NOVA SCOTIAN SURVEYOR

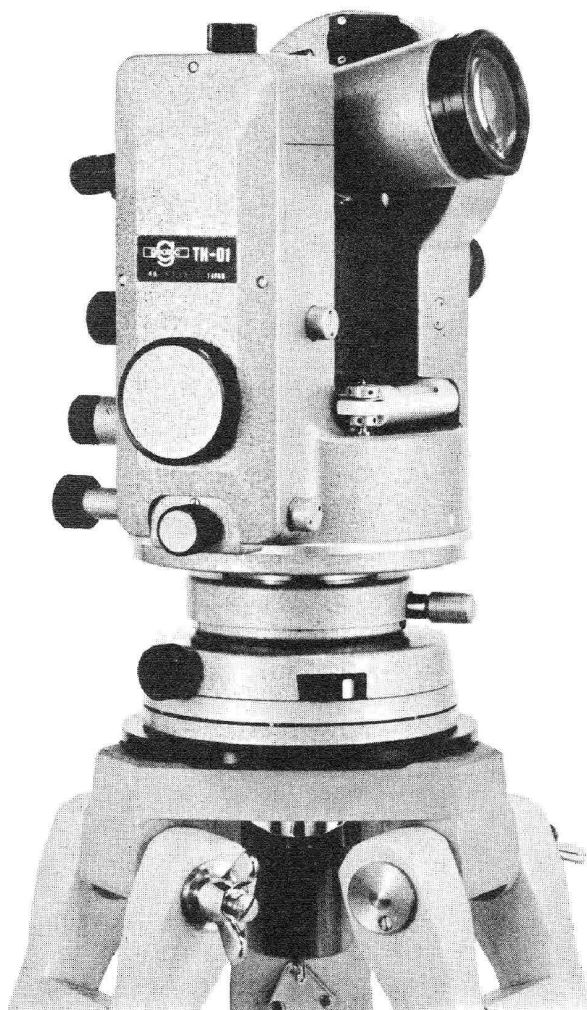


APRIL 1976

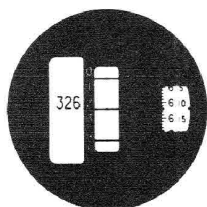
TH-01 THEODOLITE



353 3401



Horizontal Circle Reading



$$\begin{array}{r} 326^{\circ} 20' \\ 6' 12'' \\ \hline 326^{\circ} 26' 12'' \end{array}$$

- ☆ The readings of vertical and horizontal circles are the averages of two opposite sides of the circles. This circle reading optical system eliminates all eccentricity influence.
- ☆ Horizontal circle reading can be shifted to vertical circle reading, and vice versa, in one reading eyepiece. This simplifies the readings by eliminating unnecessary figures and graduations in the reading eyepiece.
- ☆ The upper head can be removed from the leveling head for use with traverse equipment. Rapid leveling can be made due to torsionally rigid ball base.
- ☆ The parallel-motion device with optical plummet facilitates the centering process.

SPECIFICATIONS

TELESCOPE

Type	Internal focussing, anallatic optics
Magnification power	28 X
Effective aperture	40mm
Minimum focus	1.6m
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
Plate level	20" per 2mm
Circular level	10' per 2mm

VERTICAL CIRCLE COINCIDENCE LEVEL

Type	Manual
Range of coincidence level	$\pm 5'$

DIMENSIONS

168mm X 183mm X 275mm

WEIGHT

5.9 kg.

TRIPOD

353 7145 5/8" x 11" Wide Frame



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The NOVA SCOTIAN SURVEYOR

Published four times a year by

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS INCORPORATED

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Secretary-Treasurer

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Incorporated 1955

Vol. 31

APRIL 1976

No. 83



RUSTY AND ANGUS IN A HEAVY DISCUSSION

**** 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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**** MESSAGE FROM THE EDITOR ****

I am tempted to offer the apologies of our staff for the delay in publishing this issue of the Surveyor. After due consideration, however, I am not going to apologize because I believe a wider range of our membership than those directly involved with the Surveyor are responsible for it.

I am also tempted to be critical of all you capable readers who, when questioned, indicate that you enjoy the Surveyor but are content to only read it and cannot find any time in your busy schedule to submit a letter to the Editor, an article or an interesting note. After some consideration, however, I am not going to do that either because it is our responsibility to tap the resources of the membership and one should never present a down-in-the-mouth attitude. The problem is how do we tap the resources of our membership? Regional reporters and our Committee structure has not worked.

Where are those tales with lots of local flavour that are so much a part of Nova Scotia and that surveyors so often are involved in? Where are the voices of experience and the words of wisdom from those with many years of experience but still active in the profession? Where are the often critical and certainly idealistic voices of our younger membership? Where are those technical papers or articles from other publications from the academically inclined?

Summer, with the vacation season, is almost here and our schedule calls for an issue in July and another in October. There is no material available for either of these issues. It is your magazine and if you think it is worth while, then get something in the mail.

Commitments have to be made to our advertizers and then with a delay in publishing, due to a lack of material, we are not able to meet those commitments. We are, therefore, being forced to abandon a rigid schedule of four issues a year and adopt a policy of printing an issue only after sufficient material is available. This does not mean that we simply intend to sit back and wait for material to come in. We will continue to gather material but without any particular deadline in mind.

If you do not agree with this policy then let's hear about it and I challenge you to first establish your right to criticize by offering something positive or constructive in printable form.

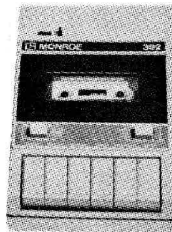


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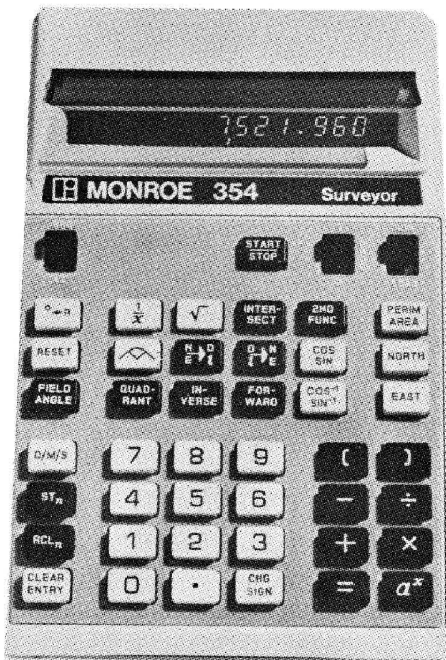


The Monroe Alpha 325 is more powerful and easier to use than any other mid-priced desktop computer in the world because:

- 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.
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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.

- RETIRED -

by J. E. R. March

Joseph F. Archibald, N.S.L.S., Registrar of Crown Lands, Nova Scotia Department of Lands and Forests, retired July 31, 1975.

Joe, as he is known by his host of friends, was born at Denver, Guysborough County, where he had his early schooling.

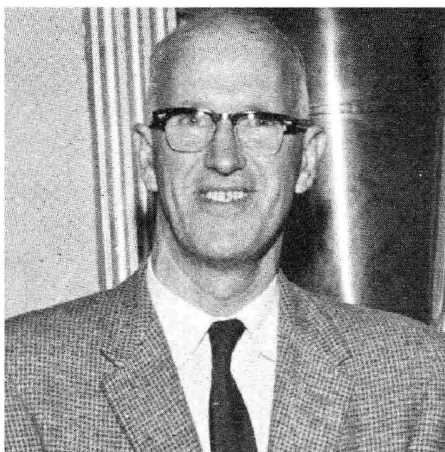
After finishing High School he took summer work with the Surveys Branch of the Department of Lands and Forests, in order to help finance his engineering studies at St. F.X. University.

It was soon apparent that Joe had found his niche in life as he was a natural born land surveyor. He began as chainman in 1936, at New Chester, Guysborough County, first with J. R. March and later with V. P. Harrison. In rapid succession Joe became an instrumentman, obtained his certificate as a Provincial Land Surveyor and was promoted to party chief. As party chief he was for many years one of the Department's most valuable field men. During the earlier years of his work relocating Crown Land boundaries, there were only two means of travel - the canoe and shanks mare. Joe was, and no doubt still is, a past master at both methods. When serious problems loomed regarding the location of Crown, Municipal or County boundaries, it was almost a rule-of-thumb to "give it to Joe". He never failed.

On October 1, 1964, Joe was appointed Registrar of Crown Lands, following the retirement of R.M. Schofield and he remained in that position until his own retirement last year.

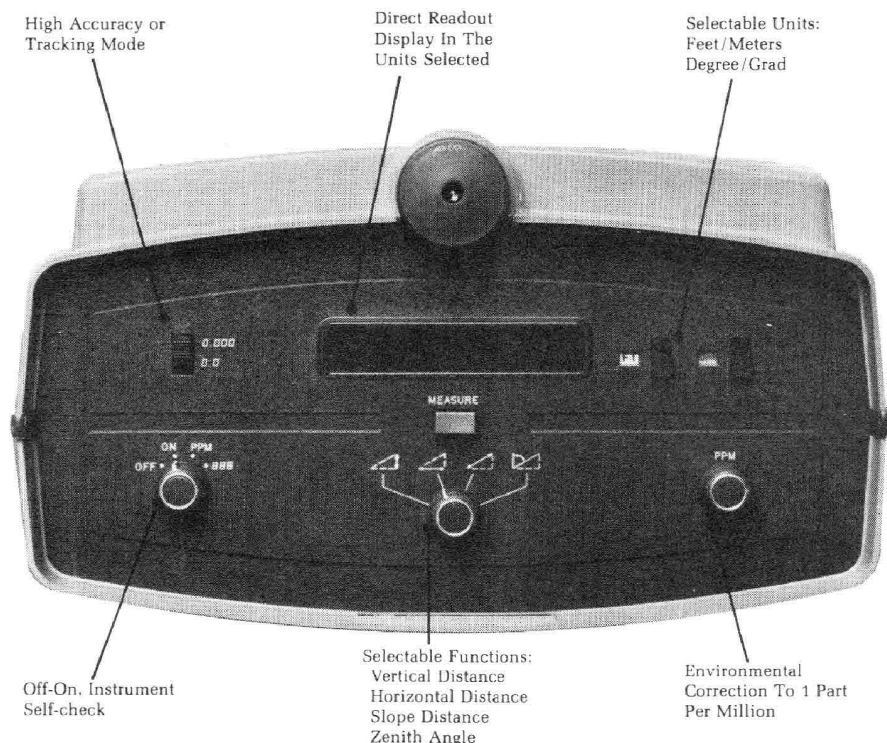
Joe is a member of the Canadian Institute of Surveying, a Past President of the Association of Nova Scotia Land Surveyors and is Secretary to their Board of Examiners. He is the author of "Historical Highlights Nova Scotia Crown Lands 1603-1972".

He is married with three children, two sons and a daughter. He and his gracious and cheerful wife, Margie, are presently living in Dartmouth. Soon they expect to move to their new home at Cameron Settlement near his birthplace and also not far from many of his favourite fishing lakes and streams.



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Angle and distance measurements couldn't be easier. Or faster. The new HP3810A Total Station lets you read and lay out horizontal distances automatically. It also gives you combined angle and distance measurements. The secret? A built-in vertical angle sensing device, a microcomputer, and a horizontal angle base.

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- COUNCIL MEETINGS -

Your Council has been very active in the past months, convening six meetings; two regular meetings, two special meetings and two hearings to consider a matter of discipline. In addition to this the majority of the Councillors and Executive are active on Committees and attended the Workshop on February 14, 1976.

Council Meeting - December 6, 1975

A regular meeting of Council convened on December 6, 1975 at the Chateau Halifax.

The submission to the Governor-in-Council, on the new Membership Dues (\$150.00 per annum) as approved at the Annual Meeting, was discussed and to be sent to F. W. Roberts, Legislative Committee, for comments of the lawyer and submission to the Governor-in-Council.

Doug MacDonald reported that APENS not in total agreement with certain sections "Companies Clause" of the proposed new Land Surveyors Act. A show of hands was called for on the question of whether this section of the proposed Act should be changed or deleted to gain the support of APENS or if it should remain as written. There were no votes for keeping that portion of the Act as written with 18 for and 3 abstentions.

A motion was approved that Bob Feetham be appointed as the first Nova Scotia Director of C.C.L.S.

R. S. Dunn was accepted as an Associate Member and Harold B. Smith to re-join the Association.

After consideration of an anonymous advertisement for offering Land Surveying Services it was decided that a letter indicating that this type of advertisement was frowned upon by the Association be forwarded to a member.

Motions were approved setting non practicing member dues at \$25.00 per annum and Junior Membership dues at \$15.00 per annum.

Council Meeting - January 17, 1976

A Special Meeting of Council was held on January 17, 1976 at the Wandlyn Motel, Bedford Highway, Halifax, primarily to consider a report from the Discipline Committee.

Ed Rice explained the "Grandfather Clause" in our Act:

There are four (4) states of being a Land Surveyor for gain:

- a) Land Surveyors who obtained their certificates prior to 1951 and did not join the Society of Provincial Land Surveyors (although they may have since joined the A.N.S.L.S.).
- b) Those in (a) that did join the Society.
- c) Those who obtained their certificates after 1959 (i.e. the formation of the Association of Nova Scotia Land Surveyors).
- d) Members of A.P.E.N.S.

- a. 1) The Land Surveyors covered by (a) are in the grandfather clause and may practice land surveying without being members of the Association - their regulatory body is the Board of Examiners.
- b. 1) The Land Surveyors covered by (b) are regulated by the laws, by-laws and rules of the Association of N.S.L.S.
- c. 1) Those Land Surveyors in Section (c) are regulated by the laws, by-laws and rules of the Association of N.S.L.S.
- d. 1) Members of APENS are not covered by any of the laws or rules of the Association of N.S.L.S. Members of APENS can voluntarily be members of the Association of N.S.L.S.
- e) If Land Surveyors were voluntary members of the Society they had to be members of the Association.

A report of the Discipline Committee was given by D. K. MacDonald, Vice-Chairman of the Committee, since the complainant in the case was the Chairman, K. AuCoin. The report dealt with the events and procedures leading to a duly convened meeting, of the Committee on January 8, 1975, to investigate the complaint. The person complained of did not appear at the meeting. The Committee reviewed ten plans in detail and found all plans in error in one or many ways. Council accepted the report of the Discipline Committee and passed a formal resolution to hold a judicial hearing pursuant to Section 5(2) of the Land Surveyors Act on March 5, 1976.

Len Kincaid and John MacInnis gave a report on the objectives of the proposed Association of Certified Survey Technicians and Technologists and discussed the proposed qualification standards. There was some concern about the personnel assessment questionnaire.

Council was informed that Bob Feetham was unable to accept the position as the Nova Scotia Director of C.C.L.S.

Council Meeting - March 6, 1976

Doug MacDonald reported that as Chairman of the Liaison Committee he has assured APENS that the Association will not demand arrears from engineers who wish to join the Association after the new Act comes into force.

Ed Rice reported that our submission to the Governor-in-Council for new membership dues had gone to the Minister of Lands and Forests. Ed gave a full breakdown of activities in this regard and that some additional figures were being submitted to the Minister. Later in meeting Ed was appointed as our Director on C.C.L.S. which we are pleased to report he accepted.

Concern was expressed by several members over the financial standing of the Association and, it was agreed that a Special Meeting be held on April 9th to discuss finances.

Forbes Thompson, representing the Private Practice Committee, presented a new Suggested Minimum Fee Schedule, which with a few amendments was approved as printed on page 15. The new Fee Schedule will be printed in a form similar to the existing "Yellow Book".

A motion was approved instructing the Private Practice Committee to do a preliminary investigation into the methods by which Crown Corporations or Government Agencies select survey consultants and to report back to Council.

Daniel Burke and W. Jackson were accepted as new members in the Association and George B. MacAulay was accepted back into the Association as a non practicing member. Brian Mullin, S. Setchell, D. Lormier and J. Dunn were accepted as Junior Members. It was decided that Junior Members would not be listed on the Roll.

Council Meeting - April 9, 1976

Finances were the main topic of discussion at a brief Council Meeting on April 9th with the financial report as printed on page 11 being presented by Ed Rice and Bill Thompson. After considerable discussion it was decided that we carry on with the present budget until June Council Meeting and the borrowing of \$5000. if necessary to carry on was authorized. At that time depending on whether the new Act is passed and the status of approval by the Governor-in-Council for increased dues Council should be in a position to do some long range financial planning and take the necessary action.

Five new Junior Members were accepted: - Daniel Wesley Smith, Duncan Roy MacDonald, Raymond MacKinnon, Dean Alfred Benedict and John William Prosser.

The proposed certification standards for Survey Technicians and Technologists was approved.

The Publicity Committee was given the go-ahead to prepare one or more T. V. programs on the survey profession in Nova Scotia but these are not to be shown before approved by Council.

Prior to the implementation of the proposed Nova Scotia Land Surveyors Act all persons affected by the provisions of Section 2(3)(a) & (b) shall be notified of the section and that their application accompanied by payment of current year's fees (only) will be required for admission to the Association. (This pertains to those who must join within six months of the Act coming into force).

- Finance Committee Report -

At the request of Council, the Finance Committee has reviewed the budget as presented at the Annual Meeting and approved by the membership. The following report shows the actuals for receipts and disbursements for the first six months of our fiscal year and a forecast of the same for the last half of the year.

In reviewing the budget we ask you to keep in mind the following:

- 1) the budget is not a financial statement,
- 2) it is not an Auditor's report,
- 3) no check has been made on the bank book and/or cheque book,
- 4) no check has been made as to whether the bills have been charged to the right accounts or not, however, the Committee is of the opinion that the accounts are correct as shown,
- 5) the cut-off date for this report was March 26, 1976 and it is assumed that the period covered is from October 1, 1975 to March 31, 1976, being the first half of our 1976 fiscal year. The second half would be from April 1, 1976 to September 30, 1976.

The Committee wishes to make note here of the larger deviations from the original budget presented in November:

- 1) Discipline - We estimated \$500/case and the actual could be \$1200/case or higher.
- 2) Education - Expenses of \$750 from 1975 were not forecasted for this year. The expenses of the seminars are being charged to Education with the receipts from the seminars being shown under Miscellaneous Receipts.

- 3) Miscellaneous Disbursements - Include rubber stamps; bank charges; stenographic services; certificates and other minor items.
- 4) Miscellaneous Receipts - Include receipts from seminars and the \$1000 from the Annual Meeting.
- 5) Bank Loan - No allowance has been made in the revised budget to repay the bank loan.

It is the opinion of this Committee that the budget can be met providing the increase in dues is granted. If the increase is not granted then two options are open: (1) go to long term high financing until the new Act is approved, or (2) commence drastic cuts to the budget immediately.

The Committee will be pleased to answer any questions.

Respectfully submitted,

E. P. Rice
W. A. Thompson.

- Budget for 1976 -

DISBURSEMENTS

This breakdown of the disbursements of this budget is to indicate where the money is allotted for spending according to the work proposed to be carried out by Committees rather than actual items with the exception of administration which has been itemized:

President (travelling)	\$ 1,500.00
Vice-President (Workshops)	800.00
Discipline Committee	1,500.00
Board of Examiners	3,500.00

Secretary-Treasurer - Administration

Manager's Salary	\$ 9,500.00	
Secretary-Treasurer - Honorarium	1,000.00	
Rent	1,200.00	
Stationary	1,750.00	
Postage	375.00	
Telephone	310.00	
Annual Meeting	1,000.00	
Office Equipment	400.00	
Loan	625.00	
Reproduction	800.00	
Council Meetings	600.00	
Flowers	30.00	
Regional Meetings	110.00	
Miscellaneous	200.00	17,900.00

Protection Committee

Professional Status	\$ 500.00	
Salary Review	200.00	
Private Practice	1,000.00	1,700.00

Cont.

Brought forward		\$26,900.00
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Communication Committee

The Nova Scotian Surveyor	\$ 2,300.00	
Liaison	<u>300.00</u>	2,600.00

Survey Standards Committee

Education	\$ 500.00	
Regulations	1,500.00	
C.S.T.T.N.S.	<u>200.00</u>	2,200.00

Public Service Committee

Legislation	\$ 4,000.00	
Publicity	400.00	
Complaints	<u>100.00</u>	4,500.00

TOTAL		<u>\$36,200.00</u>
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- Receipts -

Present Membership	245	
If fees increase, membership may drop to	205	
Membership dues (205 x \$150.00)		\$30,750.00
The Nova Scotian Surveyor		1,600.00
Education (Exam Fees, papers, etc.)		3,500.00
Interest (Based on 1974 assets)		<u>350.00</u>
TOTAL		\$36,200.00
TOTAL DISBURSEMENTS FROM ABOVE		<u>\$36,200.00</u>
BALANCE		Nil

- Financial Report for period October, 1975 to March 31, 1976 -

DISBURSEMENTS

<u>Item</u>	<u>Budget</u>	<u>1st Half Actuals</u>	<u>2nd Half Forecast</u>	<u>Revised Budget</u>
President & C.C.L.S.	\$ 1,500.00	\$ 765.21	\$ 1,400.00	\$ 2,200.00
Vice-President	800.00	151.43	400.00	551.00
Discipline Committee	1,500.00	618.00	1,800.00	2,418.00
Board of Examiners	3,500.00	751.15	2,700.00	3,500.00
Manager's Salary	9,500.00	4,167.96	4,400.00	8,600.00
Secretary-Treasurer - Honorarium	1,000.00	-	1,000.00	1,000.00
Rent	1,200.00	723.81	600.00	1,323.00
Stationary	1,750.00	677.50	800.00	1,480.00
Postage	375.00	307.61	350.00	660.00
Telephone	310.00	381.10	800.00*	1,180.00
Annual Meeting	1,000.00	288.73	-	290.00
Office Equipment	400.00	268.00	150.00	420.00
Loan Interest	625.00	97.08	336.00	440.00
Reproduction	800.00	64.83	500.00	565.00
Council Meetings	600.00	580.84	600.00	1,180.00
Flowers	30.00	-	30.00	30.00
Regional Meetings	110.00	189.64	200.00	390.00
Miscellaneous	200.00	1,027.17	1,000.00	2,030.00
Sub Total	\$25,200.00	\$11,060.06	\$17,066.00	\$28,257.00
<u>Protection</u>				
Professional Status	\$ 500.00	\$ -	\$ -	\$ -
Salary Review	200.00	36.69	50.00	87.00
Private Practice	1,000.00	350.71	400.00	751.00
Sub Total	\$ 1,700.00	\$ 387.40	\$ 450.00	\$ 838.00
<u>Communication</u>				
The Nova Scotian Surveyor	\$ 2,300.00	\$ 1,198.24	\$ 1,100.00	\$ 2,300.00
Liaison	300.00	100.00	100.00	200.00
Sub Total	\$ 2,600.00	\$ 1,298.24	\$ 1,200.00	\$ 2,500.00
<u>Survey Standards</u>				
Education	\$ 500.00	\$ 1,050.59	\$ 1,000.00	\$ 2,050.00
Regulations	1,500.00	438.78	1,100.00	1,500.00
C.S.T.T.N.S.	200.00	-	-	-
Sub Total	\$ 2,200.00	\$ 1,489.37	\$ 2,100.00	\$ 3,500.00
<u>Public Service</u>				
Legislation	\$ 4,000.00	\$ 2,429.60	\$ 1,500.00	\$ 4,000.00
Publicity	400.00	-	400.00	400.00
Complaints	100.00	-	100.00	100.00
Sub Total	\$ 4,500.00	\$ 2,429.60	\$ 2,000.00	\$ 4,500.00
TOTAL	<u>\$36,200.00</u>	<u>\$16,664.67</u>	<u>\$22,816.00</u>	<u>\$39,645.00</u>

* Includes cost of yellow page adds which is collected in revenue under Miscellaneous.

RECEIPTS

<u>Item</u>	<u>Budget</u>	<u>1st Half Actuals</u>	<u>2nd Half Forecast</u>	<u>Revised Budget</u>
Membership Dues	\$30,750.00	\$12,484.00	\$20,000.00	\$32,484.00
The Nova Scotian Surveyor	1,600.00	670.00	1,000.00	1,670.00
Education (Board of Examiners)	3,500.00	1,127.00	2,400.00	3,527.00
Interest	350.00	-	350.00	350.00
Miscellaneous	-	1,732.32	1,000.00	2,732.32
TOTAL	<u>\$36,200.00</u>	<u>\$16,013.32</u>	<u>\$24,750.00</u>	<u>\$40,763.32</u>

ASSETS

Debentures	\$ 2,800.00
Office Equipment	1,000.00
Dues	1,450.00
Cash on Hand	6,287.00
The Nova Scotian Surveyor (Outstanding advertising)	<u>220.00</u>
	<u>\$11,757.00</u>

LIABILITIES

Loan	\$ 5,000.00
Outstanding bills	3,000.00
	<u> </u>
	<u>\$ 8,000.00</u>

* * * * *

- Discipline Committee Report -

At 1:30 p.m. on Friday, March 5, 1976, the Council held a hearing to investigate the charges of gross negligence and incompetence against a member in the performance of his duties as a surveyor as prescribed under Section 5(1) of the Nova Scotia Land Surveyors Act and By-laws pertaining thereto.

The hearing was chaired by the President, Mr. Ivan Macdonald, and was conducted with the guidance of Mr. Arthur Donahue, Solicitor for Council. All testimony and discussion was recorded by a court reporter. The surveyor complained against was not represented by a Solicitor and did not choose to give testimony, however, an adjournment was granted giving him an opportunity to review the transcript and prepare a rebuttal.

The hearing reconvened on April 9, 1976, at 2:00 p.m., with the surveyor present and again not represented by a Solicitor. No rebuttal was attempted and after some discussion a resolution was approved finding him guilty of incompetence and prescribing the conditions for reinstatement.

This decision may be appealed to the County Court and, therefore, the individual's name may not be released.

This is the first time our Association has followed the complete procedure as set out in the By-laws and Act leading to the suspension or expulsion of a member. It is a most unpleasant, time consuming and costly matter, however, a necessary one if we are to maintain and/or gain a label of professional recognition and to most importantly protect the interest of the public and hence retain the privileges and responsibilities entrusted to us as a self-governing and self-regulating body.

- Workshop -

Twenty-four members representing the various Committees attended an all-day workshop on February 14, 1976.

In the morning each Committee received their terms of reference and goals and pursued individual projects or interfaced with other Committees as required.

Committee reports were presented in the afternoon and there was some discussion as to whether the positions of the four co-ordinators in the Committee structure were redundant. Roy Dunbrack presented a suggested new organization chart for consideration (see page 17).

- Suggested Tariff -

1. Abolish all specified charges for certain services as outlined in the scale of minimum fees that were approved by Council in November 1970; also the fees and charges for land surveying services that were approved by Council on March 14, 1975.
2. Fees shall be calculated in accordance with the following suggested tariff:
3. For the services of a Nova Scotia Land Surveyor, the charge shall be direct wages times a factor of not less than 2.5. The minimum hourly rate shall be calculated from an average yearly salary derived from a salary review to be performed annually by the Association.
4. For the services of a Nova Scotia Land Surveyor while attending at a trial as an expert witness, the charge shall be direct wages times a factor of not less than 3.5.
5. For the service of all technical and administrative staff, the charge shall be direct wages times a factor of not less than 2.5.
6. Disbursements are as follows:

In addition to the charges referred to in the preceding schedules, the surveyor shall be reimbursed the actual costs of disbursements, plus 15%, for expenses incurred in the rendering of his services. Without limiting the generality of foregoing, these shall include travelling and hotel expenses, meals, iron bars, stakes, land registry office fees, white printing, outside professional or technical services.
7. Vehicle charges shall be \$8.00 per day or 25¢ per mile whichever the greater.
8. For the use of electronic surveying equipment the per diem charge shall be 1% of the new purchase price.
9. For the use of an electronic calculator the per hour charge shall be 1/10 of 1% of the new purchase price.

C. J. MacLellan, N.S.L.S.,
Chairman,
Private Practice Committee

SUMMARY OF REGIONAL MEETINGS -

Eastern Region - February 5, 1976 - 14 members present. The two main topics discussed were: - (1) the Association of Certified Survey Technicians and Technologists of Nova Scotia; (2) the complete Regulations Committee was in attendance and discussion followed.

Western Region - January 29, 1976 - 27 people present, including seventeen members. The majority of the meeting involved going over the new Regulations, page by page with Mr. David Clark, Regulations Committee Member.

Halifax City/County - February 9, 1976 - 20 members present. Most of the meeting involved discussing the Association of Certified Survey Technicians and Technologists of Nova Scotia.

Other discussions involved: (1) Numbers and types of complaints against surveyors; (2) Methods used by governments to select survey firms for large projects.

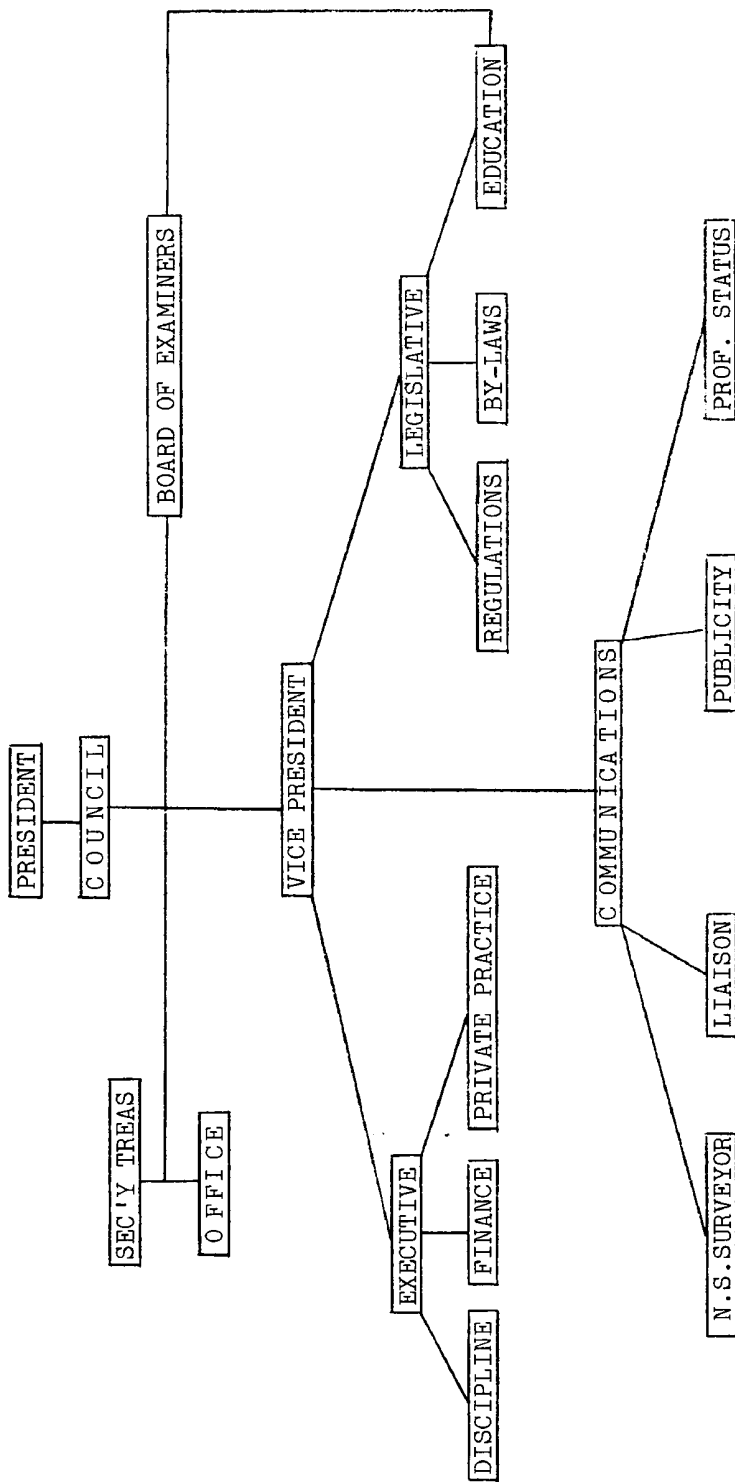
March 8, 1976 - 21 members present. Mr. Fred Roberts reported on his meeting with the Minister of Lands and Forests re the proposed New Act. The meeting was then turned over to the Regulations Committee and much lively discussion ensued.

Cape Breton Region - December 13, 1975 - 15 members present. The bulk of the meeting involved discussions on the new Regulations.

_N_O_T_I_C_E_

Members who registered at the 25th Annual Meeting, who have not yet received their paperweight, may get in touch with the Association office, 423-2058, there are a few left.

* * * * *



SUGGESTED ORGANIZATION CHART

ROY A. DUNBRACK

14/2/76

ASSOCIATION

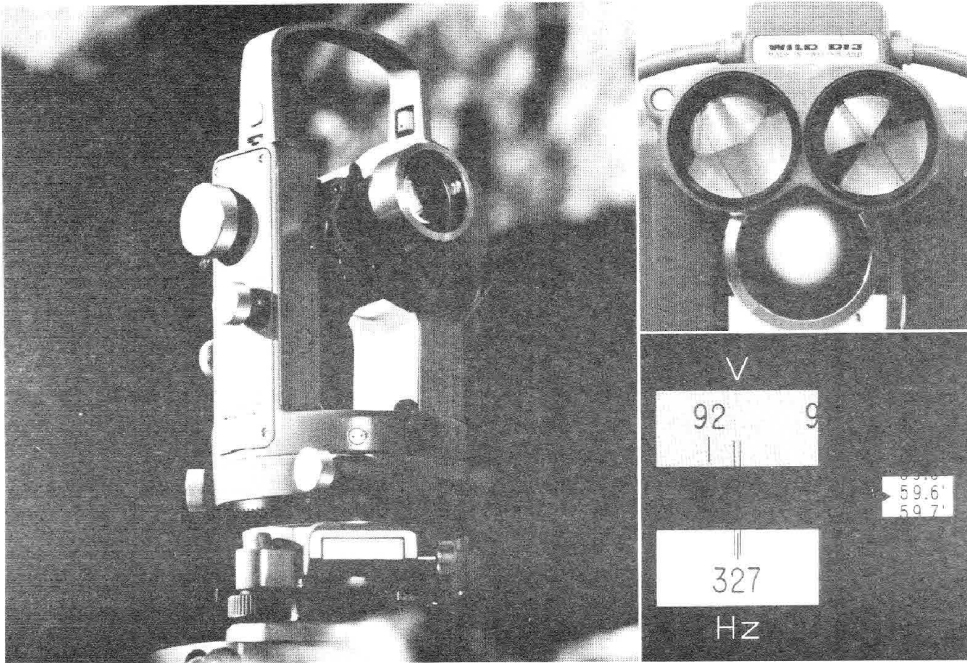
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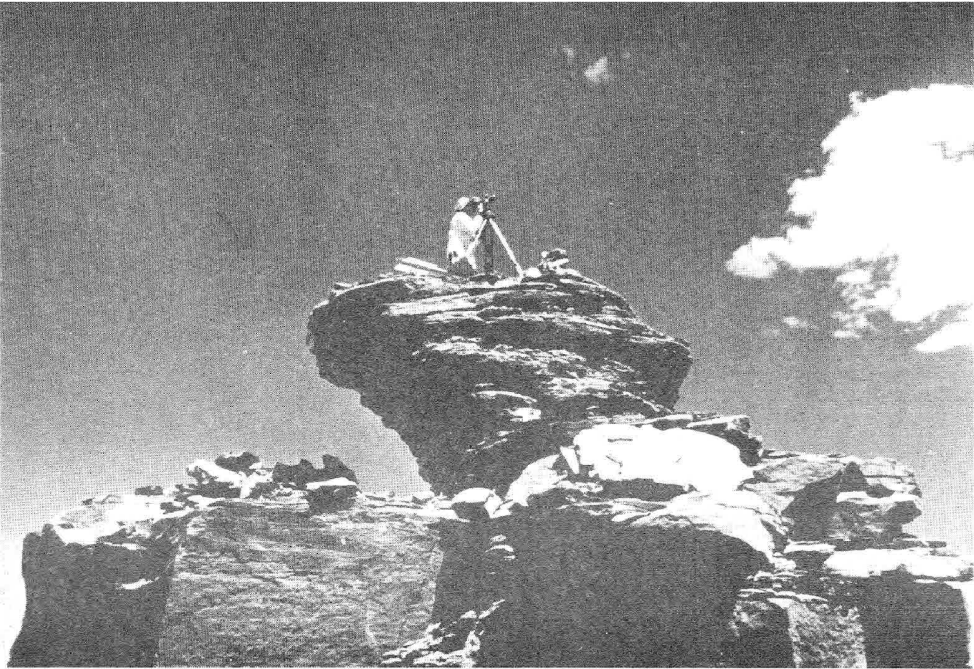
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WATER LOTS IN NOVA SCOTIA

Their Validity and Their Usage

- by Christopher P. Masland -

*(Submitted in partial fulfillment of the requirements for registration
as a Nova Scotia Land Surveyor)*

The mechanics of laying out, and preparing a plan of a water lot is most assuredly one of the simplest of surveying endeavours, but, however, establishing the validity of the lot is indubitably one of the most complex. Normally the surveyor has a reasonably firm set of procedures to follow in relation to work executed on dry land, although grey areas are apparent where natural boundaries such as rivers and water frontage are concerned. There are problems pertaining to the demarcation of lines concerning high-water-mark on properties having one or more tidal boundaries. There are problems with avulsion, accretion, alluvion and erosion. The surveyor will also be faced with incomprehensible descriptions; or with land that has questionable property lines. These problems can generally be solved to the mutual satisfaction of all parties by line agreements or, in the final analysis, by a judicial decision. There are problems of conflicting evidence, and problems with bearings: in fact the list is very long, but if it were not for these self-same problems, there would be little need for surveyors! All these obstacles however, are quite scaleable with a certain amount of persistent research, and, very often, plain bulldog perseverance.

Now, let us suppose that a client approaches a surveyor with the deed of a property that he is in the process of selling, and that land is under conveyance. He desires a plan and description of the property as is normal, these appear to be free from any major problems, although the description of the first lot is the same as one in the Client's Grandfather's deed when he bought the land in 1860. The lines and corners have been kept up, and the metes and bounds are accurate within reason. Then comes the fly in the ointment. The client is especially interested in the second lot included in the deed, as his proposed buyer's main reason for purchasing the land was for this lot. The description reads "...The second lot, being a lot of land covered with water, beginning on the northern shore of East Harbour, at the east angle of lands of Hiram Kaulbach, in the district of Chester, thence running North forty-three degrees and fifteen minutes East into the said harbour, two chains and thirty links, thence South...to the place of beginning." Then there is a back reference to a grant from Edward VII to Hiram Kaulbach, the client's father, with the date, book, and page number, together with the Petition Number.

The client makes it abundantly clear that the sale of the land depends upon the validity of the water lot, as the buyer has a large yacht that requires a reasonably deep water wharf for docking purposes. The buyer also points out that there is not a wharf on the lot at present, and wants the surveyor to look into the matter to see what, if any, difficulties might arise.

The first thought that would cross the surveyor's mind is that this is a question for his client's lawyer, and that his duty as a surveyor lies in the field work and the preparation of the plan and description of both the upland and the water lots; however, the client insists that he looks into it, and the surveyor feels that it would be improper to supply his client with a plan of a water lot that he may not own! This appears to be one of the fringe areas of a surveyor's work that overlaps the duties of the lawyer; so, after a consultation with the client's lawyer, he proceeds.

After scouring unsuccessfully through innumerable back issues of both "The Canadian Surveyor" and "The Nova Scotian Surveyor", searching for some articles or writings of court cases concerning water lots, he turns to the Dalhousie Law Library and checks for any decisions that may have been handed down. Once again a

blank is drawn, as there are very few mentions of water lots in any of the indices. So, as he is in the library, he decides to go through any book with pertinent information. "The high seas include the whole of the seas beyond low water mark and outside the boundary of a county.

The realm of England only extends to low water mark, and all beyond is the high seas.

The reason of the thing, the preponderance of authority, and the practice of nations, have decided that the main ocean, inasmuch as it is the necessary highway of all nations, and is from its nature incapable of being continually possessed, cannot be the property of any one state."¹ The surveyor found that in the early law in England, upon which most of Canada's law of the land is based, that water lots fall into a general area covering three sections of the earth; the upland, the foreshore, and the sea bed. Of these three the definition of the foreshore determines the other two. "Foreshore. Applicable only to tidal waters. The shore is the space between the land and the waters edge at still water the space between high and low water marks."² The next step is to determine what is in fact the high water mark. "...was interpreted as being the medium high tide line between the spring and neap tides."³ In fact it was also quite clearly stated, "In legal, as well as common parlance and intendment, the sea bottom, is that soil which is semper aqua maris co-operata (always covered with sea water), and never known to become dry by changes of the sea. But with regard to the terra firma or dry land, although in common speech, it imports land wholly exempt from the action of any of the tides, yet it would seem that the terra firma ranges down to the ordinary high water mark. In Roman law the shore extended quatenus hybernus fluctus maximus excurrit a boundary line equivalent, as it would seem, to the limits of our high spring tides. But with us it has been long settled that that portion only of the land adjacent to the sea, which is alternately covered and left dry by the ordinary flux and reflux of the tides is, in legal intendment, the sea shore."⁴

So the surveyor is now quite convinced that he has a clear definition of the lines of demarcation of this area and to put the final touch finds that..... "ORDINARY high water mark, is the medium high water mark at ordinary or neap tides. To add precision it may be well to note that the laws that take cognizance of three types of tides: (i) High spring tide, which happens at the two equinoxes, (ii) spring tide, which happens at the full moon, (iii) neap or ordinary tides, which takes place between full moon and change of moon twice every twenty-four hours. The first two are excluded in computing medium high water mark, which refers to ordinary or neap tides. The ordinary or neap tide, of course, varies from day to day. For about three days in the week, the tide is higher than the medium, and for about three days it is lower; for one day medium tide is reached. It is this medium tide that has been adopted as the ordinary or mean high water."⁵ However, it is interesting to note that "...the courts of Maine have held that the owner of land adjoining tidewater prima facie owns to low water mark, unless shown to the contrary."⁶

Now that the surveyor had established the definition of terrain as far as the law is concerned, he now turns to the ownership of these lands. Once again going back in his research to the English law of the land, he finds that "The title

1. Coulson and Forbes, "Law of Waters" 4th Edition by Stuart Moore, (1924), Ch. 1.
2. John S. Grimes, "Clark on Surveying & Boundaries" 3rd Edition by John S. Grimes, (Indianapolis, 1959), pp. 914.
3. Grimes, pp. 914.
4. Stuart A. Moore, "History and Law of the Foreshore and Seashore", (London, 1888), pp. 674.
5. Gerald V. LaForest, Q.C., "Water Law in Canada", (Ottawa, 1973), pp. 240.
6. Clark, pp. 576.

of the King of England to the soil aqua maris co-operata, is similar to his ancient title to all the terra firma in his dominions, as the first and original proprietor and lord paramount. It is a fundamental principle of our laws of property in land, that all the lands in the realm belonged originally to the King; and, according to feudal principles of our ancient laws of tenure, the land owners of England are, to this day, tenants to the King, holding their lands of him, as their lord paramount. That part of the land which the King and his ancestors have never granted out to the subject, remains to the King, as his demenses, in absolute ownership. The terra firma of England has become, almost entirely the property (by grant and tenure) of the subject; but the aqua maris co-operata still remains in the King in wide and barren ownership."⁷ This clearly placed ownership in the hands of the crown. In fact in the United States the general principles are the same as "... In Legal terminology, the term 'ordinary high water' is associated with the physical concept of 'shore' and is traceable to the English common law. From the time of Lord Hale (1609-1676), it has been considered as settled law in England that the title and the dominion of the sea, and of the rivers and arms of the sea, where the tide ebbs and flows, and of all lands below high water mark are in the King. Such waters, and the land which they cover, either at all times, or at least when the tide is in, are capable of ordinary and private occupation, cultivation and improvement. Hence the title, or jus privatum, in such lands, belonged to the King as the sovereign, but was held by him as the representative of the people and was subject to the public right, or jus publicum, of navigation and fishing."⁸

So with this weighty evidence before him, the surveyor now approaches the thorny question of judicial authority. In Canada the Crown has delegated its power to both the levels of government, leaving the division of powers, in some cases, not too clearly defined. This is inclined to make some judicial decisions subject to the question of being ultra vires. It is within this area that the surveyor finds himself concerning the grants of water lots.

One of the first hurdles in his way was the enigma of the term 'navigable waters'. Does a vessel of x number of feet draught passing through waters in question classify it as 'navigable water' or if a canoe glides across an inlet, does that give it the impressive title of 'navigable water'? "From what I have been able to deduce, a body of water to be considered navigable in law must be tidal. Whether a body of water is navigable in fact presents a more difficult problem, and there does not seem to be any positive definition to use as a guide. A Supreme Court of Canada judgment said, "The test of navigability is its utility for commercial purposes!"⁹

In a memorandum of instructions concerning the Navigable Waters Protection Act it states that, "there is no definition of navigable water given in the Act, and that, each case would be looked at individually",¹⁰ but in the Act itself, it clearly states that "navigable water includes a canal and any other body of water created or altered as a result of the construction of any work."¹¹

The surveyor turns to the fulcrum of Canadian legislation, the British North America Act. Before Confederation, the early settlers, most of whom were British, brought with them their own laws of the land from which they had emigrated.

7. Moore, "History and Law of the Foreshore and Seashore", pp. 671.

8. Aaron L. Shalowitz, "Shore and Sea Boundaries", Vol. 1, U.S. Dept. Commerce, Coast and Geodetic Survey (1962), pp. 641.

9. M. Viminiz, "Water Boundaries", Canadian Surveyor XIV, (April, 1958), pp. 75.

10. Ministry of Transport, Navigable Waters Protection Act, Memorandum of Instructions, Section #5, (October 1st, 1971).

11. Government of Canada, Navigable Waters Protection Act, Chapter N-19, (1968 - 1969), C. 15, s.1.

These laws were the lever which, when placed across the B.N.A. Act, pried Canada into the future of the twentieth century, with all its weight of development and expansion resting basically on its pre-Confederation laws. Of course, one of the main functions of the Act was to take the authority of the government, both federal and provincial, and delegate the authority in specific areas. In order to cover any gaps in this delegation of power "...where there is conflict, however, federal law prevails."¹² As a substantial amount of property was vested in the provinces before Confederation Section 117 states that....."The several Provinces shall retain all their respective Public Property required for Fortifications or for the Defence of the Country."¹³

However, one of the most important, and as proved in the final analysis, the vocal point of the surveyor's scrutiny concerning the whole question of the validity of water lots, is in the Third Schedule to the B.N.A. Act, and titled Public Harbours. "...subject to extensive judicial dissection. A harbour may be described as a place affording protection for ships from violence of sea." Most authorities also suggest that it must also be in use for commercial purposes, and whether or not this is true of harbours generally, it appears to be a requisite of a public harbour within the meaning of the British North America Act.

In order to be a public harbour within the Third Schedule, it must, first of all have belonged to the Province at Union. Moreover, before Confederation, a harbour must have (i) been used by them as a public harbour or (ii) public money must have been expended on it or (iii) it must have been declared a public harbour by statute or in some official manner."¹⁴

The fog of confusion now starts to clear for the surveyor, as he sees that he has found the controlling factor in determining the validity of water lots.

There is one section of the Act which would be of importance of some parts of the Province, but not specifically in the area in which the surveyor was concentrating, as far as this lot is situated. For future reference, however, he notes that, "The Declaratory Power granted under Section 92 (10) (c) is a most unusual one. It permits the federal Parliament by a simple declaration that the work is for the general advantage of Canada or for the advantage of two or more provinces to extend its legislative jurisdiction over such work. This is entirely within the discretion of Parliament; the courts cannot sit in judgment over its decision. Items declared to be for the general advantage that relate to water include the following: dams, canals, bridges, aqueducts, waterfalls, docks and harbours."¹⁵ Of course the last two items are the ones under consideration, for it appears that if the federal Parliament, in its wisdom, decided that a certain area on the Fundy shore would be suitable for building a ferry terminal to supply a service between New Brunswick and Nova Scotia, it could extend its legislative jurisdiction to cover that area. What this would do to any previously granted water lots remains unknown.

The surveyor also notes that another important section of the Act, which again is not directly in his immediate line of approach but close enough to it to warrant filing for future reference, is in "Section 109 of the British North America Act 1867 and Section 117, and terms 35 and 37. The effect was for practical purposes to give to the provinces the bulk of the public domain not previously granted including beds of rivers, even navigable rivers. Provincial ownership also carries with it power to act in respect thereof in the same way as an ordinary land owner. A province can, for example, attach conditions to Grants and Licenses even if these touch on subjects ordinarily falling within federal competence such as aliens or trade and commerce.....The province could grant water rights on its lands subject to conditions, for it is clear that water rights (such as riparian and rights relating to the ownership of the bed) like other ordinary incidents to land belonging to the province by virtue of their retention of their lands.

12. LaForest, pp. 3

14. LaForest, pp. 12

13. LaForest, pp. 5

15. LaForest, pp. 56

Another incident of land is the right of the owner of the bed of waters to fish thereon, and the province may legislate respecting provincially owned fisheries under its power under Section 92(5) of the B.N.A. Act to make laws relating to 'The Management and sale of Public Lands belonging to the Province.'¹⁶

Once again the surveyor seems to be back peddling and this time the question is whether or not the provinces have jurisdiction over the sea bed beyond low water mark. "...for the jurisdiction of a province is limited to the provincial territory. If the provinces do not have jurisdiction the federal Parliament has complete legislative jurisdiction. If they do the federal Parliament has in any event jurisdiction over the matters provided for the Section 91 of the B.N.A. Act.

In order to discuss the ownership of the sea bed it is necessary to distinguish between two categories of offshore waters; inland and territorial watersInland waters boundary between Nova Scotia and New Brunswick is drawn across the middle of the Bay of Fundy....It is clear that waters expressly falling within the boundaries of a province continued to belong to that province at Union. Section 7 of the B.N.A. Act expressly provides for the continuation of the pre-existing boundaries of New Brunswick and Nova Scotia....

The Nova Scotia and New Brunswick proclamations include within the description of those provinces 'all the rights, members and appurtenances thereunto belonging'.....

Colonies were entitled to jurisdiction over inland waters only to the extent that such waters had been delegated to them by the British Crown.....Which ever body owns an inland water, whether the Dominion or the Province, it may expressly convey it to the other, or for that matter, to private individuals or organizations....."¹⁷

So, basically the whole problem boiled down to these facts. Firstly, unless the harbour in which the water lot in question was located, was listed as a harbour, or unless public money had been expended on it, it remained the property of the province to do with as it pleased. Secondly, it is definitely covered under the classification of Inland Waters. Thirdly, as the grant of the water lot had been issued some thirty-six years after Confederation, and that it was issued under provincial authority, it appeared to favour the legality of the lot. The surveyor realized that he must now check to see if there was any reference to this particular harbour at Confederation.

His first step was to peruse the British North America Act itself, to see if there was a list of harbours. Here he drew a blank. His next move was to approach The Acts of the Province of Nova Scotia to see if any of them shed pertinent light on water lot grants.

The Lands and Forest Act, Part 1 "Crown Lands" Section #20 was the only reference found and this stated that "The Governor-in-Council may without requiring any compensation, therefore, grant to any Municipality any Crown Lands, wholly or in part covered with water, either absolutely or upon any trust of a public nature, or for the benefit of the inhabitants of the municipality or for the public."¹⁸ The next Section of the Act states that anyone may petition for a grant of any Crown Lands, but all the requirements are for agricultural purposes. This is emphasized in Section #22 of the Act, which says, "Every holder of a permit who has taken possession of the land described therein and within the two years from

16. *LaForest*, pp. 68.

17. *LaForest*, pp. 463 and 464.

18. *Province of Nova Scotia "The Lands and Forest Act", Part 1 Crown Lands, R.S., c. 145, s. 20.*

the date thereof has built a house thereon and has resided upon said land for not less than three successive years and has cultivated not less than ten acres thereof."¹⁹ Difficult on a water lot! These were obviously not intended to refer to grants of water lots.

The next Act to be examined proved to be more enlightening. This was 'The Beaches and Foreshores Act'. The first section of the Act is quite implicit, "1 (i) The Governor-in-Council may, upon application therefor in writing to the Minister of Lands and Forests,

(a) give a grant from the Crown to any person of any ungranted, beach or foreshore upon the coast of the Province, or

(b) enter into a lease with any person of any such flat, beach or foreshore."²⁰

The Act then goes on to say in Section #3, "No grant of a water front shall be issued to any other than the owner of the land on which the waterfront abuts, without the consent in writing of the owner."²¹

This seemed to place the jurisdiction quite firmly in the hands of the Provincial Government and when the 'Beaches Protection Act' was examined even more evidence for provincial jurisdiction was found. Section #1 (i) states that, "The Governor-in-Council, on the recommendation of the Minister of Lands and Forests, may designate areas of land lying under tidal water or adjacent to such land as protected beaches.

(ii) An area designated under subsection (i) may include the land extending seaward from mean high water mark and such land adjacent thereto whether or not covered with water as may be necessary to afford adequate protection...."²² then further on in the Act under a section headed Crown Lands, Section #6 subsection (i) states that, "The Minister of Lands and Forests may post signs on or near land of the Crown extending seaward from mean high water mark warning the public that the beach is a protected beach under this Act."²³ Subsections (ii) and (iii) under section #6 say that material such as sand and gravel, etc. cannot be removed from the land extending seaward from the mean high water mark, without the permission of the Minister.

The Oyster Fisheries Act, however, only pertained to leasing of the land, but the fact that the Provincial Government can grant a lease, again indicates that there is an area of provincial jurisdiction. The Water Act, The Marshlands Reclamation Act, the Irish Moss Act, and even The Sea Plants Harvesting Act, while throwing little light on the case, still inferred that the Provincial Government was the ruling authority in these areas of the foreshore.

The surveyor then decided that he should, in the interests of his client, be prepared for the fact that he may come across evidence that the water in which this lot was situated was indeed a listed harbour at Confederation, and that he should see if any alternate solution to the problem could be found. One of the first thoughts to come to mind was the old faithful question of riparian rights. The surveyor was thinking that perhaps even if the client's customer could not actually own the water lot, he may still be able to erect a wharf if he owned the

19. *Crown Lands, R.S., c. 145, s. 22.*

20. *Province of Nova Scotia "The Beaches & Foreshores Act", R.S., c. 20, s.1 (1).*

21. *"Beaches....", R.S., c.20, s. 3.*

22. *Province of Nova Scotia, "Beaches Protection Act", (1960), c. 2, s. 2(1).*

23. *"Beaches Protection.....", (1961), c. 62, s. 1(1).*

upland, by claiming riparian rights. "One of the generally recognized rights of the riparian or littoral owner on navigable waters, is access to the waters. To use the waters for navigation or travel is one of the purposes of access, and it follows that the riparian may construct a wharf or fill in the shallows so as to obtain access to the navigable part of the waters."²⁴ This right of access is one of great importance, and is a question upon which many legal decisions have been handed down, "The right of access included the right to wharf out to deep water, subject to the general rules imposed by the legislature (PHILADELPHIA v. COMMONWEALTH, 289 Pa. 225, 130 Atl. 491) and the owner of the upland adjoining flats has the privilege of wharfing out and erecting stores and piers over and upon such soil by using it for any purpose that does not interfere with navigation. (WALTZ v. BENNETT, 95 Conn. 537, 111 Atl. 834, 835). This right is subject only to the superior right of the state that may improve navigation and better the channels of commerce for the benefit of the public without compensation for damages to the rights of the riparian owners. (HINKLEY v. STATE, 202 App. Div. 570, 195 N.Y.S. 9L4)."²⁵ Then Skelton goes on to say that in a few jurisdictions riparian rights permits him to reclaim land under tidal water through filling in and wharfing out over the public domain in front of his land to the extent that it does not interfere to the public right of navigation or fishing. These cases seem to indicate that there are possibilities that the client might be able to sell his upland and then, his grantee, using his riparian rights, wharf out into deep water. The Wharves and Public Landings Act of Nova Scotia only deals with public property and states that, "The Council of every municipality shall have control of all public wharves and public landings, within the municipality and under the jurisdiction and legislative control of the Provincial Legislature."²⁶ Does this mean that a municipality may erect a wharf in one of its harbours, even if that harbour was one listed at Confederation? Generally speaking the municipalities would place any questions regarding construction of any sort below mean high water mark in the hands of the Federal Ministry of Transport.

In a telephone conversation, a Ministry of Transport Official who has the responsibility of handling matters pertaining to water lots, told the surveyor that this was an area in which, up to the last two or three years, little interest was shown, but with the rapid increase in the demand for water frontage, many claims and disputes are and will be filed. He said that as far as the Federal Government is concerned, only water lots granted before Confederation are valid, and anyone who lays claim to one granted after 1867 should apply to the Federal Government, and he will probably be issued a grant or lease for the same lot, thereby ensuring its validity. He went on to say that Ottawa considers that all waters below high water mark to fall under the jurisdiction of the Federal Government.

Our surveyor then decided to get expert opinion from various segments of our society who have, or who have had an interest in this field.

Firstly, in discussion with some of the lawyers practicing in the area, he was left with the impression that there was no validity in any of the water lots in the area, and this was after some extensive research had been done on their part on behalf of their respective clients. Although, admittedly none of them could give any strong case either for, or against, except those issued before Confederation.

24. Robert Emmet Clark, et al, "Water and Water Rights", Vol. 1, pp. 273.

25. Ray Hamilton Skelton, "The Legal Elements of Boundaries & Adjacent Properties" (Indianapolis, 1930), pp. 290.

26. Province of Nova Scotia, "The Wharves and Public Landings Act", R.S., c. 313, s.1.

Secondly, in a telephone conversation with a former Cabinet Minister at the Provincial level, he was told that there is no mystery concerning water lots. Only in harbours that were designated in the B.N.A. Act, did the Federal Government have jurisdiction, anywhere else the authority fell solely in the hands of the Province. He also said that, in this instance, any harbour that might be in question as to whether or not it should be under federal control, would fall to the Province rather than Ottawa, as is normal, under Section #91. He also said that a person with a water lot grant could wharf out to deep water, and only under certain circumstances would it be necessary to get a permit from the Federal Ministry of Transport under the Navigable Waters Protection Act.

In a Federal Department of Transport Memorandum respecting applications for water lot leases in Public Harbours, the first paragraph reads, "The beds of all harbours in Canada, which were public harbours at the time of Confederation of which Dominion Patents have not been issued since, are the property of the Dominion Government."²⁷

The Crown Lands Registration Office of the Nova Scotia Department of Lands and Forests, were generally of the opinion that the water lots were valid, but were letting the Federal Government handle the applications as they fall under the Navigable Waters Protection Act.

It is interesting to note that in 1899 the province definitely felt that it was the controlling authority in this matter, as a letter registered with the Crown Lands Office clearly shows..."

Dear Sir:

I have carefully examined or caused to be examined the books of this office down to 1854 and find that only 63 out of the 278 lots which the Town Plot consists appear to be granted. The most of these lots were granted in A.D., 1789.

How the proprietors of the remaining lots obtained their titles I cannot inform you, but I presume they took possession under the old Township grant.

If the present occupants have through themselves and their predecessors held peaceable possession for 60 years and upwards their title is good as against the Crown.

It does not appear that more than 8 or 10 of the water lots have been granted. I cannot see any reason why a grant should not be given to the owners of the upland which it fronts. As the conditions contained in the grants could not very well be made to apply to water lots I do not see how they could be escheated.

Persons desiring grants of water lots are supposed to apply here and pay \$50 for any frontage less than 500 feet. If they wish to erect wharves they are expected to apply to the Dominion Government for a grant of confirmation.

Yours truly,

James H. Austin,
pro Atty. General."²⁸

27. Department of Transport, *Memorandum Respecting Applications for Water Leases and Licenses in Public Harbours*, (March 1st, 1967).

28. *Crown Lands Registry, Letter Book 25*, pp. 835.

This letter referred to the town of Chester, and there seems little doubt that the provincial Attorney Generals Office had the control of the issuance of Water lots. Also, the last sentence gave rise to the fact that navigation was of importance then long before the Navigable Waters Protection Act was enforced and that the Federal Government definitely had jurisdiction in the field of navigation.

The next probe was put out to the district assessment office, here again the feeling was that the lots were not valid, that is that only those issued before Confederation were recognized and they were not assessed. So, the surveyor, realizing that there could be considerable income to a Municipality from the taxation of water lots, approached the Municipal Clerk in the area concerned and asked him why the Municipality had not pursued the issue. His reply was that - once again - they were not considered legal, and if they were, then the assessment would be low because there could be no construction on the land and it could not be developed. This may be true, but there may be a more important side to the matter. If a person held a legal water lot, he would own the beach and foreshore. This would mean that he had control over that area between his upland and the ocean and would be able to prevent anyone from trespassing on his beach. This would surely be a major consideration for taxation purposes, particularly as waterfront property is assessed higher than its inland counterpart. In effect, it means that there could be a series of private beaches in the Province, and that the owners could fence them in, as long as the fences did not interfere with navigation. This would also give the owners the right to remove sand and gravel from the beach, which in itself would increase the value of the lot. Looking back, the surveyor remembered that the Beaches Protection Act was established to prevent the removal of material from the beaches, by the public, and it recognizes that the owner of such lands has the right to the sand and stone on his beach.

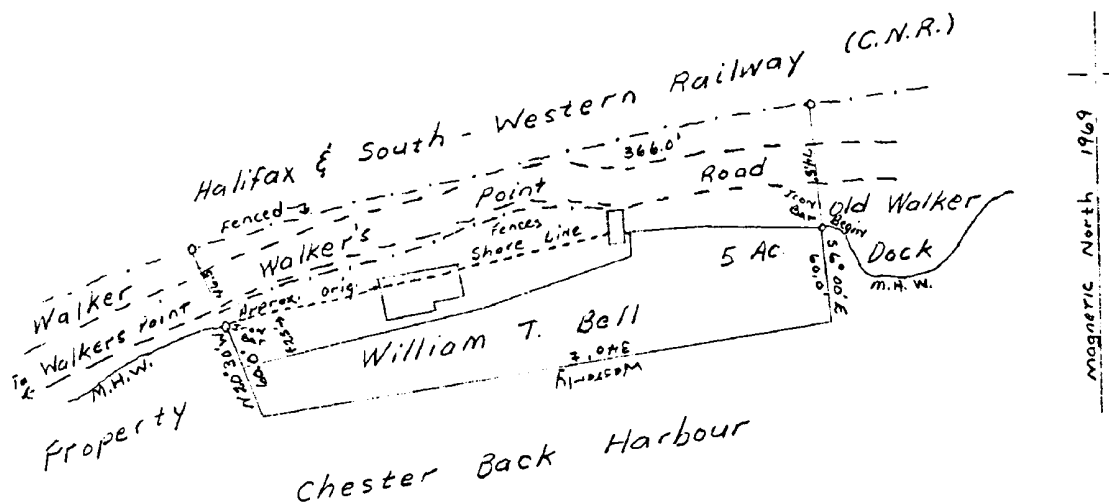
The surveyor also wondered what there would be to prevent someone building a wharf on his waterlot, then building a house on the wharf? Again, as long as the Navigable Waters Protection Act was not violated - one can assume that before the wharf was built the Ministry of Transport would have issued a form of approval - and as long as the two Departments of the Environment had no complaint and that the Department of Health could find no fault, then it would be permissible.

One's immediate thought in this matter is, of course, the question of sewerage and water. Let us assume that the owner of the wharf also owns the upland. He installs a large sewage disposal bed on his upland of suitable capacity to handle any dwellings that are on the land lot and also the houses to be built on the wharf. He plans to install a sewage pump in the wharf house to transport the sewage to his disposal bed, thereby obviating the need for gravity sewer line. He also has a well drilled on the upland to service the wharf house. All these summations are theoretic, but the surveyor found an interesting grant issued to William T. Bell of a water lot in the Back Bay of Chester, this grant was issued by the Provincial Government on the 7th of July, 1969. The house and the garden had been built many years before over an area that was below high water mark, and had of course, been filled in. This was of great interest to the surveyor, as the lot that his client was wishing to sell was to the west of the Bell lot, and on the same side of the harbour, and he felt that if a water lot can be granted up the harbour, then surely any others that had been granted to seaward of it must be valid.

It was noticed by the surveyor that in the 19th July, 1975 edition of the 'Chronicle-Herald' there appeared in the classified ads a real estate notice listing a salt water lot for anchorage at \$5,800.²⁹ The surveyor contacted the Real Estate Company and was informed that the lot was actually in Chester Basin, so it was outside his immediate realm of interest, but the fact that the value of the lot was quite high considering that there was not a wharf existing on the lot, helped to confirm his opinion that the whole matter of the lots should be clarified. The

29. "The Chronicle Herald", Halifax, N. S., Real Estate Ad, (19th July, 1975).

Real Estate Agent also stated that he had had many enquiries concerning the lot, but everyone wished to build a cottage on it. He advised them that the Health Department would not permit construction, as there was no upland with the lot, and in fact a provincial road ran along high water mark, and as a result there was nowhere to put in a sewage disposal system.



Scale: 100 Feet to an inch
Halifax, N.S., 7 July 1969
Grant No. 23296

It became apparent to the surveyor that the correct approach to the question of water lots and their usage, was best broken down into sections, and each section should be tackled and resolved before the next examined:

- (1) It must be established that the grant, as issued was indeed for the lot in question. This is solved through general research and survey practices, and no major problems out of the realm of the surveyor should be encountered.
- (2) Under what area of jurisdiction does the body of water fall? This is the major point, and it must be firmly established - by the courts if necessary - that the lot, in order to be valid, (i) must have been issued before Confederation, (ii) if, after Union it must have been issued by the Dominion Government if the lot fell within a designated harbour, or (iii) it must have been issued by the Provincial authority if anywhere else. Of course, the main decision is going to be over the question of jurisdiction.

- (3) After the first two hurdles have been cleared, and the ownership of the lot established, the next step is to determine to what extent the owner may make use of it. Again the evidence appears to give the owner the same rights as he has on any land grant. That is, that he can fence it, and use it as private property, as long as it does not interfere with navigation. If he wishes to construct a wharf, then he has to follow the procedures as laid down by the Federal Government in the Navigable Waters Protection Act.
- (4) If it be proven that he does not own the water lot, then he does have the option to apply to the Ministry of Transport for a water lot lease to construct his wharf.

In the final analysis, the whole matter seems quite simple, but the vast amount of research, and the financial and legal aspects involved, would probably make the pursuit of the ownership of the lot, more than it's worth, particularly as the same result can be achieved with the granting of a lease. The apparent indifference, or lack of any real decision making with respect to the jurisdiction of the water lots, is therefore most likely due to these factors. It simply has not been worth while for anyone to fight for a decision, and even if they did, it would only be applicable in their immediate area, as anyone else would have to fight the case with a different set of facts pertaining to his locale, and the decision might, quite easily, go the other way.

The surveyor presented these facts to his client, and as a last comment, threw one more monkey wrench into the works, which may or may not be of significance. Practically all water lots granted under Provincial Authority since Confederation, have included the clause ".....his Heirs and Assigns forever yielding and paying for the same, to Us, our Heirs and Successors one Peppercorn of yearly rent on the 25th day of March in each year, or so soon thereafter as the same shall be lawfully demanded..." and even those Grants issued before Confederation stated ".....Yielding and Paying by the said Grantee his Heirs and Assigns, which by the acceptance thereof he binds and obliges himself his Heirs and Executors, or to any Person lawfully authorized to receive the same a free yearly Quit Rent of one farthing per Acre, for the premises the first Payment of the Quit Rent to be commence and become payable at the expiration of Two Years from the date hereof and foreto continue payable yearly thereafter forever. On default thereof this Grant to be null and void...."

How many farthings has the Crown collected in recent years, and what do they do with the peppercorns?

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* * * * *

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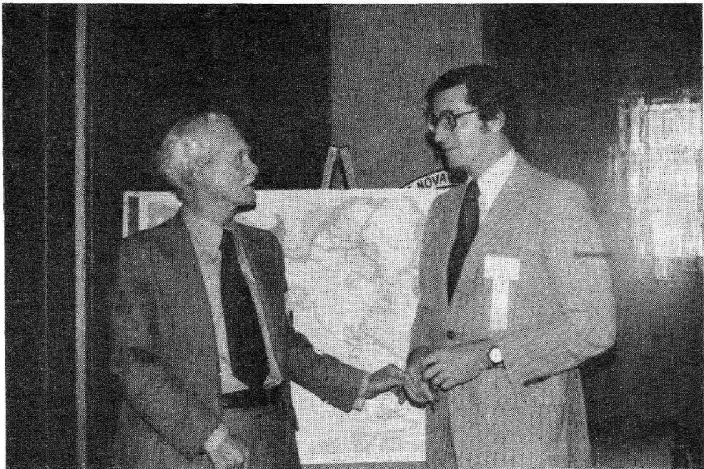
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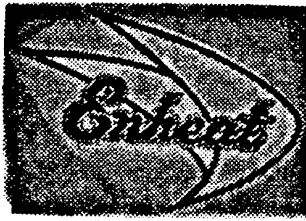
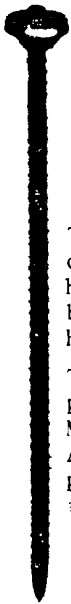
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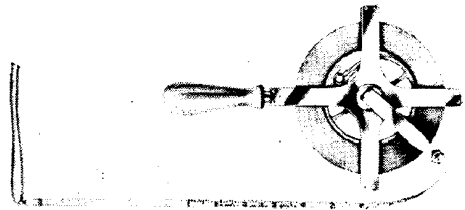
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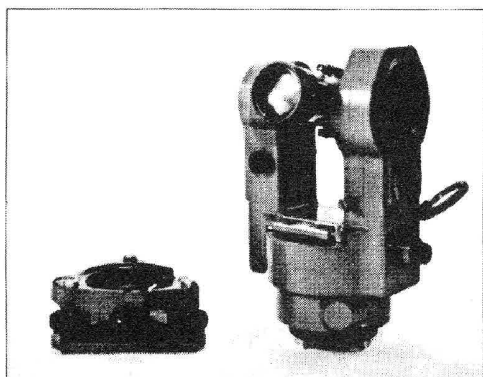
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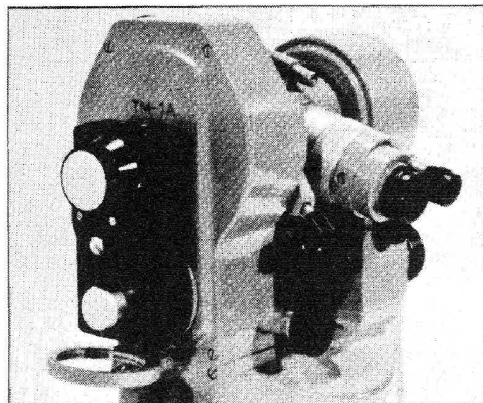
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